

Taping Dimensions

There are two types of taping packing, Adhesive Taping in accordance with EIAJ standard ET-7101 "Packaging of Electronic Components on Continuous Tapes (Adhesive Types)" and Emboss carrier taping in accordance with JIS standard C-0806 "Packaging of Electronic Components on Continuous Tapes (Surface Mounting Device)".

Adhesive Taping Table

| Item | PKG | EMP | | DMP | | | | SDMP | |
|--------------------|-----|-------|-------|------|-------|-------|-------|-------|-------|
| | | 8pin | 14pin | 8pin | 14pin | 16pin | 20pin | 24pin | 30pin |
| Reel Diameter (mm) | | Ø 300 | | | | | | | |
| Tape Width (mm) | | 32 | | | | | | | |
| Pitch (mm) | | 12 | | | | | | | |
| Contents (pcs) | | 2000 | | | | | 1500 | 1500 | |

| | | |
|-------------------------|----|--|
| Pull-out direction → | T1 | |
| | T2 | |

| Item | PKG | SOP | | | TO-92 | |
|--------------------|-----|-------|-------|-------|-------|---------|
| | | 8pin | 18pin | 20pin | 3pin | |
| Reel Diameter (mm) | | Ø 300 | | | Ø 360 | Zip zag |
| Tape Width (mm) | | 32 | | | 18 | ← |
| Pitch (mm) | | 12 | | | 12.7 | ← |
| Contents (pcs) | | 2000 | | | ← | ← |

| | | | | |
|-------------------------|----|--|--|--|
| Pull-out direction → | T1 | | | |
| | T2 | | | |

TAPING DIMENSIONS

Emboss Taping Table

| Item | PKG | DMP | | | | | SDMP | |
|-------------------------|-------|------|------|-------|-------|----------|-------|-------|
| | | 8pin | 8pin | 14pin | 16pin | 20pin | 24pin | 30pin |
| Reel Diameter (mm) | Ø 330 | ← | ← | ← | ← | ← | ← | ← |
| Tape Width (mm) | 16 | 12 | 16 | ← | ← | 24.0±0.3 | ← | ← |
| Pitch (mm) | 12 | 8 | 12 | ← | ← | 16 | ← | ← |
| Contents (pcs) | 2000 | ← | ← | ← | ← | ← | 1000 | ← |
| Pull-out direction → | | TE1 | TE3 | TE1 | TE1 | TE1 | TE1 | TE1 |
| | | | | | | | | |
| | | TE2 | TE4 | TE2 | TE2 | TE2 | TE2 | TE2 |
| | | | | | | | | |

| Item | PKG | SOP | | | | |
|-------------------------|-------|------|-------|-------|-------|-------|
| | | 8pin | 18pin | 22pin | 28pin | 40pin |
| Reel Diameter (mm) | Ø 330 | ← | ← | ← | ← | ← |
| Tape Width (mm) | 12 | 24 | ← | ← | ← | 44 |
| Pitch (mm) | 8 | 12 | ← | ← | ← | 16 |
| Contents (pcs) | 3000 | 2000 | ← | ← | ← | 1000 |
| Pull-out direction → | | TE1 | TE1 | TE1 | TE1 | TE1 |
| | | | | | | |
| | | TE2 | TE2 | TE2 | TE2 | TE2 |
| | | | | | | |

| Item | PKG | EMP | | | | | |
|-------------------------|-------|------|-------|---------|---------|---------|---------|
| | | 8pin | 14pin | 14pinE2 | 16pinE2 | 20pinE2 | 24pinE3 |
| Reel Diameter (mm) | Ø 330 | ← | ← | ← | ← | ← | ← |
| Tape Width (mm) | 12 | 16 | ← | ← | ← | 24 | ← |
| Pitch (mm) | 8 | ← | ← | ← | 12 | ← | ← |
| Contents (pcs) | 2000 | ← | ← | ← | 1500 | ← | ← |
| Pull-out direction → | | TE1 | TE1 | TE1 | TE1 | TE1 | TE1 |
| | | | | | | | |
| | | TE2 | TE2 | TE2 | TE2 | TE2 | TE2 |
| | | | | | | | |

TAPING DIMENSIONS

Emboss Taping Table

| Item | PKG | SSOP | | | | | |
|-------------------------|-------|------|-------|-------|-------|-------|---------|
| | | 8pin | 10pin | 14pin | 16pin | 20pin | 20pinB2 |
| Reel Diameter (mm) | Ø 255 | ← | ← | ← | ← | ← | ← |
| Tape Width (mm) | 12 | ← | ← | ← | ← | ← | ← |
| Pitch (mm) | 8 | ← | ← | ← | ← | ← | ← |
| Contents (pcs) | 2000 | ← | ← | ← | ← | ← | ← |
| Pull-out direction → | TE1 | | | | | | |
| | TE2 | | | | | | |
| | TE1 | | | | | | |
| | TE2 | | | | | | |

| Item | PKG | SSOP | | | VSP | |
|-------------------------|-------|---------|-------|----------|-------|-------|
| | | 20pinF1 | 24pin | 24pin-E1 | 8pin | 10pin |
| Reel Diameter (mm) | Ø 330 | ← | ← | ← | Ø 255 | ← |
| Tape Width (mm) | 16 | ← | ← | ← | 12 | ← |
| Pitch (mm) | 12 | ← | ← | ← | 8 | ← |
| Contents (pcs) | 2000 | ← | ← | ← | 2000 | ← |
| Pull-out direction → | TE1 | | | | | |
| | TE2 | | | | | |
| | TE1 | | | | | |
| | TE2 | | | | | |

| Item | PKG | TVSP | | TO-252(DL1) | | SOT-89 | |
|-------------------------|-------|------|-------|-------------|---------|--------|------|
| | | 8pin | 10pin | 3pin | 5pin | 3pin | 5pin |
| Reel Diameter (mm) | Ø 255 | ← | ← | Ø 330 | Ø 331.5 | Ø 180 | ← |
| Tape Width (mm) | 12 | ← | ← | 16 | ← | 12 | ← |
| Pitch (mm) | 8 | ← | ← | ← | ← | ← | ← |
| Contents (pcs) | 2000 | ← | ← | 3000 | ← | 1000 | ← |
| Pull-out direction → | TE1 | | | | | | |
| | TE2 | | | | | | |
| | TE1 | | | | | | |
| | TE2 | | | | | | |

TAPING DIMENSIONS

Emboss Taping Table

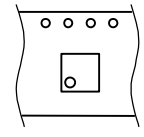
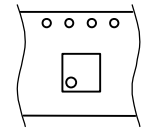
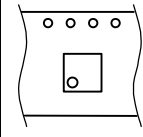
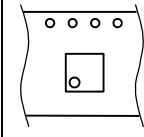
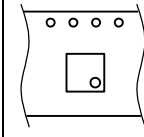
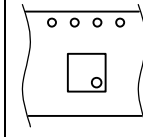
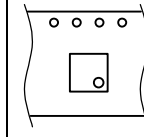
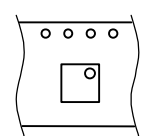
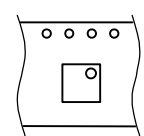
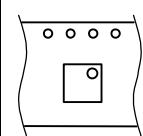
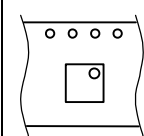
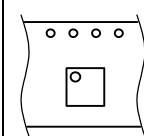
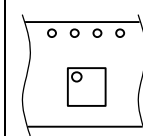
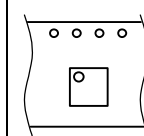
| Item \ PKG | SOT-23 (MTP) | | | SC-88A | FLP | | |
|-------------------------|--------------|------|------------|--------|------------|------------|--------------|
| | 5pin | 6pin | 6pin (6-1) | 5pin | 6pin(6-B2) | 6pin(6-C3) | 10pin(10-C1) |
| Reel Diameter (mm) | Ø 180 | ← | ← | ← | ← | ← | ← |
| Tape Width (mm) | 8 | ← | ← | ← | ← | ← | 12 |
| Pitch (mm) | 4 | ← | ← | ← | ← | ← | ← |
| Contents (pcs) | 3000 | ← | ← | ← | ← | ← | ← |
| Pull-out direction → | TE1 | TE1 | TE1 | TE1 | TE1 | TE1 | TE3 |
| | | | | | | | |
| | TE2 | TE2 | TE2 | TE2 | TE2 | TE2 | TE4 |
| | | | | | | | |

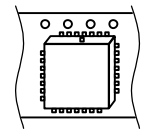
| Item \ PKG | SON | QFN | | |
|-------------------------|-------|----------|----------|----------|
| | 6pin | 20pin-M1 | 28pin-N1 | 28pin-P4 |
| Reel Diameter (mm) | Ø 180 | Ø 300 | ← | ← |
| Tape Width (mm) | 8 | 12 | ← | ← |
| Pitch (mm) | 4 | 8 | ← | ← |
| Contents (pcs) | 3000 | ← | ← | ← |
| Pull-out direction → | TE3 | TE4 | TE4 | TE4 |
| | | | | |
| | TE4 | | | |
| | | | | |

| Item \ PKG | FFP | | | | PCSP | |
|--------------------|-------|-------|-------|-------|----------|---------|
| | 12pin | 16pin | 24pin | 32pin | 14pin-C3 | 16in-E4 |
| Reel Diameter (mm) | Ø 255 | ← | ← | ← | Ø 180 | Ø 255 |
| Tape Width (mm) | 8 | ← | 12 | ← | 8 | 12 |
| Pitch (mm) | 4 | ← | 8 | ← | 4 | 8 |
| Contents (pcs) | 4000 | ← | 2000 | ← | 3000 | 2000 |
| Pull-out direction | TE1 | TE1 | TE1 | TE1 | TE1 | TE1 |
| | | | | | | |
| | TE2 | TE2 | TE2 | TE2 | TE2 | TE2 |
| | | | | | | |

TAPING DIMENSIONS

Emboss Taping Table

| Item \ PKG | USB | | | | BCC | | |
|-------------------------|---|---|---|---|--|---|---|
| | 6pin-D3 | 8pin-B3 | 10pin-C3 | 12pin-E3 | 24pin | 32pin | 36pin |
| Reel Diameter (mm) | φ 180 | ← | ← | ← | φ 254 | ← | ← |
| Tape Width (mm) | 8 | ← | ← | ← | 12 | ← | ← |
| Pitch (mm) | 4 | ← | ← | ← | 8 | ← | ← |
| Contents (pcs) | 3000 | ← | ← | ← | 2000 | ← | ← |
| Pull-out direction → | TE1 | TE1 | TE1 | TE1 | TE1 | TE1 | TE1 |
| |  |  |  |  |  |  |  |
| | TE2 | TE2 | TE2 | TE2 | TE2 | TE2 | TE2 |
| |  |  |  |  |  |  |  |

| Item \ PKG | PLCC |
|-------------------------|---|
| | 28pin-M2 |
| Reel Diameter (mm) | Ø 330 |
| Tape Width (mm) | 24 |
| Pitch (mm) | 16 |
| Contents (pcs) | 750 |
| Pull-out direction → | TE3 |
| |  |

TAPING DIMENSIONS

Adhesive Taping Dimensions

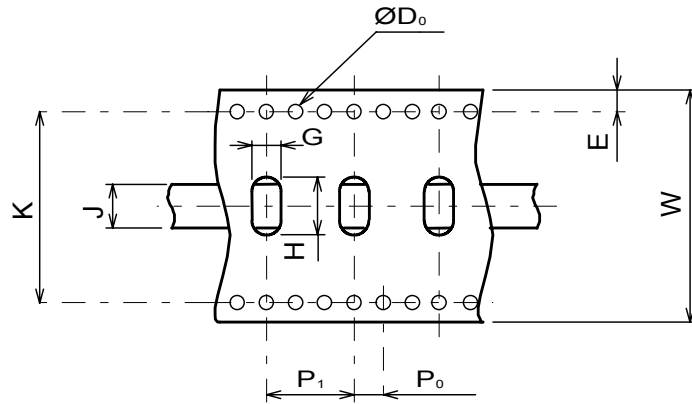
(1) Adhesive Taping Dimensions for DMP/EMP

- DMP8/14/16/20/24, SDMP30, EMP8/14(T1, T2)

→ Pull-out direction

| Symbol | Size |
|--------|-----------------|
| D_0 | 1.0 $^{+0.1}_0$ |
| E | 3.0±0.1 |
| G | 4.0 |
| H | 8.0 |
| J | 6.0 |
| K | 26.0±0.1 |
| P_0 | 4.0±0.1 |
| P_1 | 12.0±0.1 |
| W | 32.0±0.3 |

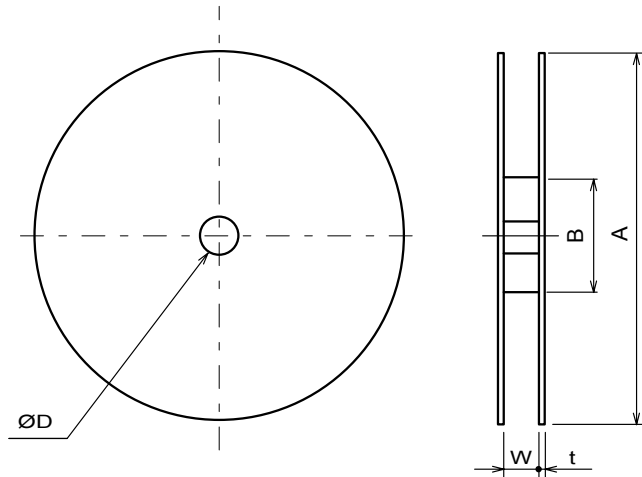
Unit : mm



EMP8/14

| Symbol | Size |
|--------|---------|
| A | Ø300±2 |
| B | Ø80±1 |
| D | Ø16±0.8 |
| W | 34±1 |
| t | 2 |

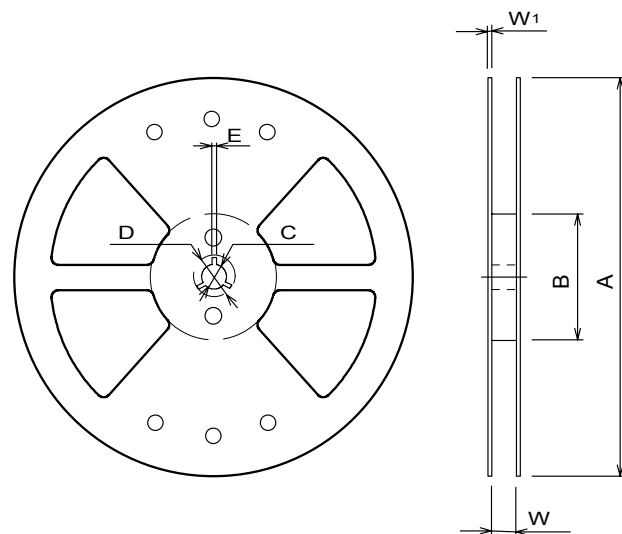
Unit : mm



DMP8/14/16/20/24/SDMP30

| Symbol | Size |
|--------|----------|
| A | Ø300±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 33.5±0.5 |
| W₁ | 2.2±0.2 |

Unit : mm



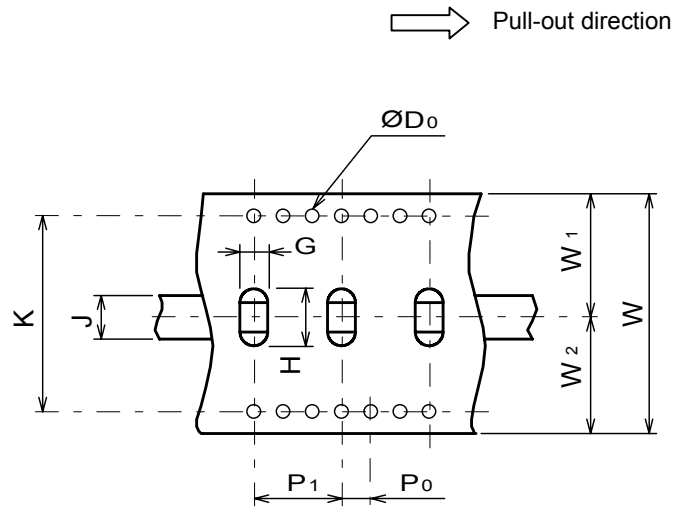
Pull-out beginning : Empty part 80~100cm + Adhesive Tape 20cm
 Pull-out end : Empty part 80~100cm

(2) Adhesive Taping Dimensions for SOP

• SOP8/18/20(T1, T2)

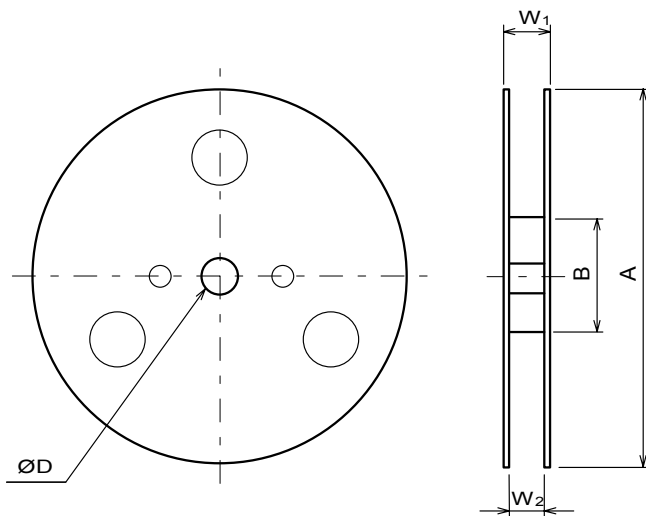
| Symbol | Size |
|--------|----------------|
| D_0 | 1.0 ± 0.1 |
| G | 4.0 |
| H | 8.0 |
| J | 6.0 |
| K | 26.0 ± 0.1 |
| P_0 | 4.0 ± 0.1 |
| P_1 | 12.0 ± 0.1 |
| W | 32.0 ± 0.3 |
| W_1 | 16.0 |
| W_2 | 16.0 |

Unit : mm



| Symbol | Size |
|--------|----------------------|
| A | $\text{Ø}300 \pm 2$ |
| B | $\text{Ø}80 \pm 2$ |
| D | $\text{Ø}16 \pm 0.5$ |
| W_1 | 37 ± 1 |
| W_2 | 32.5 ± 1 |

