

EMC Components

MEA Series MEA3216, MEA8020 Types

3-Terminal Filter for Signal Line and DC Power Line

SMD

4-LINE, MEA3216 TYPE

FEATURES

- TDK's own unique 4-line multilayer L-type EMC filter.
- This chip EMC filter removes high frequency noise from signal lines.
- Approximately 40% mounting area reduction in comparison to the earlier 8020 EMC filter.
- Tape packaging allows use by automatic assembly equipment.
- Entirely monolithic structure is almost unaffected by crosstalk.

APPLICATIONS

Personal computers, computing and communications devices, electronic games, hard disk drives, facsimiles, etc.

PRODUCT IDENTIFICATION

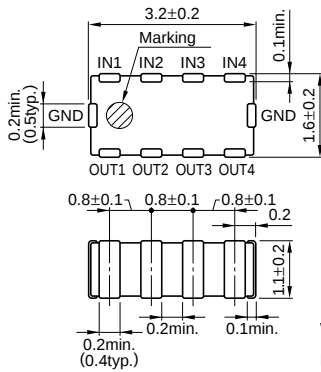
MEA	3216	L	50R0	T
(1)	(2)	(3)	(4)	(5)

- (1) Series name (4) Cutoff frequency (MHz)
 (2) Dimensions L×W 50R0:fc=50MHz
 (3) L type circuit (5) Packaging style T:Taping

TEMPERATURE RANGES

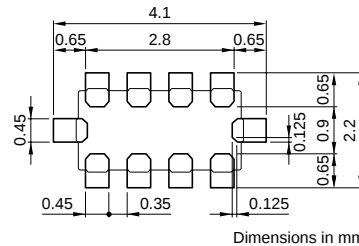
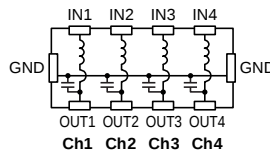
Operating	-40 to +85°C
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SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



Weight: 32mg

Dimensions in mm



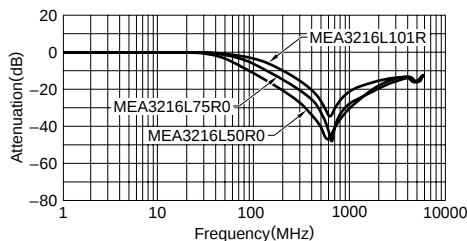
Dimensions in mm

ELECTRICAL CHARACTERISTICS

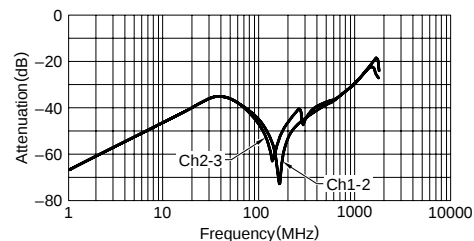
Part No.	Cutoff frequency (MHz)typ.	Attenuation 20dB frequency range (MHz)	Rated voltage (V)max.	Rated current (mA)max.
MEA3216L50R0	50	500 to 1000	10	100
MEA3216L75R0	75	500 to 800	10	100
MEA3216L101R	100	500 to 600	10	100

TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS



MEA3216L50R0: Crosstalk(50W System)



TEST EQUIPMENT

- HP-8753B NETWORK ANALYZER, or equivalent
- HP-85046A S-PARAMETER TEST SET, or equivalent