Unit : mm



Pull-out beginning : Empty part more than 90cm + Adhesive Tape 20cm
 Pull-out end : Empty part 80cm

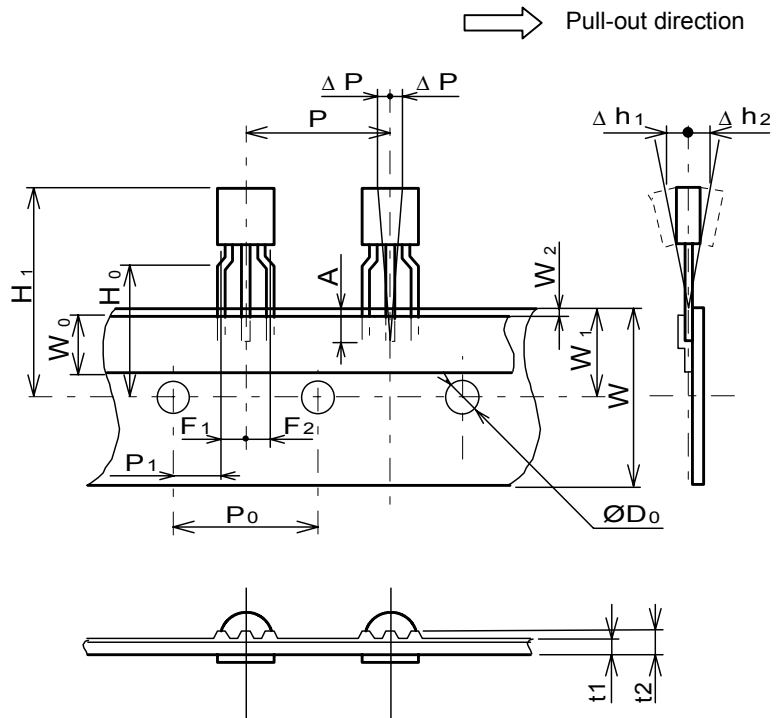
TAPING DIMENSIONS

(3) Adhesive Taping Dimensions for TO

• TO92 (T1, T2)

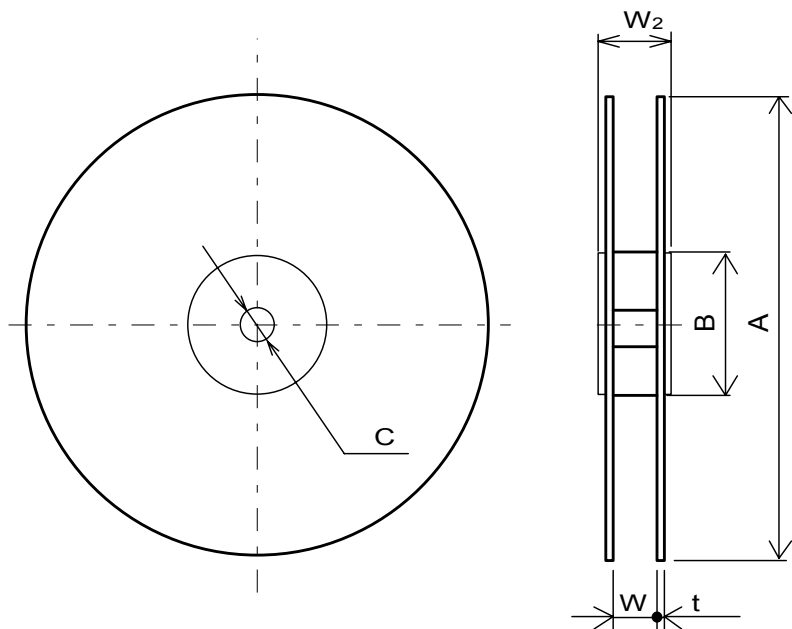
| Symbol | Size |
|-----------------------------------|--------------------------------------|
| A | 2.5 |
| D ₀ | 4.0±0.2 |
| F ₁ , F ₂ | 2.54 ^{+0.4} _{-0.1} |
| H ₀ | 16.0±0.5 |
| H ₁ | 24.7MAX |
| Δh ₁ , Δh ₂ | 2.0MAX |
| P | 12.7±1.0 |
| P ₀ | 12.7±0.3 |
| P ₁ | 3.81±0.7 |
| ΔP | 1.0MAX |
| W | 18.0 ^{+1.0} _{-0.5} |
| W ₀ | 6.0 |
| W ₁ | 9.0±0.5 |
| W ₂ | 0.5MAX |
| t ₁ | 0.6±0.3 |
| t ₂ | 1.5MAX |

Unit : mm



| Symbol | Size |
|----------------|------|
| A | Ø360 |
| B | Ø89 |
| C | Ø30 |
| W | 43.0 |
| W ₂ | 53.0 |
| t | 3.0 |

Unit : mm

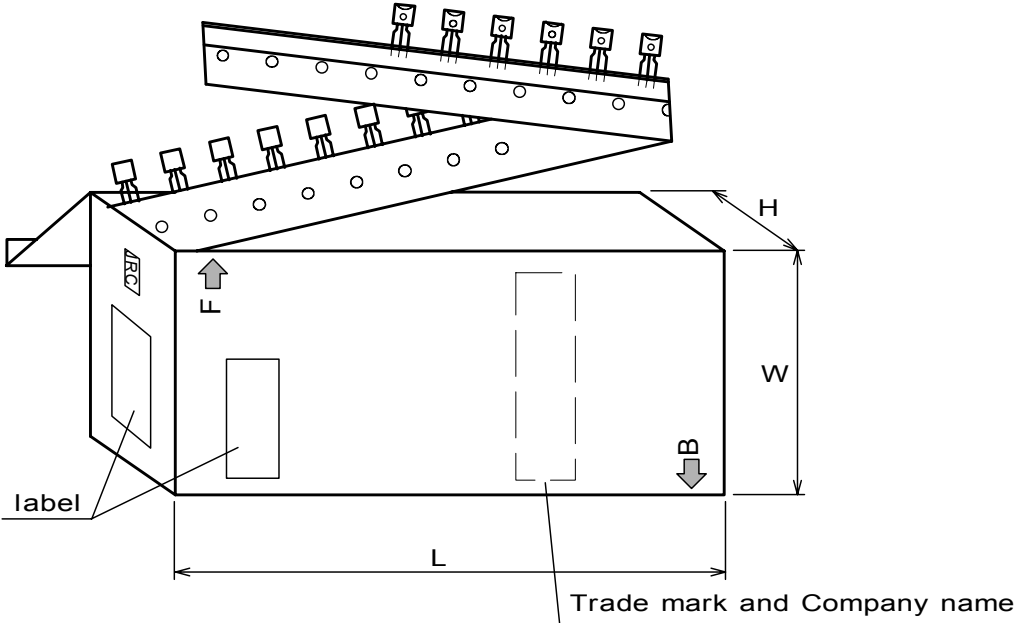


Pull-out beginning : Empty part more than 5 devices + layer paper more than 100cm
 Pull-out end : Empty part more than 5 devices + layer paper more than 100cm

• TO92 (T3)

| Symbol | Size |
|--------|------|
| L | 336 |
| W | 262 |
| H | 45 |

Unit : mm



Zigzag type (25 devices winding)
Tape size is the same as T1/T2 type

TAPING DIMENSIONS

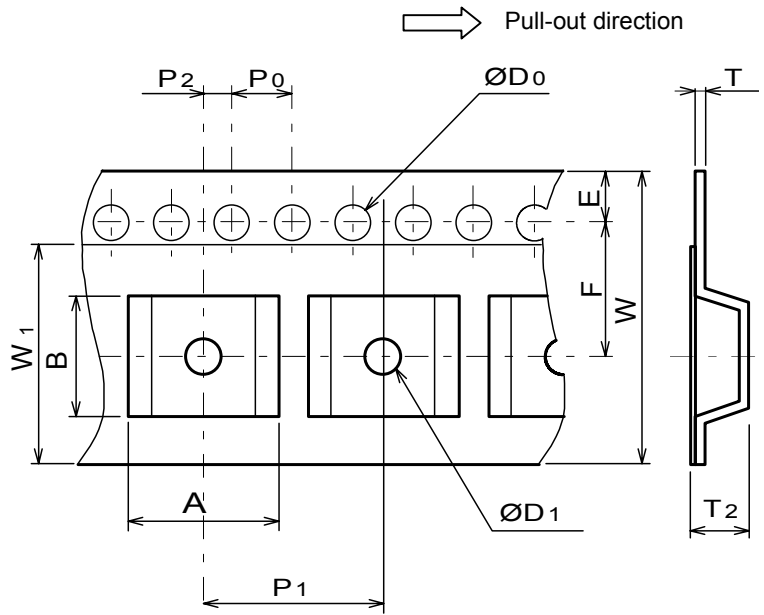
Emboss Carrier Taping Dimensions

(1) Emboss Carrier Taping Dimensions for DMP

• DMP8 (TE1, TE2)

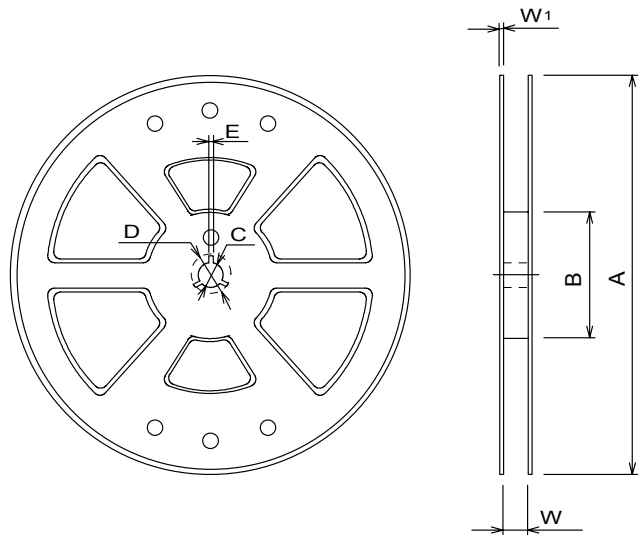
| Symbol | Size | Remark |
|----------------|-----------|---------------------|
| A | 7.1 | Bottom size |
| B | 5.4 | Bottom size |
| D ₀ | 1.55±0.05 | |
| D ₁ | 2.05±0.1 | |
| E | 1.75±0.1 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 12.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 2.3 | |
| W | 16.0±0.3 | |
| W ₁ | 13.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 17.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



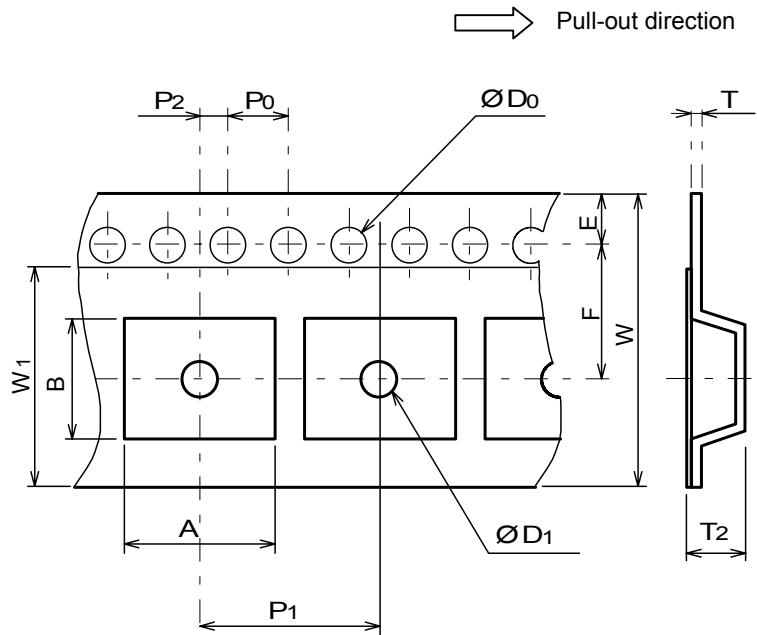
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• DMP8 (TE3, TE4)

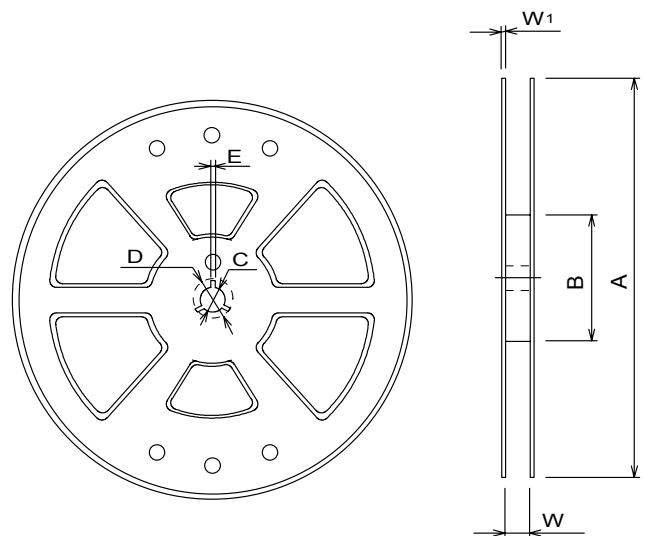
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 5.4 | Bottom size |
| B | 7.3 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.7±0.1 | |
| E | 1.75±0.1 | |
| F | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.3±0.05 | |
| T ₂ | 2.3 | |
| W | 12.0±0.3 | |
| W ₁ | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



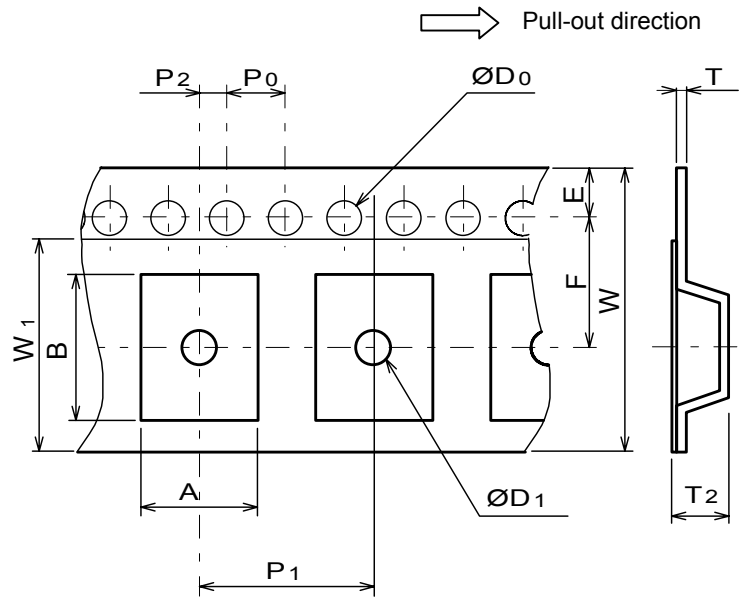
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• DMP14/16/20(TE1, TE2)

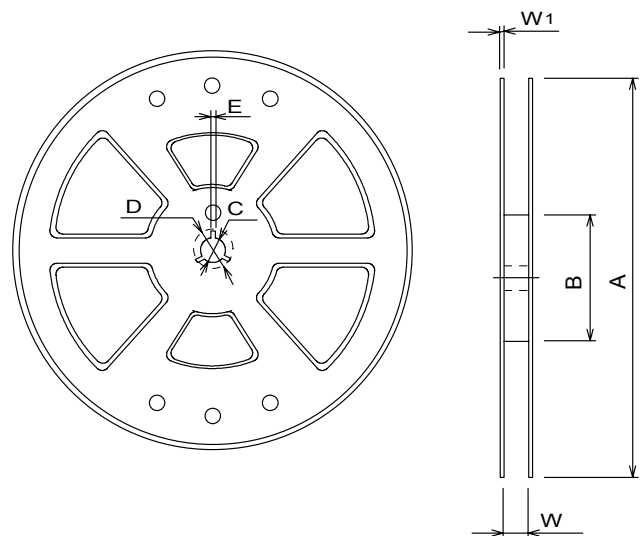
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 7.4 | Bottom size |
| B | 10.4 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.7±0.1 | |
| E | 1.75±0.1 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 12.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 2.3 | |
| W | 16.0±0.3 | |
| W ₁ | 13.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 17.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



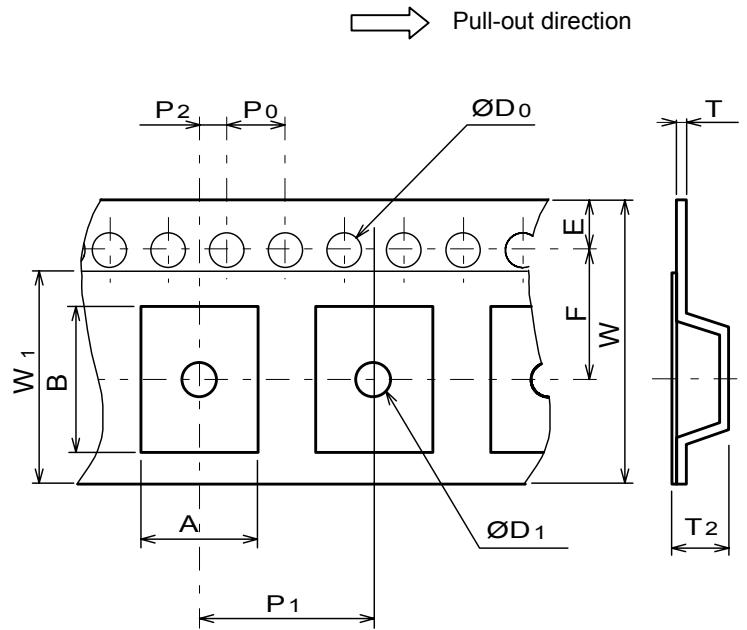
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• DMP24/SDMP30 (TE1, TE2)

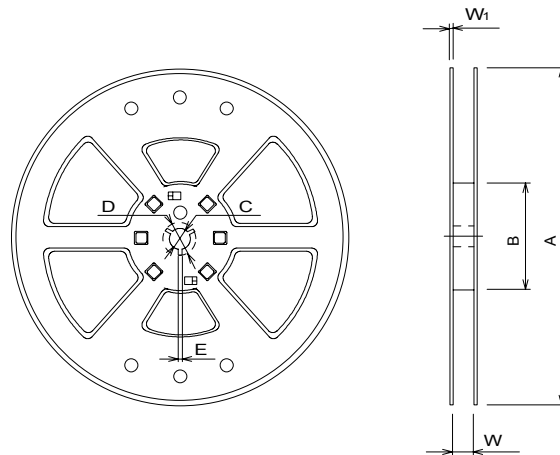
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 11.0 | Bottom size |
| B | 16.0 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 2.0 ^{+0.1} ₋₀ | |
| E | 1.75±0.1 | |
| F | 11.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 16.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 3.3 | |
| W | 24.0±0.3 | |
| W ₁ | 21.0 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 25.5±1.0 |
| W ₁ | 2.0±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

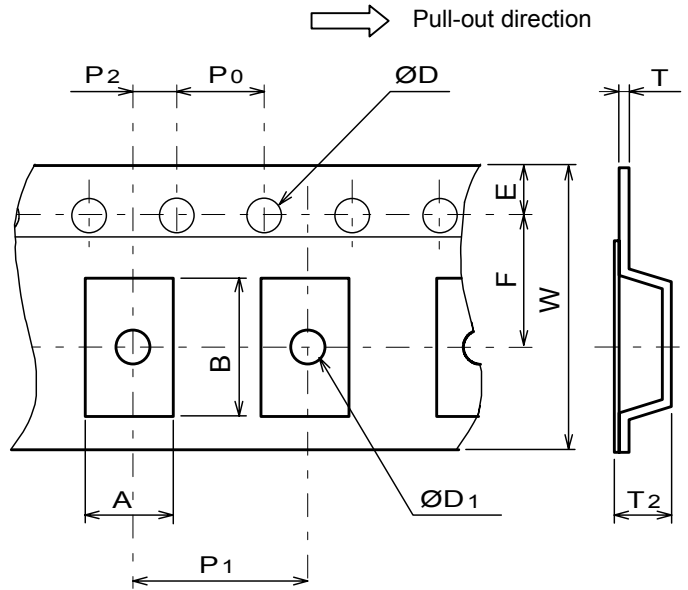
TAPING DIMENSIONS

(2) Emboss Carrier Taping Dimensions for SOP

• SOP8/18/22/28 (TE1, TE2)

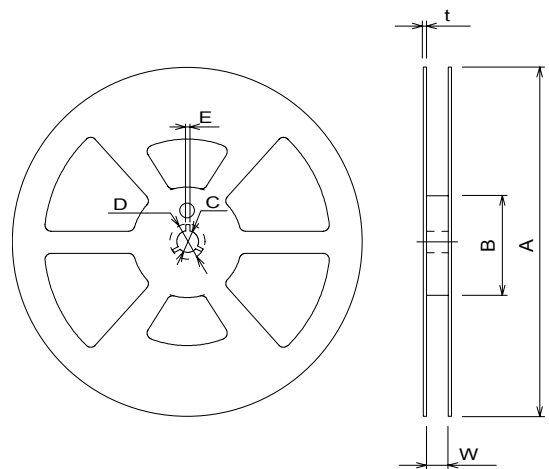
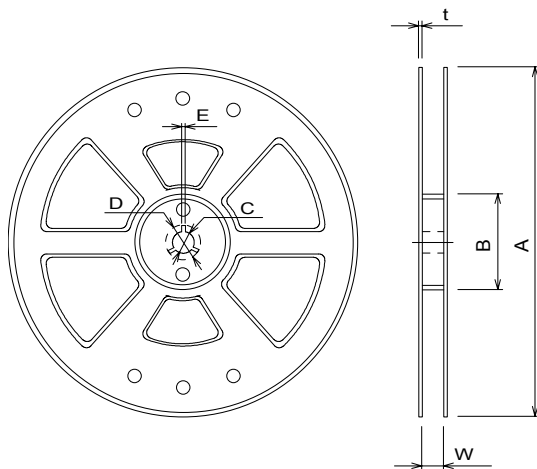
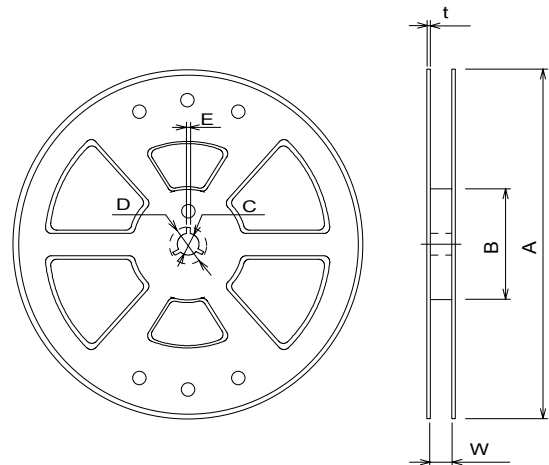
| | SOP8 | SOP18 | SOP22/28 |
|----------------|-----------|-----------|-----------|
| Symbol | Size | Size | Size |
| A | 6.7±0.1 | 8.4±0.1 | 8.4±0.1 |
| B | 5.55±0.1 | 12.0±0.1 | 14.5±0.1 |
| D | 1.55±0.05 | 1.55±0.05 | 1.55±0.05 |
| D ₁ | 2.05±0.05 | 2.05±0.05 | 2.05±0.05 |
| E | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 |
| F | 5.5±0.05 | 11.5±0.05 | 11.5±0.05 |
| P ₀ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 |
| P ₁ | 8.0±0.1 | 12.0±0.1 | 12.0±0.1 |
| P ₂ | 2.0±0.05 | 2.0±0.05 | 2.0±0.05 |
| T | 0.3±0.05 | 0.3±0.05 | 0.3±0.05 |
| T ₂ | 2.46 | 2.86 | 2.86 |
| W | 12.0±0.2 | 24.0±0.3 | 24.0±0.3 |

Unit : mm



| | SOP8 | SOP18/22/28 |
|--------|----------|-------------|
| Symbol | Size | Size |
| A | Ø330±2 | Ø330±2 |
| B | Ø80±1 | Ø80±1 |
| C | Ø13±0.2 | Ø13±0.2 |
| D | Ø21±0.8 | Ø21±0.8 |
| E | 2±0.5 | 2±0.5 |
| W | 13.5±0.5 | 25.5±0.5 |
| t | 2±0.2 | 2±0.2 |

Unit : mm

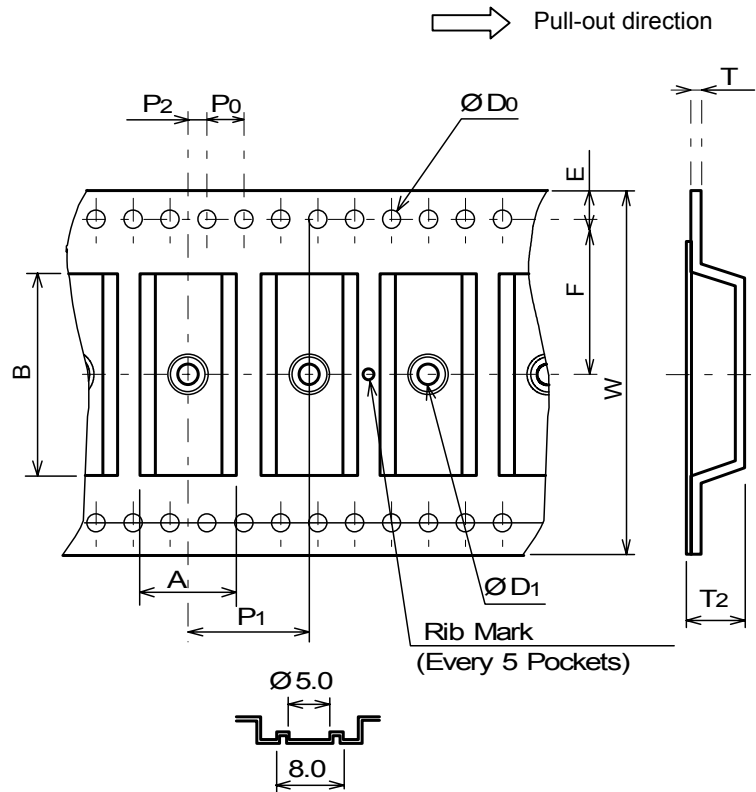


Pull-out beginning : Empty part more than 500mm + Cover tape more than 400mm
 Pull-out end : Empty part more than 500mm + Cover tape more than 400mm

• SOP40 (TE1, TE2)

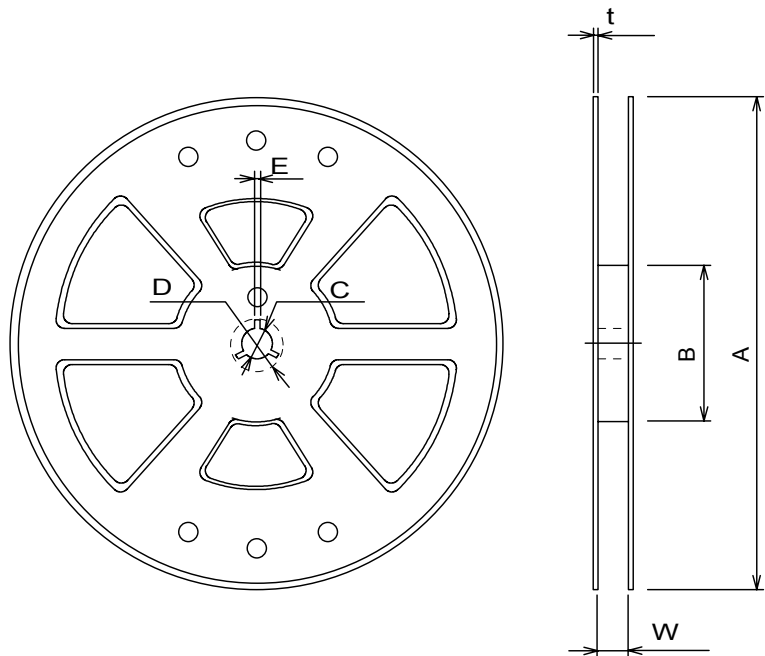
| Symbol | Size | Remark |
|----------------|------|-------------|
| A | 12.4 | Bottom size |
| B | 27.2 | Bottom size |
| D ₀ | 1.55 | |
| D ₁ | 2.05 | |
| E | 1.75 | |
| F | 20.2 | |
| P ₀ | 4.0 | |
| P ₁ | 16.0 | |
| P ₂ | 2.0 | |
| T | 3.96 | |
| T ₂ | 3.0 | |
| W | 44.0 | |

Unit : mm



| Symbol | Size |
|--------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 45.5±0.5 |
| t | 2 |

Unit : mm



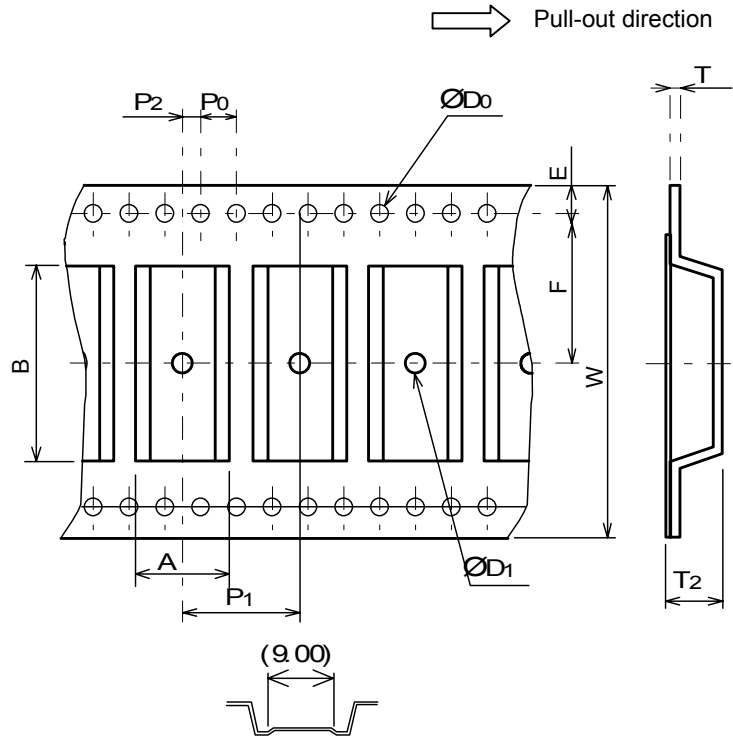
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• SOP40-K1 (TE1, TE2)

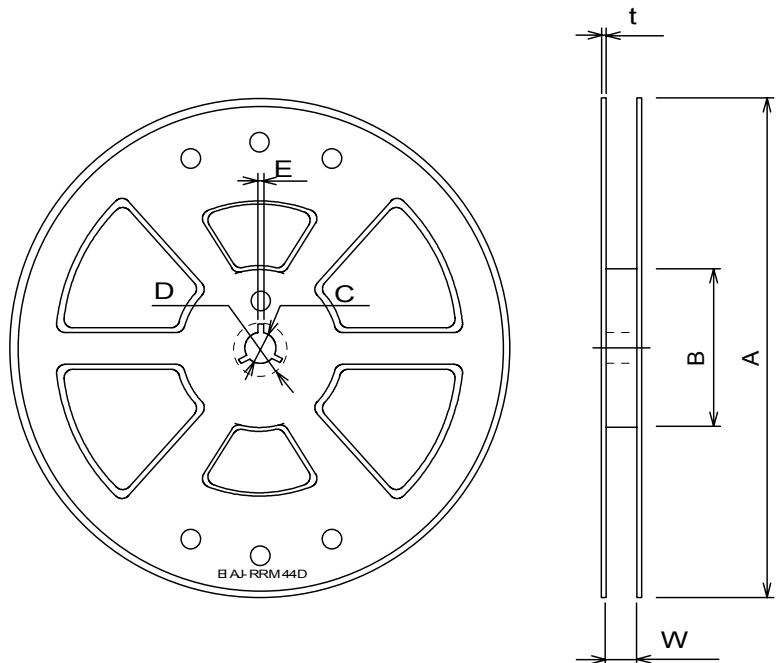
| Symbol | Size | Remark |
|----------------|------------------------------------|-------------|
| A | 14.7±0.1 | Bottom size |
| B | 26.6±0.1 | Bottom size |
| D ₀ | 1.50 ^{+0.1} ₋₀ | |
| D ₁ | 2.20±0.1 | |
| E | 1.75±0.1 | |
| F | 20.20±0.1 | |
| P ₀ | 4.00±0.1 | |
| P ₁ | 24.00±0.1 | |
| P ₂ | 2.00±0.15 | |
| T | 0.30±0.05 | |
| T ₂ | 3.40±0.1 | |
| W | 44.00±0.3 | |

Unit : mm



| Symbol | Size |
|--------|---------|
| A | ∅330±2 |
| B | ∅80±1 |
| C | ∅13±0.5 |
| D | ∅21±0.8 |
| E | 2±0.5 |
| W | 45.5±1 |
| t | 2 |

Unit : mm



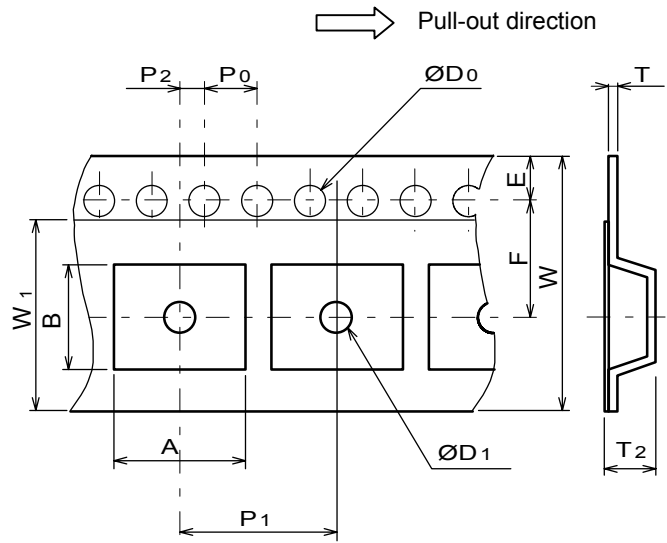
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(3) Emboss Carrier Taping Dimensions for EMP

• EMP8/14(TE1, TE2)

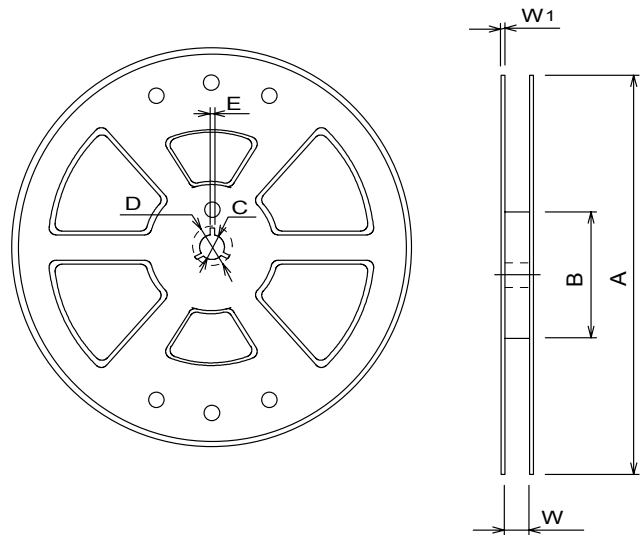
| | EMP8 | EMP14 | |
|----------------|-----------------------------------|-----------------------------------|---------------------|
| Symbol | Size | Size | Remark |
| A | 6.6 | 6.6 | Bottom |
| B | 5.4 | 9.1 | Bottom |
| D ₀ | 1.5 ^{+0.1} ₋₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.7±0.1 | 1.7±0.1 | |
| E | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.05 | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.1 | |
| T | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 2.2 | 2.2 | |
| W | 12.0±0.3 | 16.0±0.3 | |
| W ₁ | 9.5 | 13.5 | Thickness 0.1MAX |

Unit : mm



| | EMP8 | EMP14 |
|----------------|----------|----------|
| Symbol | Size | Size |
| A | Ø330±2 | Ø330±2 |
| B | Ø80±1 | Ø80±1 |
| C | Ø13±0.2 | Ø13±0.2 |
| D | Ø21±0.8 | Ø21±0.8 |
| E | 2±0.5 | 2±0.5 |
| W | 13.5±0.5 | 17.5±0.5 |
| W ₁ | 2±0.2 | 2±0.2 |

Unit : mm



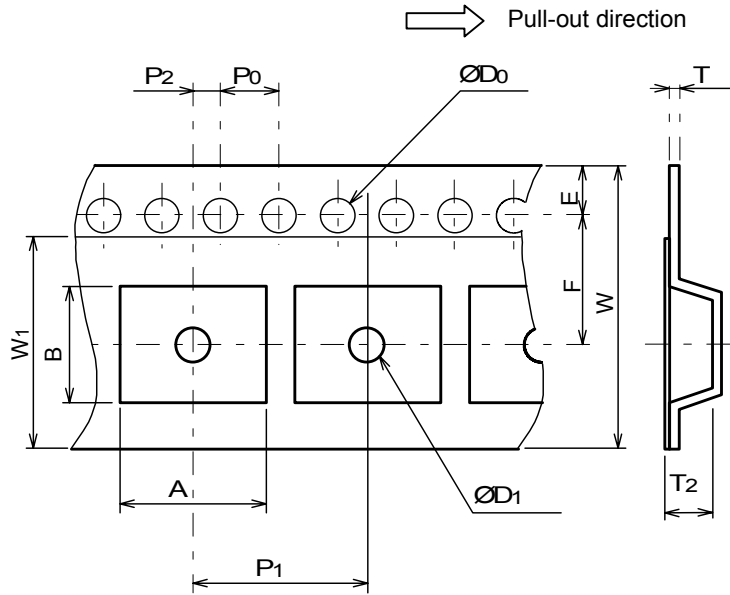
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• EMP14-E2 (TE1, TE2)

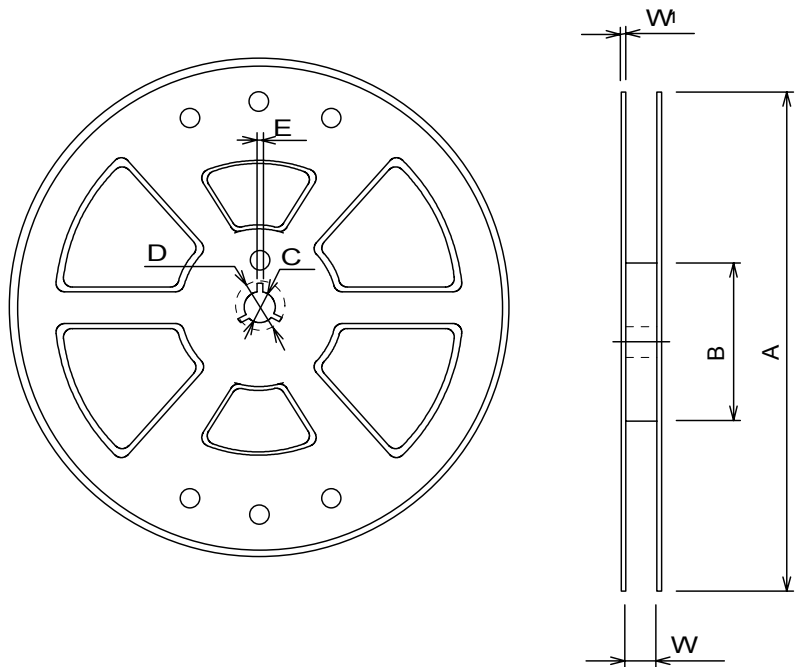
| Symbol | Size | Remark |
|----------------|----------|------------------|
| A | 6.5 | Bottom size |
| B | 9.5 | Bottom size |
| D ₀ | 1.5 | |
| D ₁ | 2.0±0.1 | |
| E | 1.75±0.1 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 2.1 | |
| W | 16.0±0.3 | |
| W ₁ | 13.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 17.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



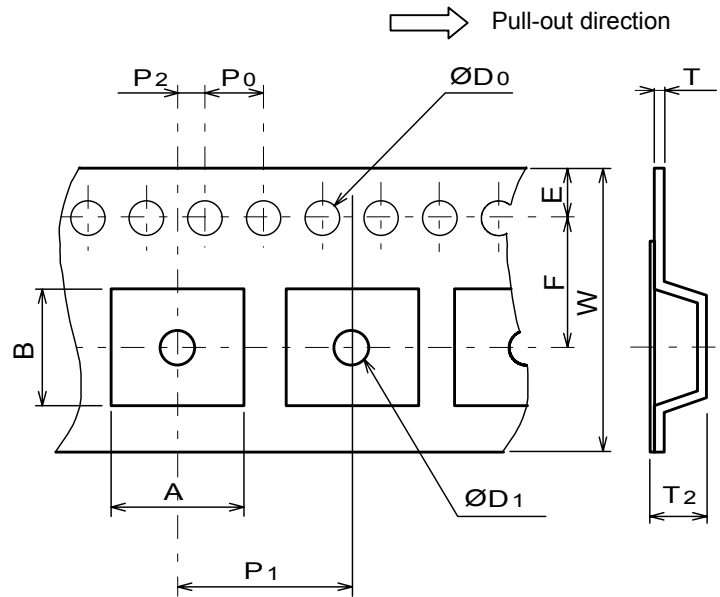
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• EMP16-E2 (TE1, TE2)

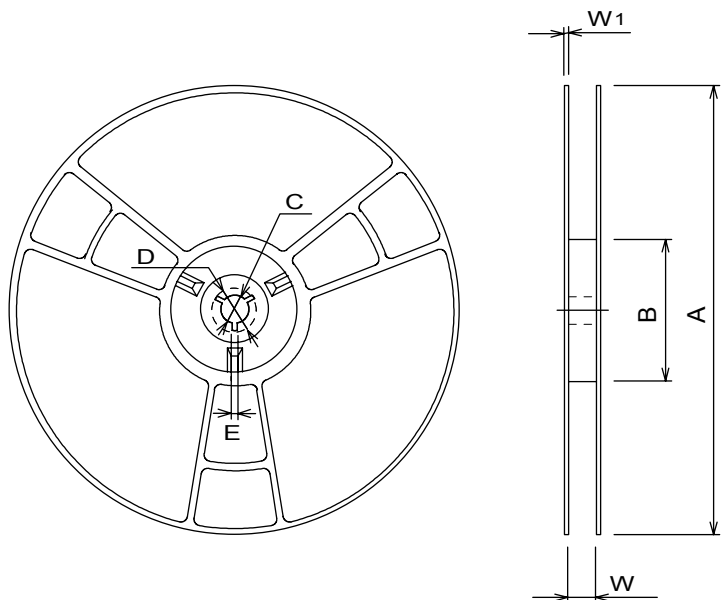
| Symbol | Size | Remark |
|----------------|-----------------------------------|-------------|
| A | 10.9 | Bottom size |
| B | 10.7 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.6±0.1 | |
| E | 1.75±0.1 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 12.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 3.0±0.1 | |
| W | 16.0±0.3 | |

Unit : mm



| Symbol | Size |
|----------------|--------------------------------------|
| A | ∅330±2 |
| B | ∅100±1 |
| C | ∅13 ^{+0.5} _{-0.2} |
| D | ∅20.2MIN |
| E | 2±0.5 |
| W | 16.8 ^{+0.6} _{-0.4} |
| W ₁ | 2±0.2 |

Unit : mm



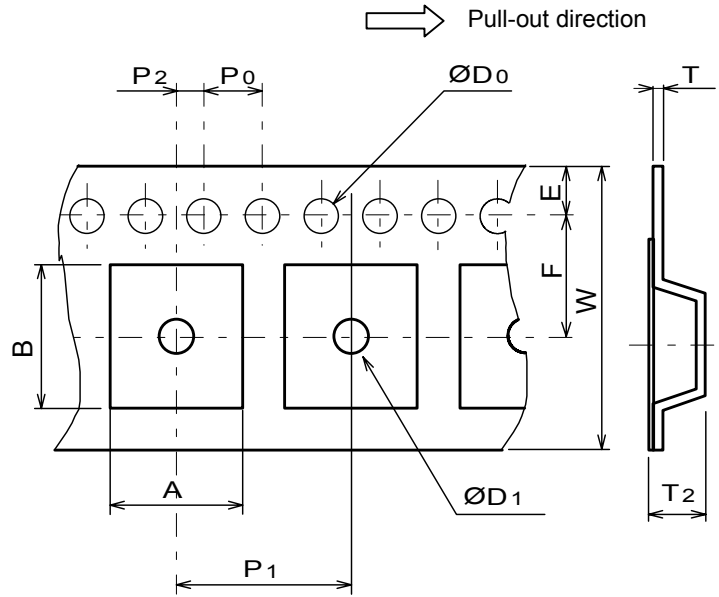
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• EMP20-E2 (TE1, TE2)

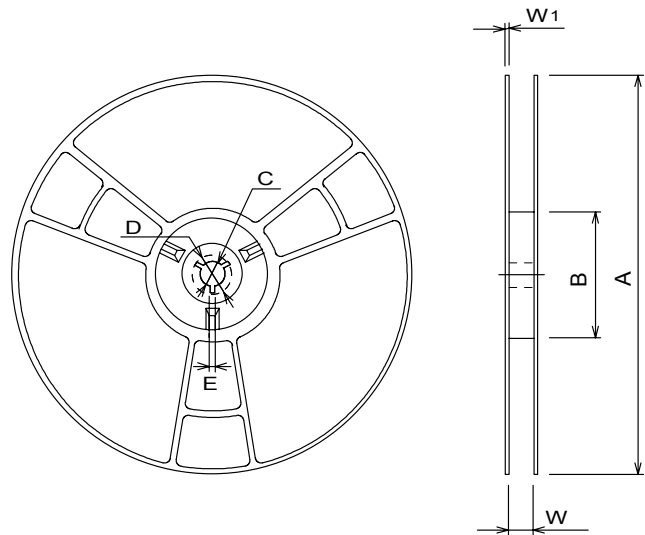
| Symbol | Size | Remark |
|----------------|-----------------------------------|-------------|
| A | 10.9 | Bottom size |
| B | 13.3 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.55±0.1 | |
| E | 1.75±0.1 | |
| F | 11.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 12.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 3.0±0.1 | |
| W | 24.0±0.3 | |

Unit : mm



| Symbol | Size |
|----------------|--------------------------------------|
| A | Ø330±2 |
| B | Ø100±1 |
| C | Ø13 ^{+0.5} _{-0.2} |
| D | Ø20.2MIN |
| E | 2±0.5 |
| W | 24.8 ^{+0.6} _{-0.4} |
| W ₁ | 2±0.2 |

Unit : mm

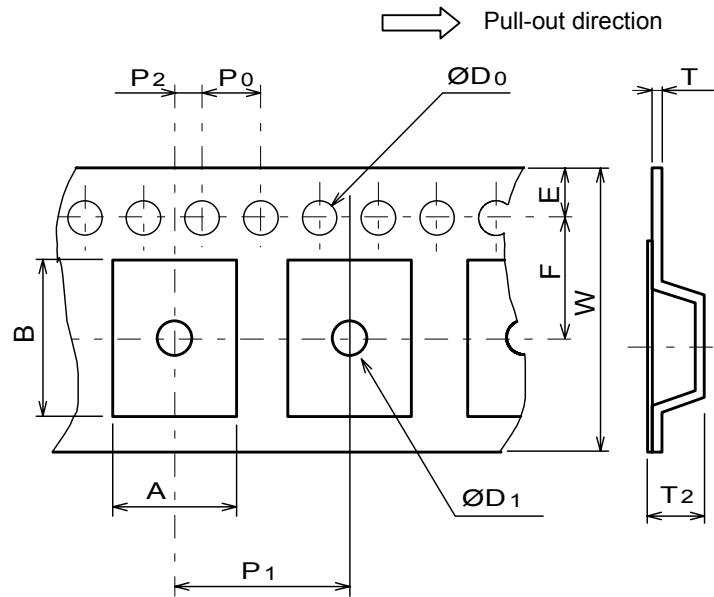


Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

• EMP24-E3 (TE1, TE2)

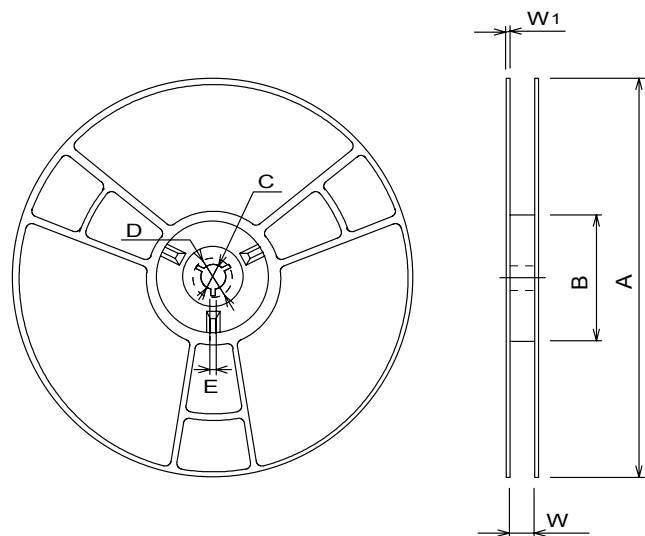
| Symbol | Size | Remark |
|----------------|-----------------------------------|-------------|
| A | 10.9 | Bottom size |
| B | 16.0 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.55±0.1 | |
| E | 1.75±0.1 | |
| F | 11.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 12.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 3.0±0.1 | |
| W | 24.0±0.3 | |

Unit : mm



| Symbol | Size |
|----------------|--------------------------------------|
| A | ∅330±2 |
| B | ∅100±1 |
| C | ∅13 ^{+0.5} _{-0.2} |
| D | ∅20.2MIN |
| E | 2±0.5 |
| W | 24.8 ^{+0.6} _{-0.4} |
| W ₁ | 2±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

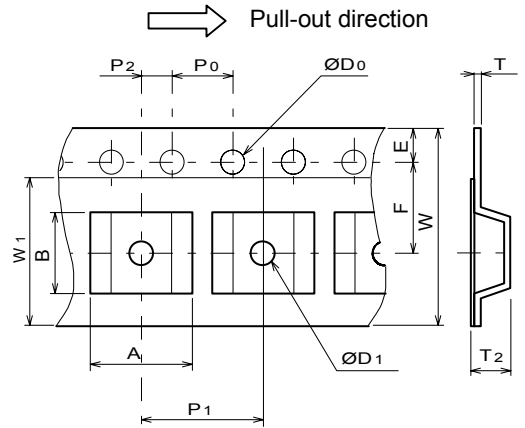
TAPING DIMENSIONS

(4) Emboss Carrier Taping Dimensions for SSOP

• SSOP8/10/14/16/20/20-B2(TE1, TE2)

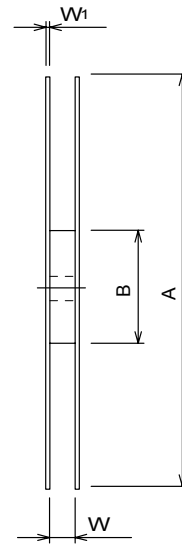
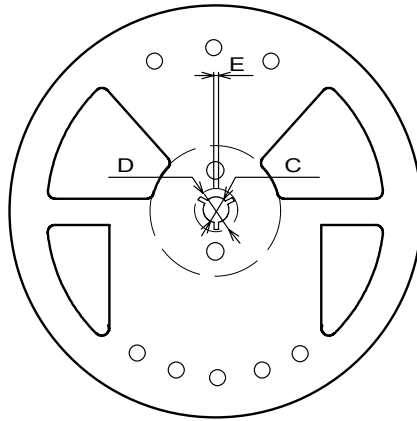
| | SSOP8/10 | SSOP14/16/20-B2 | SSOP20 | |
|----------------|-----------|-----------------|-----------|---------------------|
| Symbol | Size | Size | Size | Remark |
| A | 6.7 | 6.95 | 6.7 | Bottom size |
| B | 3.9 | 5.4 | 6.9 | Bottom size |
| D ₀ | 1.55±0.05 | 1.55±0.05 | 1.55±0.05 | |
| D ₁ | 1.55±0.1 | 1.55±0.1 | 1.55±0.1 | |
| E | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.05 | 5.5±0.05 | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | 2.0±0.05 | |
| T | 0.3±0.05 | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 2.2 | 2.2 | 2.2 | |
| W | 12.0±0.3 | 12.0±0.3 | 12.0±0.3 | |
| W ₁ | 9.5 | 9.5 | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅254±2 |
| B | ∅100±1 |
| C | ∅13±0.2 |
| D | ∅21±0.8 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm

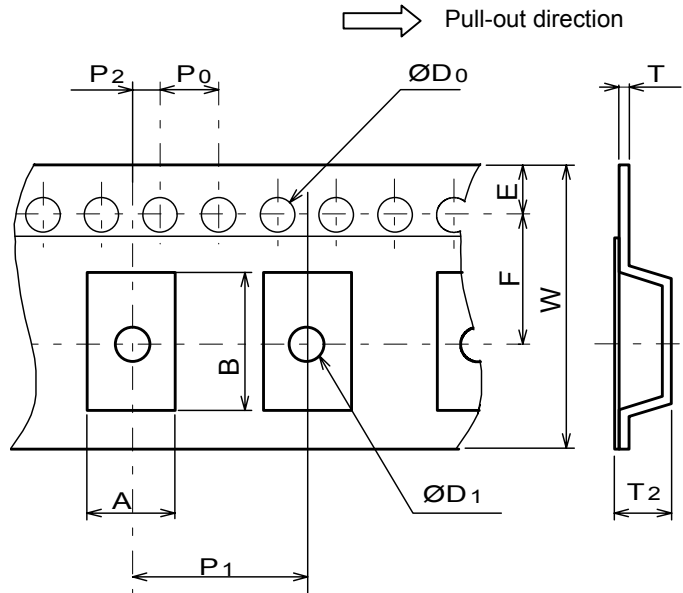


Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

• SSOP20-F1/24(TE1, TE2)

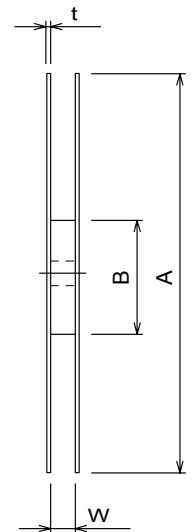
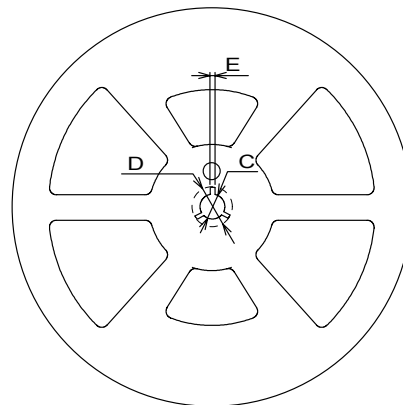
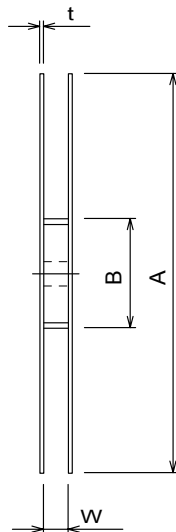
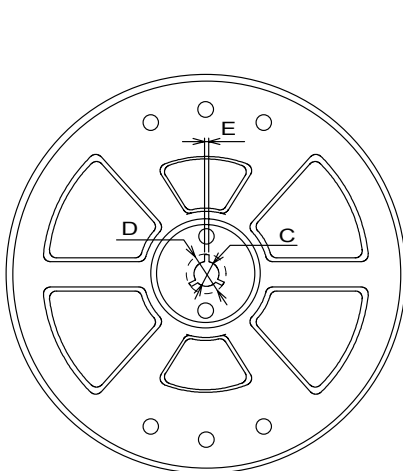
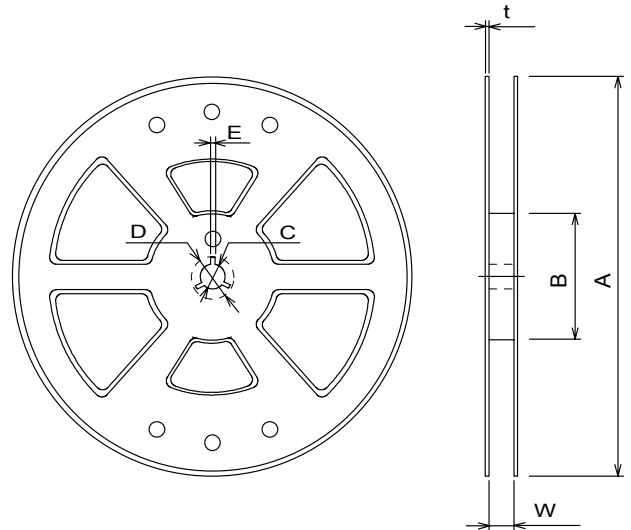
| | SSOP20-F1 | SSOP24 |
|----------------|-----------|-----------|
| Symbol | Size | Size |
| A | 8.4±0.1 | 8.3±0.1 |
| B | 9.3±0.1 | 10.6±0.1 |
| D ₀ | 1.55±0.05 | 1.55±0.05 |
| D ₁ | 1.55±0.05 | 2.05±0.05 |
| E | 1.75±0.1 | 1.75±0.1 |
| F | 7.5±0.05 | 7.5±0.05 |
| P ₀ | 4.0±0.1 | 4.0±0.1 |
| P ₁ | 12.0±0.1 | 12.0±0.1 |
| P ₂ | 2.0±0.05 | 2.0±0.05 |
| T | 0.3±0.05 | 0.3±0.05 |
| T ₂ | 2.86 | 2.76 |
| W | 16.0±0.3 | 16.0±0.3 |

Unit : mm



| Symbol | Size |
|--------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 17.5±0.5 |
| t | 2±0.2 |

Unit : mm



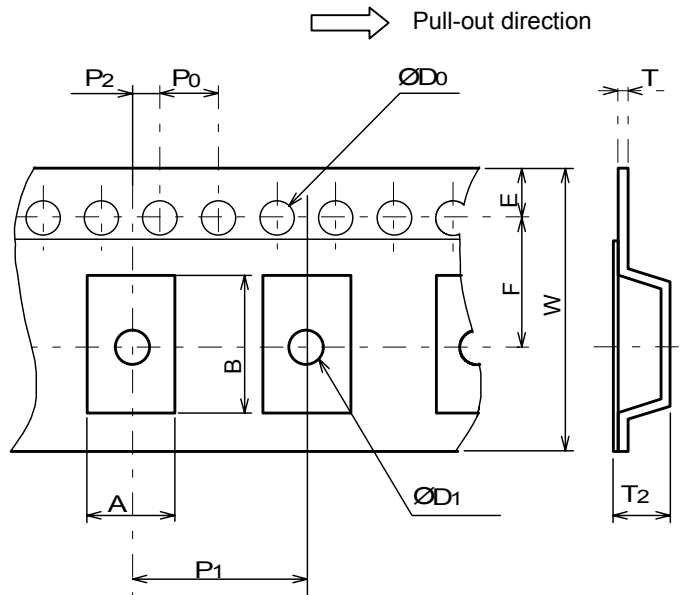
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• SSOP24-E1(TE1, TE2)

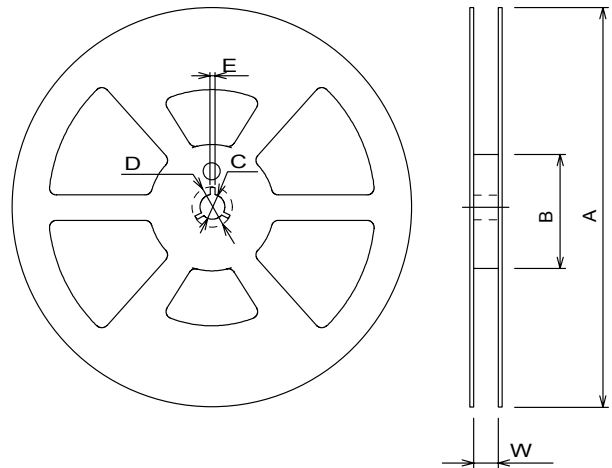
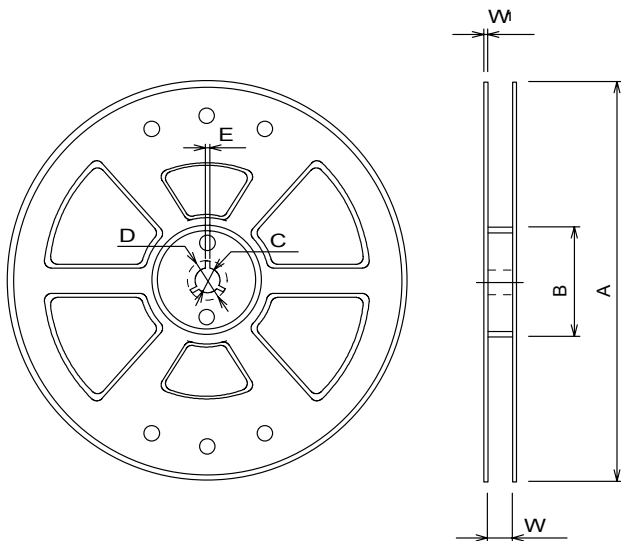
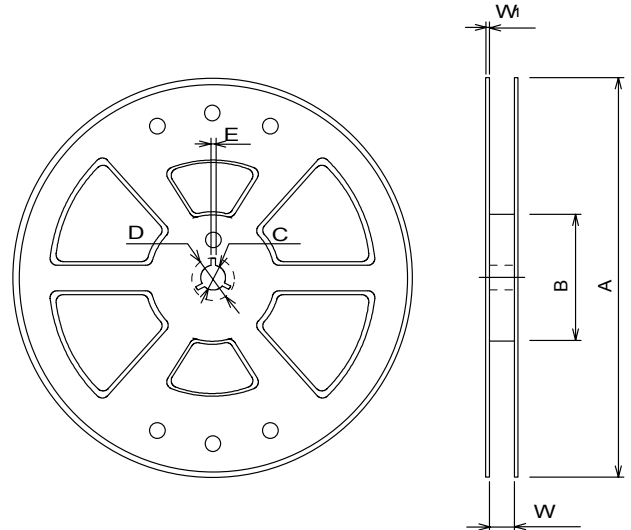
| Symbol | Size |
|----------------|-----------|
| A | 8.15 |
| B | 8.4 |
| D ₀ | 1.55±0.05 |
| D ₁ | 1.55±0.05 |
| E | 1.75±0.1 |
| F | 7.5±0.05 |
| P ₀ | 4.0±0.1 |
| P ₁ | 12.0±0.1 |
| P ₂ | 2.0±0.05 |
| T | 0.3±0.05 |
| T ₂ | 2.36 |
| W | 16.0±0.3 |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 17.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



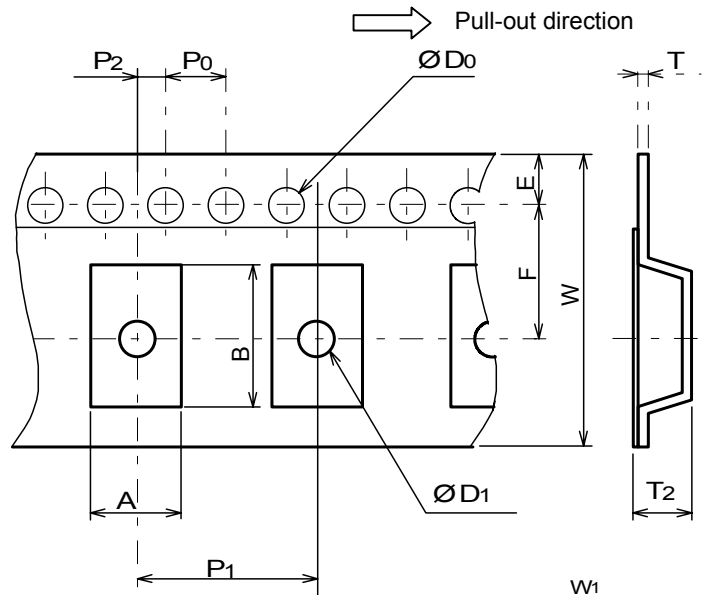
Pull-out beginning : Empty part more than 500mm + Cover tape more than 400mm
 Pull-out end : Empty part more than 400mm

TAPING DIMENSIONS

• SSOP28(TE1, TE2)

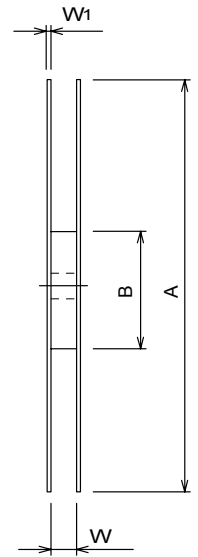
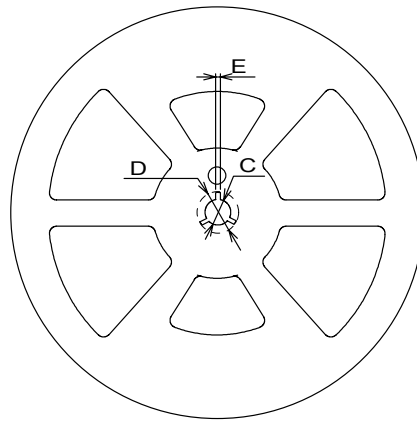
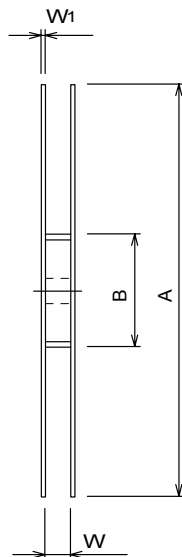
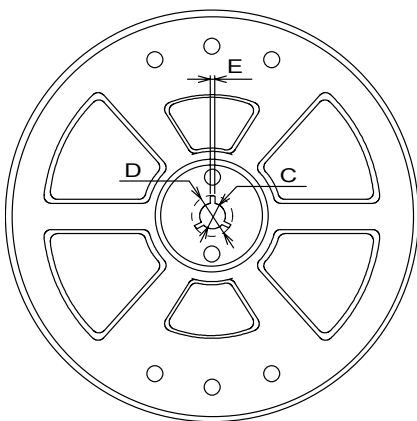
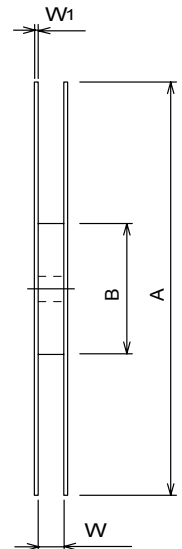
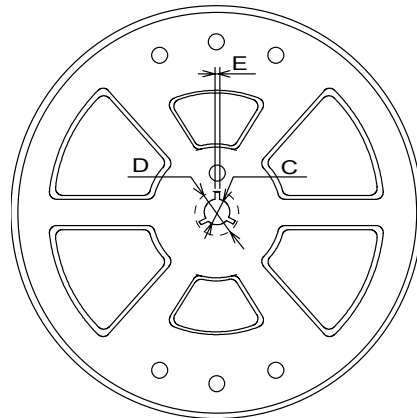
| Symbol | Size |
|----------------|-----------|
| A | 8.1±0.1 |
| B | 10.1±0.1 |
| D ₀ | 1.55±0.05 |
| D ₁ | 1.55±0.05 |
| E | 1.75±0.1 |
| F | 7.5±0.05 |
| P ₀ | 4.0±0.1 |
| P ₁ | 12.0±0.1 |
| P ₂ | 2.0±0.05 |
| T | 0.3±0.05 |
| T ₂ | 2.26 |
| W | 16.0±0.3 |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø330±2 |
| B | Ø80±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 500mm + Cover tape more than 400mm
 Pull-out end : Empty part more than 400mm

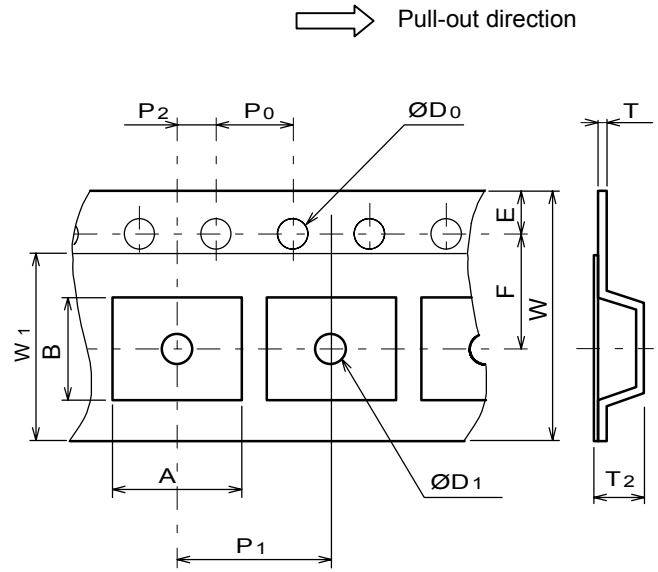
TAPING DIMENSIONS

(5) Emboss Carrier Taping Dimensions for VSP

• VSP8/10, TVSP8/10 (TE1, TE2)

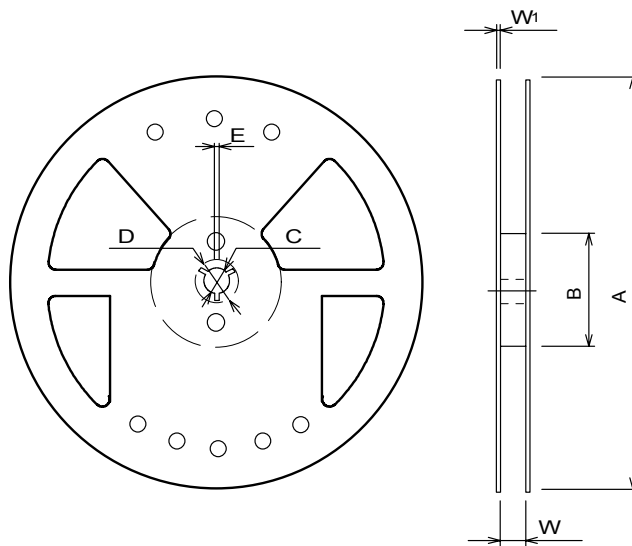
| | VSP8/10 | TVSP8/10 | |
|----------------|-----------------------------------|-----------------------------------|---------------------|
| Symbol | Size | Size | Remark |
| A | 4.4 | 4.4 | Bottom size |
| B | 3.2 | 3.2 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.5 ^{+0.1} ₋₀ | 1.5 ^{+0.1} ₋₀ | |
| E | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.05 | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | |
| T | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 2.0(MAX) | 1.75(MAX) | |
| W | 12.0±0.3 | 12.0±0.3 | |
| W ₁ | 9.5 | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø254±2 |
| B | Ø100±1 |
| C | Ø13±0.2 |
| D | Ø21±0.8 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



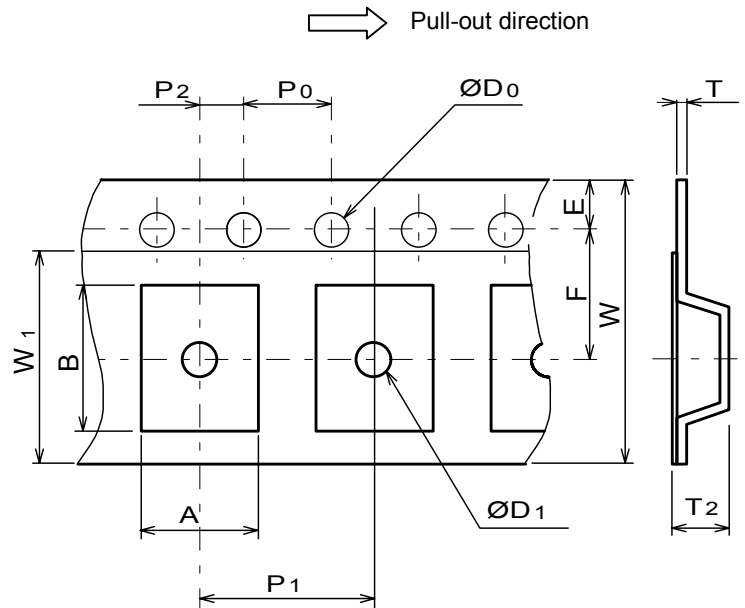
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(6) Emboss Carrier Taping Dimensions for TO

• TO-252 (DL1) 3pin (TE1, TE2)

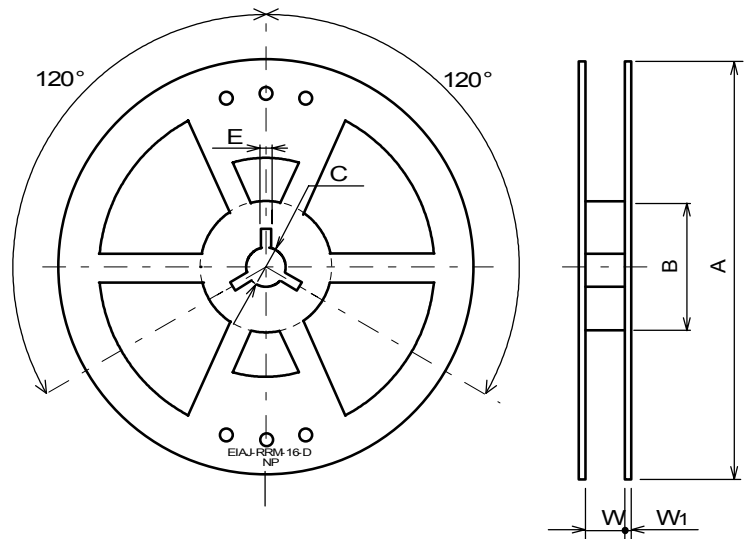
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 6.9±0.1 | Bottom size |
| B | 10.5±0.1 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.5 ^{+0.1} ₋₀ | |
| E | 1.75±0.1 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.1 | |
| T ₂ | 3.4MAX | |
| W | 16.0±0.3 | |
| W ₁ | 13.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|--------|----------|
| A | ∅330±2 |
| B | ∅80±1 |
| C | ∅13±0.5 |
| E | 2 |
| W | 17.5±0.5 |
| t | 2±0.5 |

Unit : mm



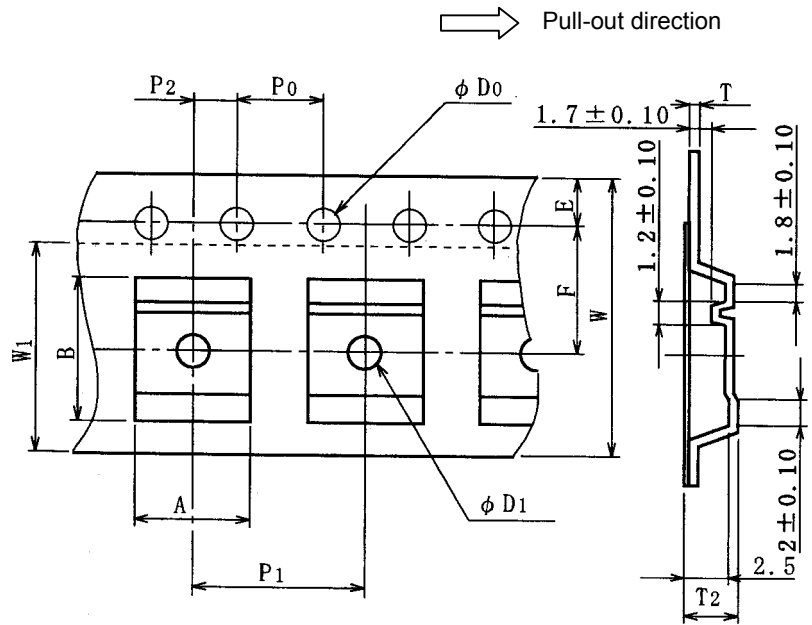
Pull-out beginning : Empty part more than 40mm + Cover tape more than 150mm
 Pull-out end : Empty part more than 40mm

TAPING DIMENSIONS

- TO-252 (DL2) 5pin (TE1, TE2)

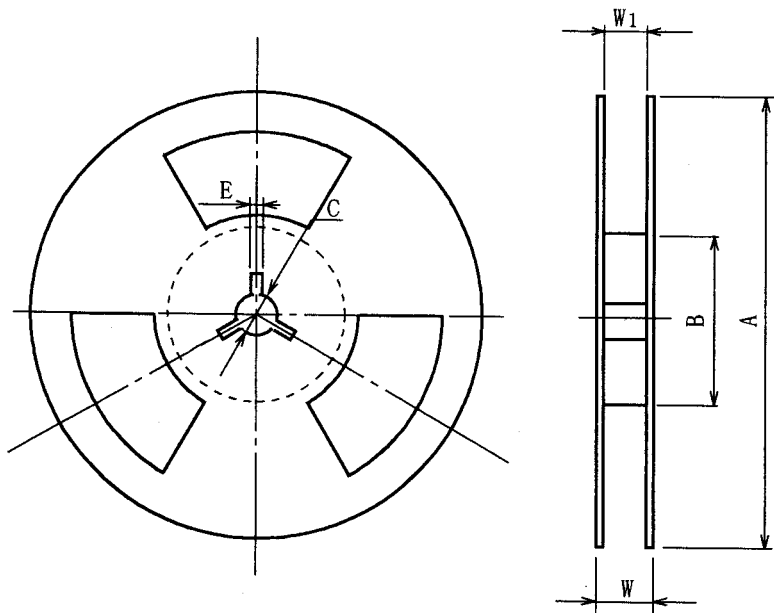
| Symbol | Size | Remark |
|----------------|-----------------------------------|-------------|
| A | 6.9±0.1 | Bottom size |
| B | 10.5±0.1 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.5MIN | |
| E | 1.75 | |
| F | 7.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 3.4MAX | |
| W | 16.0±0.3 | |
| W ₁ | 13.5 | |

Unit : mm



| Symbol | Size |
|----------------|-------------------------------------|
| A | ∅331.5MAX |
| B | ∅100±0.5 |
| C | ∅13 ^{+0.5} _{-0.2} |
| E | 2.2±0.5 |
| W | 22.4MAX |
| W ₁ | 19.4MAX |

Unit : mm



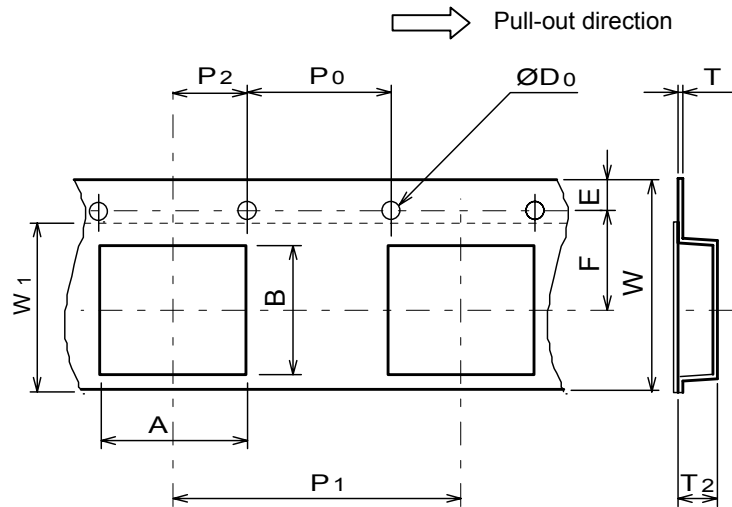
Pull-out beginning : Empty part more than 40mm + Cover tape more than 150mm
 Pull-out end : Empty part more than 40mm

(7) Emboss Carrier Taping Dimensions for SOT

• SOT89 (TE1, TE2)

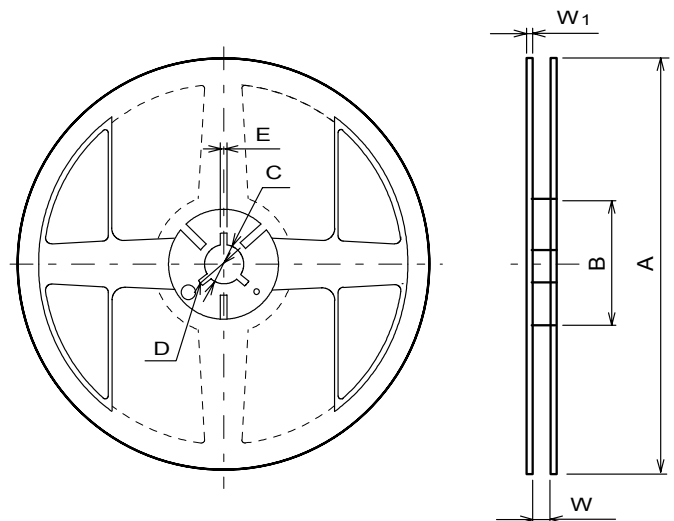
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 4.9±0.1 | Bottom size |
| B | 4.5±0.1 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| E | 1.5±0.1 | |
| F | 5.65±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.3±0.05 | |
| T ₂ | 2.0 | |
| W | 12.0±0.3 | |
| W ₁ | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|---------|
| A | ∅180±1 |
| B | ∅60±1 |
| C | ∅13±0.2 |
| D | ∅21±0.8 |
| E | 2±0.5 |
| W | 13±0.5 |
| W ₁ | 1.2±0.2 |

Unit : mm



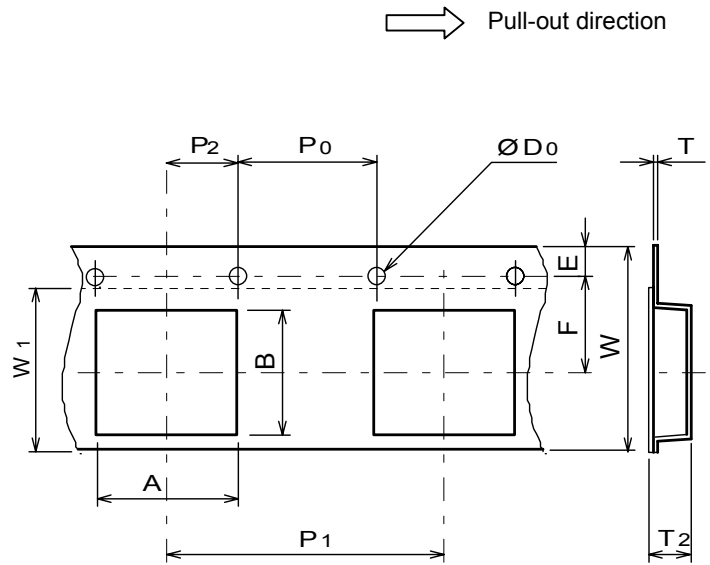
Pull-out beginning : Empty part more than 400mm + Cover tape more than 500mm
 Pull-out end : Empty part more than 400mm

TAPING DIMENSIONS

• SOT89 (5pin)(TE1, TE2)

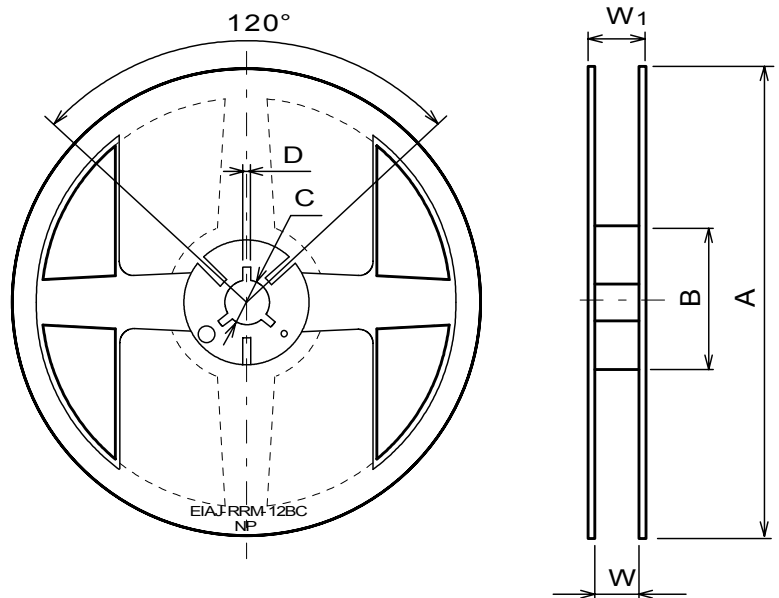
| Symbol | Size | Remark |
|----------------|-----------------------------------|---------------------|
| A | 4.65 | Bottom size |
| B | 4.3 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| E | 1.5 | |
| F | 5.65 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0 | |
| T | 0.3 | |
| T ₂ | 2.3MAX | |
| W | 12.0±0.2 | |
| W ₁ | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|-------------------------------------|
| A | ∅ 180 ⁺⁰ _{-3.0} |
| B | ∅ 60 ^{+1.0} ₋₀ |
| C | ∅ 13±0.2 |
| D | 2±0.5 |
| W | 13±0.3 |
| W ₁ | 16.5MAX |

Unit : mm



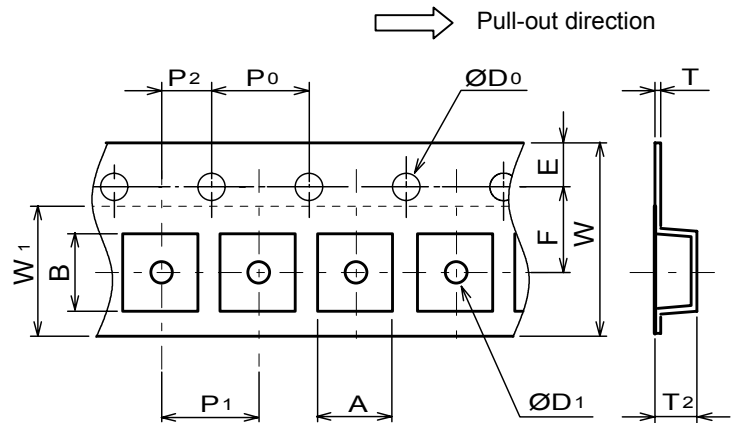
Pull-out beginning : Empty part more than 40mm + Cover tape more than 500mm
 Pull-out end : Empty part more than 40mm

(8) Emboss Carrier Taping Dimensions for SOT-23 (MTP)

• SOT-23 (MTP5) (TE1, TE2)

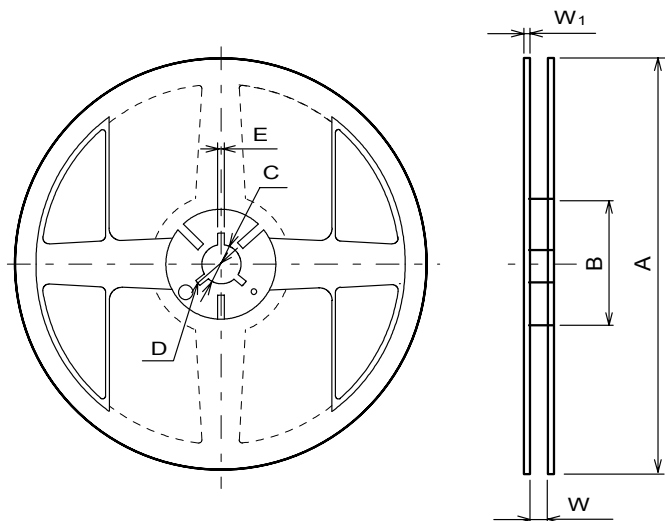
| Symbol | Size | Remark |
|----------------|-----------|---------------------|
| A | 3.3±0.1 | Bottom size |
| B | 3.2±0.1 | Bottom size |
| D ₀ | 1.55 | |
| D ₁ | 1.05 | |
| E | 1.75±0.1 | |
| F | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.25±0.05 | |
| T ₂ | 1.5 | |
| W | 8.0±0.3 | |
| W ₁ | 5.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅180±1 |
| B | ∅ 60±1 |
| C | ∅ 13±0.2 |
| D | ∅ 21±0.8 |
| E | 2±0.5 |
| W | 9±0.5 |
| W ₁ | 1.2±0.2 |

Unit : mm



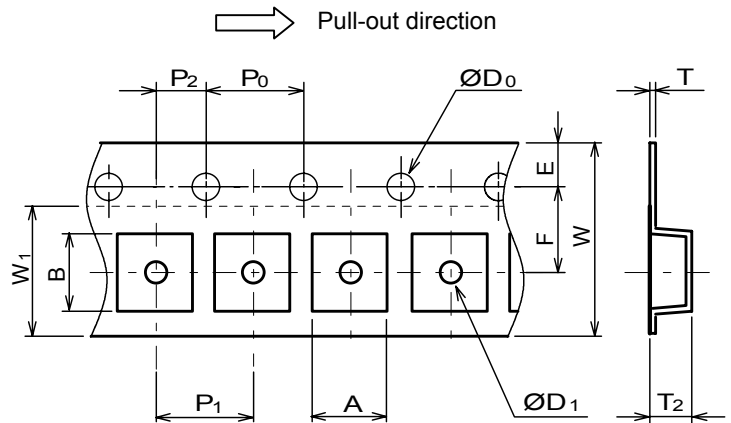
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• SOT-23-6 (MTP6/6-1)(TE1, TE2)

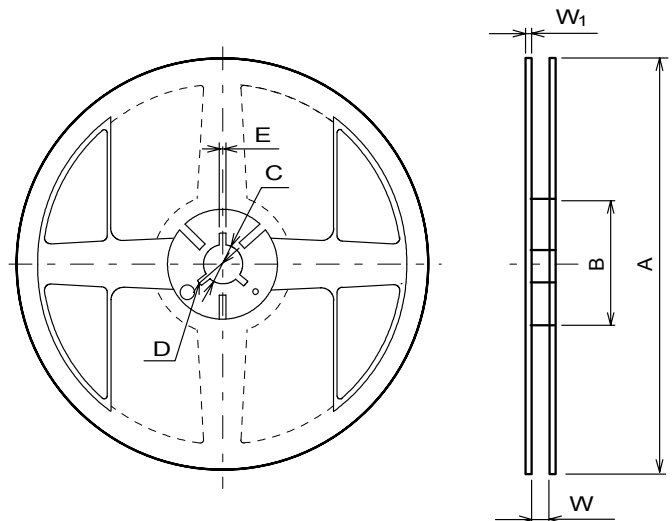
| Symbol | Size | Remark |
|----------------|-----------|---------------------|
| A | 3.3±0.1 | Bottom size |
| B | 3.2±0.1 | Bottom size |
| D ₀ | 1.55 | |
| D ₁ | 1.05 | |
| E | 1.75±0.1 | |
| F | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.25±0.05 | |
| T ₂ | 1.5 | |
| W | 8.0±0.3 | |
| W ₁ | 5.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅180±1 |
| B | ∅ 60±1 |
| C | ∅ 13±0.2 |
| D | ∅ 21±0.8 |
| E | 2±0.5 |
| W | 9±0.5 |
| W ₁ | 1.2±0.2 |

Unit : mm



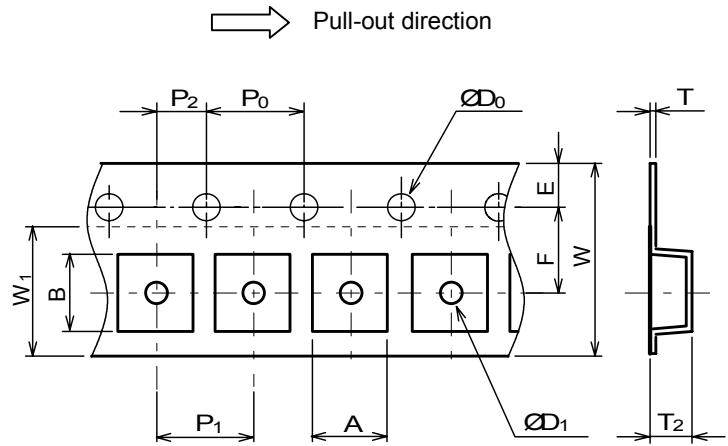
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(9) Emboss Carrier Taping Dimensions for SC-88A

• SC-88A (TE1, TE2)

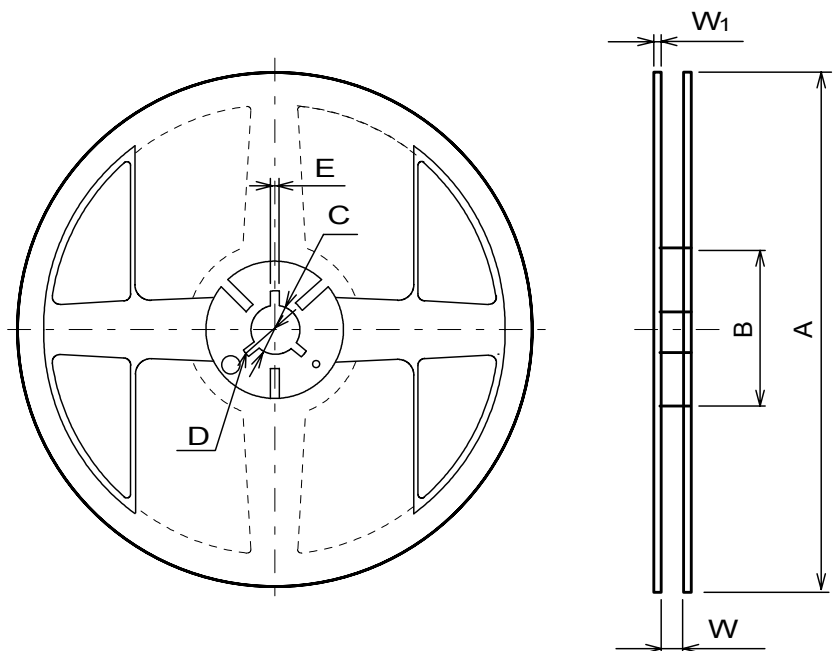
| Symbol | Size | Remark |
|----------------|-----------|---------------------|
| A | 2.30±0.1 | Bottom size |
| B | 2.50±0.1 | Bottom size |
| D ₀ | 1.55±0.05 | |
| D ₁ | 1.05±0.05 | |
| E | 1.75±0.1 | |
| F | 3.50±0.05 | |
| P ₀ | 4.00±0.1 | |
| P ₁ | 4.00±0.1 | |
| P ₂ | 2.00±0.05 | |
| T | 0.25±0.05 | |
| T ₂ | 1.3±0.1 | |
| W | 8.0±0.2 | |
| W ₁ | 5.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅180±0.1 |
| B | ∅ 60±0.1 |
| C | ∅ 13±0.2 |
| D | ∅ 21±0.8 |
| E | 2±0.5 |
| W | 9±0.5 |
| W ₁ | 1.2±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

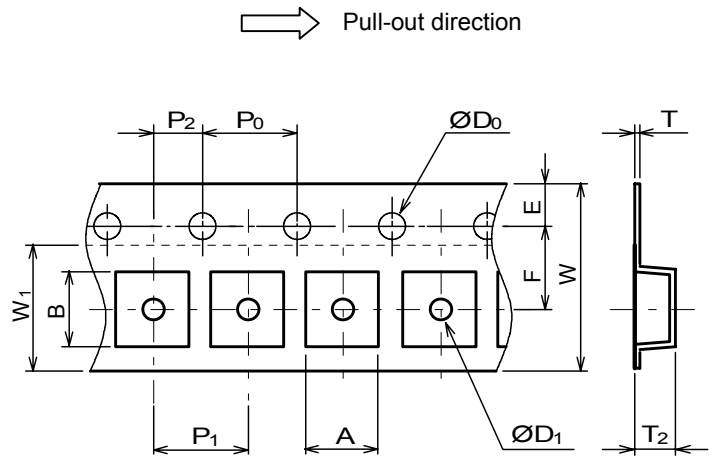
TAPING DIMENSIONS

(10) Emboss Carrier Taping Dimensions for FLP

- FLP6-B2, (TE1, TE2)/10-C1(TE3,TE4)

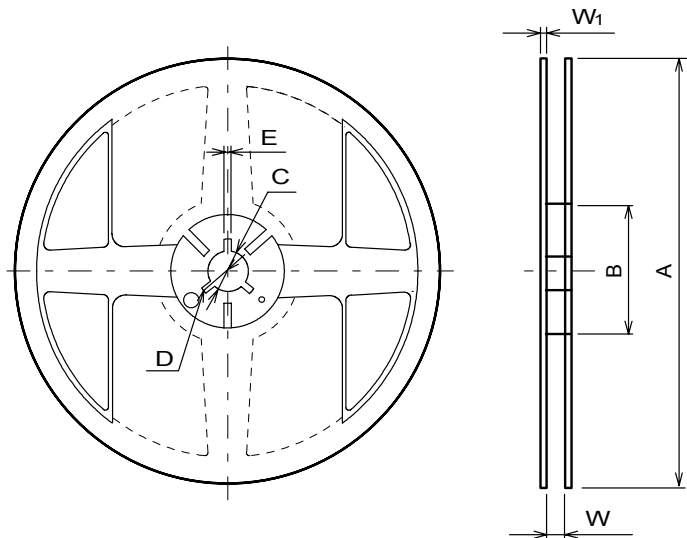
| | FLP6-B2 | FLP10-C1 | |
|----------------|----------|-----------|---------------------|
| Symbol | Size | Size | Remark |
| A | 2.15 | 2.8±0.1 | Bottom size |
| B | 2.25 | 3.4±0.1 | Bottom size |
| D ₀ | 1.55 | 1.55 | |
| D ₁ | 1.05 | 1.05 | |
| E | 1.75±0.1 | 1.75±0.1 | |
| F | 3.5±0.1 | 5.5±0.1 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | 4.0±0.1 | |
| P ₂ | 2.0±0.1 | 2.0±0.05 | |
| T | 0.2±0.05 | 0.25±0.05 | |
| T ₂ | 1.3 | 1.1 | |
| W | 8.0±0.3 | 12.0±0.3 | |
| W ₁ | 5.5 | 9.5 | Thickness 0.1MAX |

Unit : mm



| | FLP6-B2 | FLP10-C1 |
|----------------|----------------------------------|----------|
| Symbol | Size | Size |
| A | ∅180 ⁺⁰ ₋₃ | ∅180±3 |
| B | ∅60 ⁺¹ ₋₀ | ∅60±1 |
| C | ∅13±0.2 | ∅13±0.2 |
| D | ∅21±0.8 | ∅21±0.8 |
| E | 2±0.5 | 2±0.5 |
| W | 9±0.5 | 13.0±0.5 |
| W ₁ | 1.2±0.2 | 1.2±0.2 |

Unit : mm



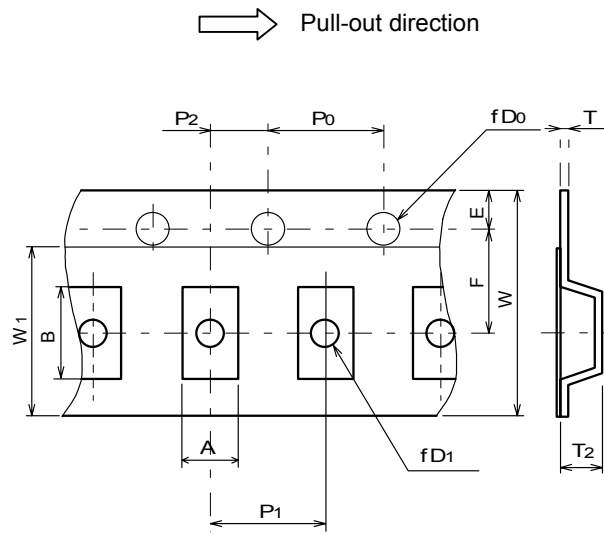
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(11) Emboss Carrier Taping Dimensions for SON

• SON6 (TE1, TE2)

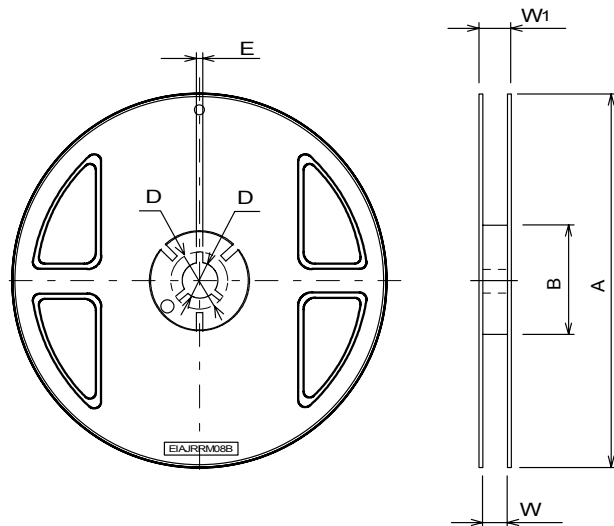
| Symbol | Size | Remark |
|----------------|-----------|-------------|
| A | 1.9±0.1 | Bottom size |
| B | 3.15±0.1 | Bottom size |
| D ₀ | 1.55±0.05 | |
| D ₁ | 1.05±0.05 | |
| E | 1.75±0.1 | |
| F | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | |
| P ₂ | 2.0±0.06 | |
| T | 0.2±0.05 | |
| T ₂ | 1.1±0.1 | |
| W | 8.0±0.2 | |
| W ₁ | 5.5 | |

Unit : mm



| Symbol | Size |
|----------------|----------------------------------|
| A | ∅180 ⁺⁰ ₋₃ |
| B | ∅60 ⁺¹ ₋₀ |
| C | ∅13±0.2 |
| D | ∅21±0.5 |
| E | 2±0.5 |
| W | 9±0.3 |
| W ₁ | 11.4±0.1 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

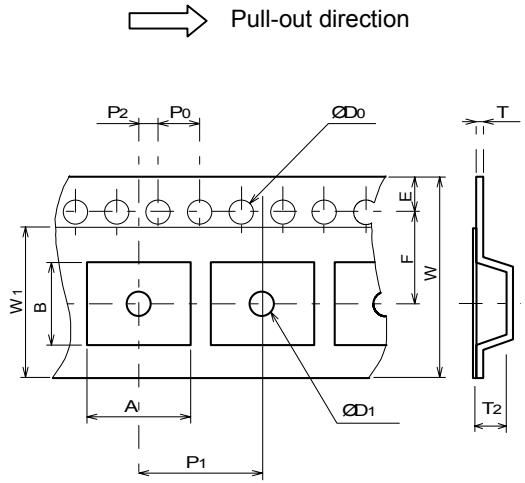
TAPING DIMENSIONS

(12) Emboss Carrier Taping Dimensions for QFN

- QFN20-M1 / 20-N1 / 28-P4 (TE4)

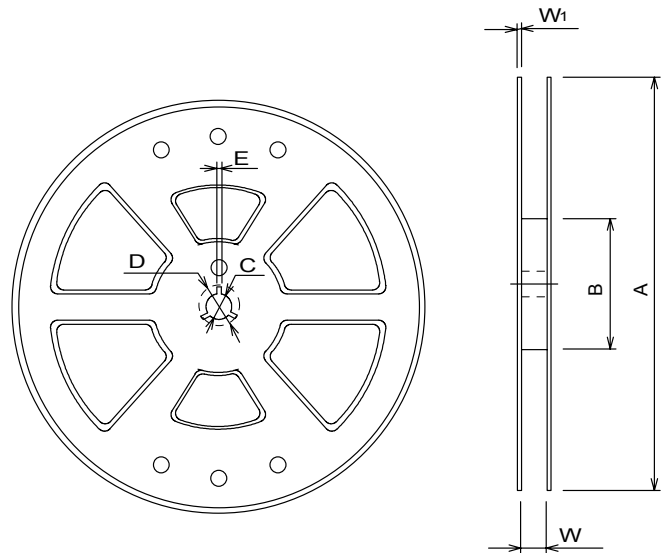
| | QFN20-M1 | QFN28-N1 | QFN28-P4 | |
|----------------|-----------|-----------|-----------|---------------------|
| Symbol | Size | Size | Size | Remark |
| A | 4.4±0.1 | 5.6±0.1 | 4.9±0.1 | Bottom size |
| B | 4.4±0.1 | 5.6±0.1 | 4.9±0.1 | Bottom size |
| D ₀ | 1.5±0.1 | 1.5±0.1 | 1.5±0.1 | |
| D ₁ | 1.55±0.05 | 1.55±0.05 | 1.55±0.05 | |
| E | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.05 | 5.5±0.05 | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | 2.0±0.05 | |
| T | 0.3±0.05 | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 1.4±0.1 | 1.4±0.1 | 1.4±0.1 | |
| W | 12.0±0.2 | 12.0±0.2 | 12.0±0.2 | |
| W ₁ | 9.5 | 9.5 | 9.5 | Thickness 0.1MAX |

Unit : mm



| | QFN20-M1 | QFN28-N1 | QFN28-P4 |
|----------------|----------|----------|----------|
| Symbol | Size | Size | Size |
| A | Ø330±2 | Ø330±2 | Ø330±2 |
| B | Ø100±1 | Ø100±1 | Ø100±1 |
| C | Ø 13±0.2 | Ø 13±0.2 | Ø 13±0.2 |
| D | Ø 21±0.8 | Ø 21±0.8 | Ø 21±0.8 |
| E | 2±0.5 | 2±0.5 | 2±0.5 |
| W | 13.5±0.5 | 13.5±0.5 | 13.5±0.5 |
| W ₁ | 2±0.2 | 2±0.2 | 2±0.2 |

Unit : mm



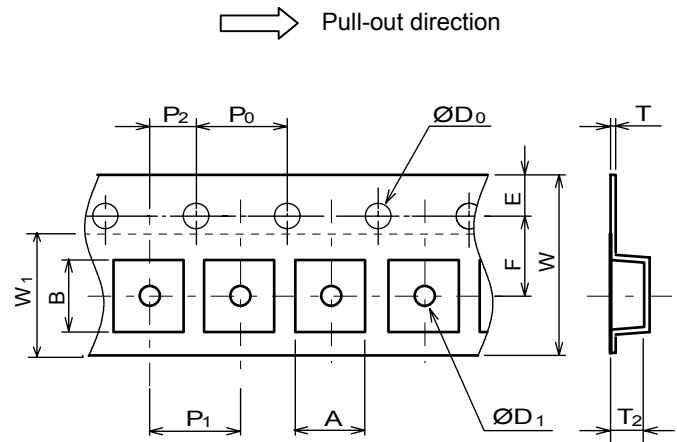
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(13) Emboss Carrier Taping Dimensions for FFP

- FFP12-B1, FFP16-C1 (TE1, TE2)

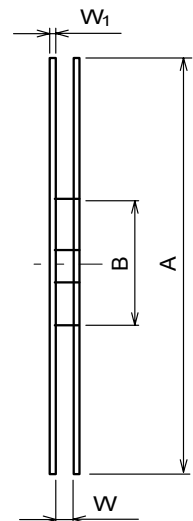
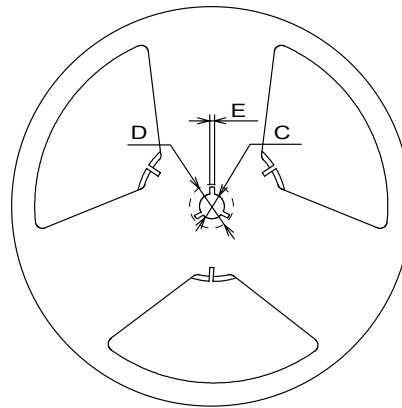
| | FFP12-B1 | FFP16-C1 | |
|----------------|-----------------------------------|-----------------------------------|---------------------|
| Symbol | Size | Size | Remark |
| A | 2.2±0.1 | 2.8±0.1 | Bottom size |
| B | 2.2±0.1 | 2.8±0.1 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.0 ^{+0.2} ₋₀ | 1.0 ^{+0.2} ₋₀ | |
| E | 1.75±0.1 | 1.75±0.1 | |
| F | 3.5±0.05 | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | 4.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | |
| T | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 1.20 | 1.20 | |
| W | 8.0±0.2 | 8.0±0.2 | |
| W ₁ | 5.5 | 5.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅255±1 |
| B | ∅ 80±1 |
| C | ∅ 13±0.3 |
| D | ≥∅ 20.2 |
| E | 2±0.5 |
| W | 9.5±0.3 |
| W ₁ | 2±0.2 |

Unit : mm



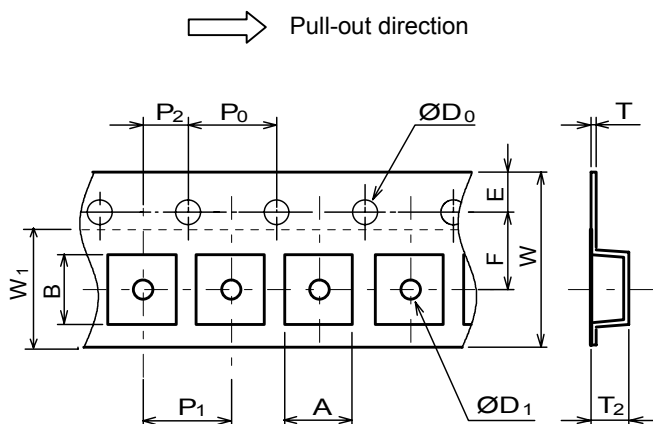
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

TAPING DIMENSIONS

• FFP24-E1/32-G1 (TE1, TE2)

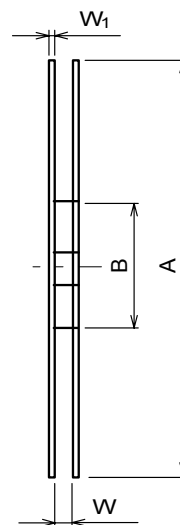
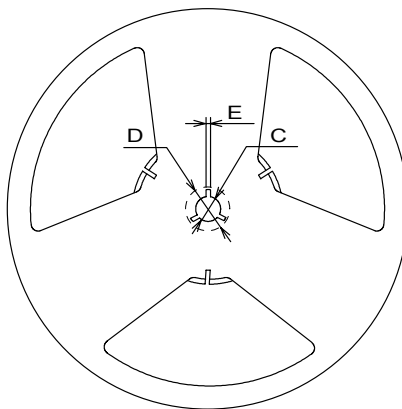
| | FFP24-E1 | FFP32-G1 | |
|----------------|-----------------------------------|-----------------------------------|---------------------|
| Symbol | Size | Size | Remark |
| A | 3.8±0.1 | 4.8±0.1 | Bottom size |
| B | 3.8±0.1 | 4.8±0.1 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.5 ^{+0.2} ₋₀ | 1.5 ^{+0.2} ₋₀ | |
| E | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.05 | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | |
| T | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 1.20 | 1.20 | |
| W | 12.0±0.3 | 12.0±0.3 | |
| W ₁ | 9.5 | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | ∅255±1 |
| B | ∅ 80±1 |
| C | ∅ 13±0.3 |
| D | ≥∅ 20.2 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



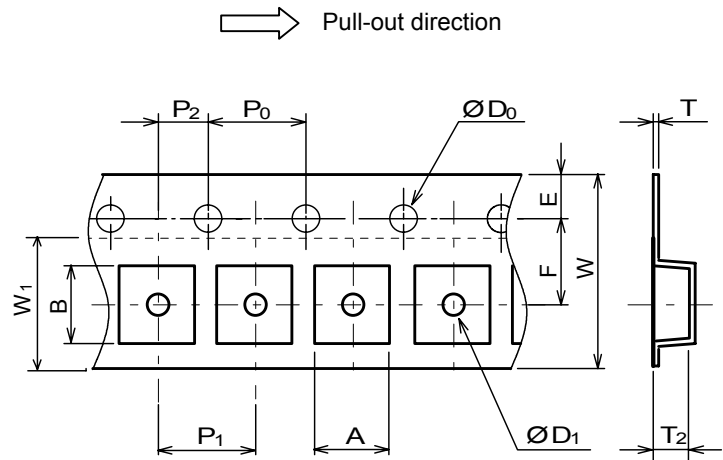
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(14) Emboss Carrier Taping Dimensions for PCSP

• PCSP14-C3 (TE1, TE2)

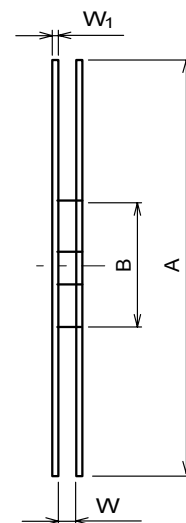
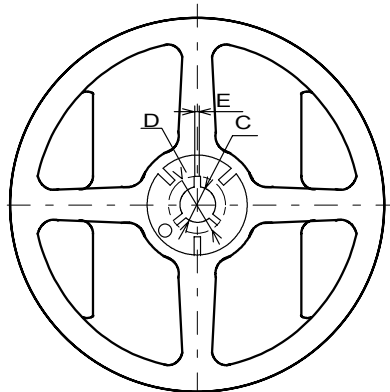
| Symbol | Size | Remark |
|----------------|----------|---------------------|
| A | 2.8±0.1 | Bottom size |
| B | 2.8±0.1 | Bottom size |
| D ₀ | 1.5 | |
| D ₁ | 1.0 | |
| E | 1.75±0.1 | |
| F | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.2±0.05 | |
| T ₂ | 1.20 | |
| W | 8.0±0.2 | |
| W ₁ | 5.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|---------------------------------|
| A | $\varnothing 180^{+0.5}_{-1.5}$ |
| B | $\varnothing 60^{+1}_{-0}$ |
| C | $\varnothing 13 \pm 0.2$ |
| D | $\varnothing 21 \pm 0.8$ |
| E | 2 ± 0.5 |
| W | $9^{+0.3}_{-0}$ |
| W ₁ | 1.2 |

Unit : mm



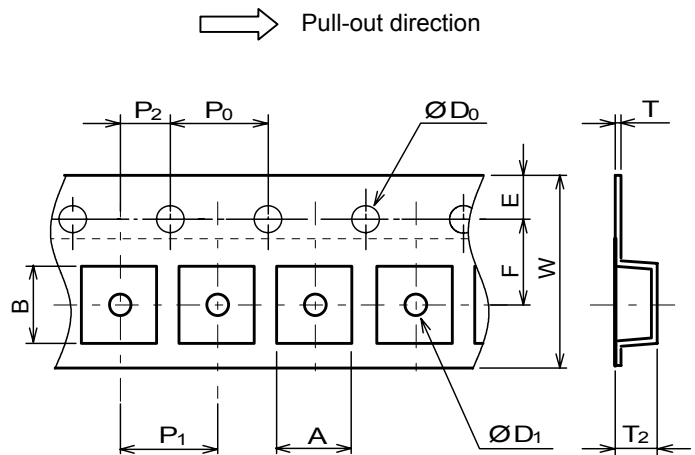
Pull-out beginning : Empty part more than 25 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 45 embosses

TAPING DIMENSIONS

• PCSP16-E4 (TE1, TE2)

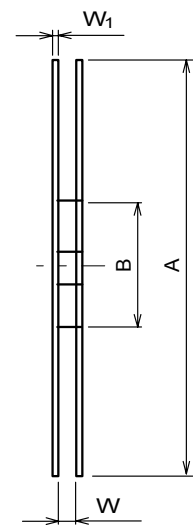
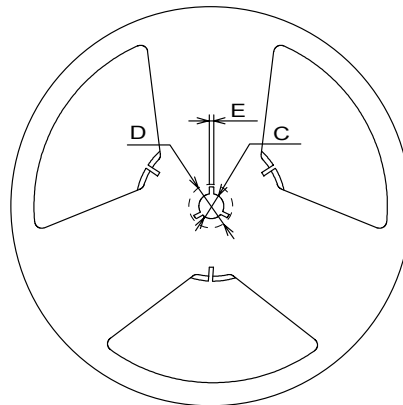
| Symbol | Size | Remark |
|----------------|----------|---------------------|
| A | 3.8±0.1 | Bottom size |
| B | 3.8±0.1 | Bottom size |
| D ₀ | 1.5 | |
| D ₁ | 1.5 | |
| E | 1.75±0.1 | |
| F | 5.5±0.05 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | |
| P ₂ | 2.0±0.05 | |
| T | 0.3±0.05 | |
| T ₂ | 1.20 | |
| W | 12.0±0.3 | |
| W ₁ | 9.5 | Thickness 0.1MAX |

Unit : mm



| Symbol | Size |
|----------------|----------|
| A | Ø255±1 |
| B | Ø 80±1 |
| C | Ø 13±0.3 |
| D | ≥Ø 20.2 |
| E | 2±0.5 |
| W | 13.5±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



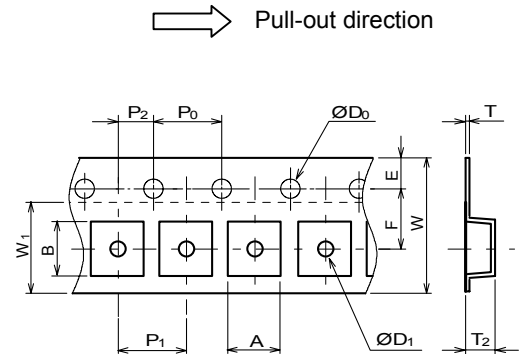
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(15) Emboss Carrier Taping Dimensions for USB

- USB6-D3, USB8-B3, USB10-C3, USB12-E3 (TE1, TE2)

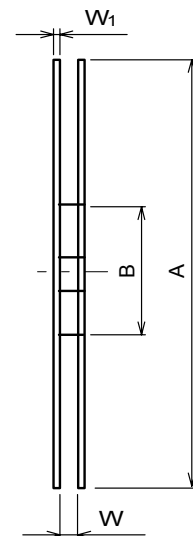
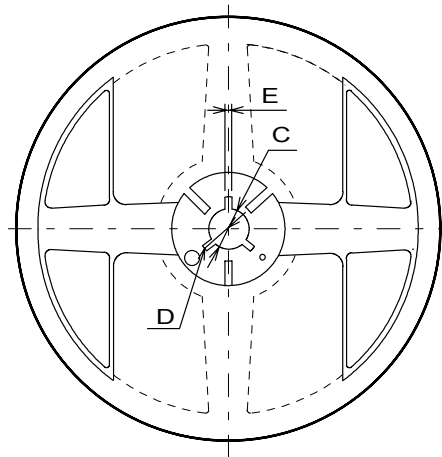
| | USB6-D3 | USB8-B3 | USB10-C3 | USB12-E3 | |
|----------------|-----------|-----------|-----------|-----------|----------------------|
| Symbol | Size | Size | Size | Size | Remark |
| A | 2.2±0.1 | 1.9±0.1 | 2.4±0.1 | 2.75±0.1 | Bottom Size |
| B | 2.4±0.1 | 1.9±0.1 | 1.9±0.1 | 2.75±0.1 | Bottom Size |
| D ₀ | 1.5 +0.1 | 1.5 +0.1 | 1.5 +0.1 | 1.5 +0.1 | |
| D ₁ | 1.1±0.1 | 1.1±0.1 | 1.1±0.1 | 1.1±0.1 | |
| E | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 | |
| F | 3.5±0.05 | 3.5±0.05 | 3.5±0.05 | 3.5±0.05 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | |
| P ₂ | 2.0±0.05 | 2.0±0.05 | 2.0±0.05 | 2.0±0.05 | |
| T | 0.25±0.05 | 0.25±0.05 | 0.25±0.05 | 0.25±0.05 | |
| T ₂ | 1.1±0.1 | 1.1±0.1 | 1.1±0.1 | 1.1±0.1 | |
| W | 8.0±0.2 | 8.0±0.2 | 8.0±0.2 | 8.0±0.2 | |
| W ₁ | 5.5±0.1 | 5.5±0.1 | 5.5±0.1 | 5.5±0.1 | Thickness 69µmMAX |

Unit : mm



| 照合文字 | 寸法 |
|----------------|----------------------------------|
| A | ∅180 ⁺⁰ ₋₃ |
| B | ∅60 ⁺¹ ₋₀ |
| C | ∅13±0.2 |
| D | ∅21±0.8 |
| E | 2±0.5 |
| W | 9±0.3 |
| W ₁ | 1.2±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 40 embosses

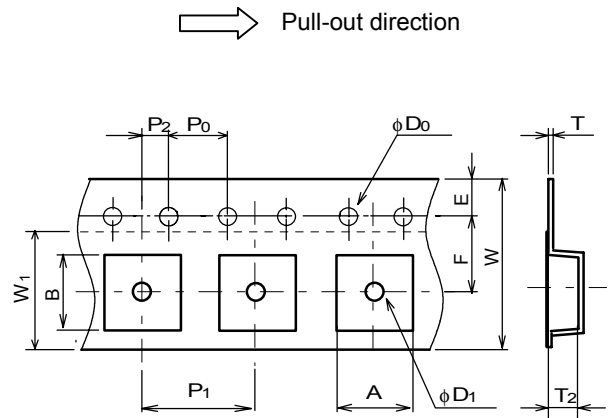
TAPING DIMENSIONS

(16) Emboss Carrier Taping Dimensions for BCC

- BCC24, BCC32, BCC36 (TE1,TE2)

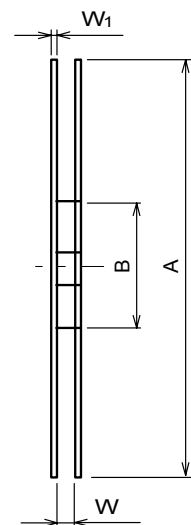
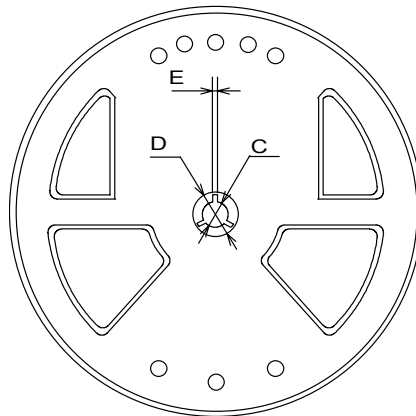
| | BCC24 | BCC32 | BCC36 | |
|----------------|------------------------------------|------------------------------------|------------------------------------|---|
| Symbol | Size | Size | Size | Remark |
| A | 4.30±0.1 | 5.35±0.1 | 4.8±0.1 | Bottom size |
| B | 4.30±0.1 | 5.35±0.1 | 4.8±0.1 | Bottom size |
| D ₀ | 1.55 ^{+0.1} ₋₀ | 1.55 ^{+0.1} ₋₀ | 1.55 ^{+0.1} ₋₀ | |
| D ₁ | 1.55 ^{+0.1} ₋₀ | 1.55 ^{+0.1} ₋₀ | 1.55 ^{+0.1} ₋₀ | |
| E | 1.75±0.1 | 1.75±0.1 | 1.75±0.1 | |
| F | 5.5±0.1 | 5.5±0.1 | 5.5±0.1 | |
| P ₀ | 4.0±0.1 | 4.0±0.1 | 4.0±0.1 | |
| P ₁ | 8.0±0.1 | 8.0±0.1 | 8.0±0.1 | |
| P ₂ | 2.0±0.1 | 2.0±0.1 | 2.0±0.1 | |
| T | 0.3±0.05 | 0.3±0.05 | 0.3±0.05 | |
| T ₂ | 0.9±0.1 | 1.0±0.1 | 0.9±0.1 | |
| W | 12.0±0.3 | 12.0±0.3 | 12.0±0.3 | |
| W ₁ | 9.5 | 9.5 | 9.5 | Thickness 0.05 MAX.(24/32) 0.1 MAX.(36) |

Unit : mm



| Symbol | Size |
|----------------|----------------------------------|
| A | ∅254±2 |
| B | ∅100 ⁺² ₋₀ |
| C | ∅13±0.2 |
| D | ∅21±0.8 |
| E | 2±0.5 |
| W | 13.4±0.1 |
| W ₁ | 2.9 MAX |

Unit : mm



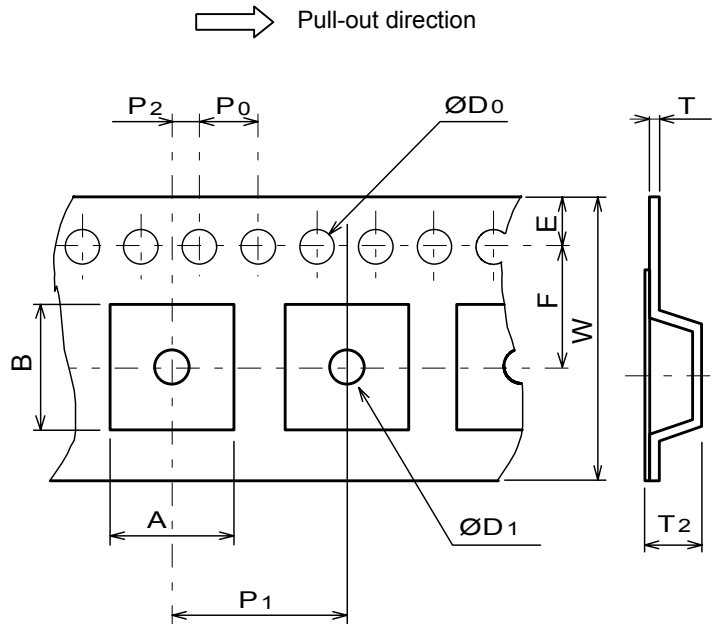
Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses

(17) Emboss Carrier Taping Dimensions for PLCC

• PLCC28-M2 (TE3)

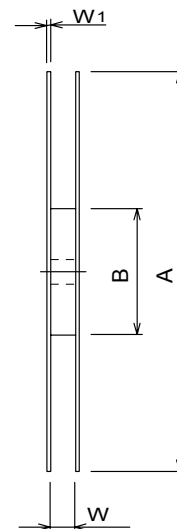
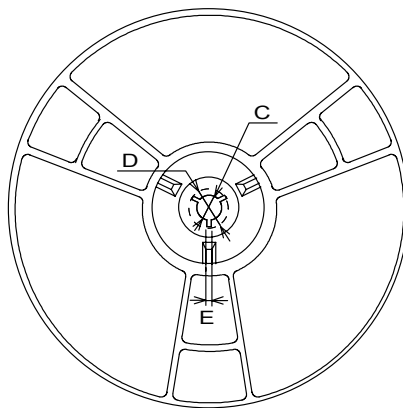
| Symbol | Size | Remark |
|----------------|-----------------------------------|-------------|
| A | 13.0 | Bottom size |
| B | 13.0 | Bottom size |
| D ₀ | 1.5 ^{+0.1} ₋₀ | |
| D ₁ | 1.55±0.1 | |
| E | 1.75±0.1 | |
| F | 11.5±0.1 | |
| P ₀ | 4.0±0.1 | |
| P ₁ | 16.0±0.1 | |
| P ₂ | 2.0±0.1 | |
| T | 0.3±0.05 | |
| T ₂ | 4.9 | |
| W | 24.0±0.3 | |

Unit : mm



| Symbol | Size |
|----------------|-------------------------------------|
| A | ∅330±2 |
| B | ∅100±1 |
| C | ∅13 ^{+0.5} _{-0.2} |
| D | ∅20.2MIN |
| E | 2±0.5 |
| W | 24±0.5 |
| W ₁ | 2±0.2 |

Unit : mm



Pull-out beginning : Empty part more than 20 embosses + Cover tape more than one around reel
 Pull-out end : Empty part more than 20 embosses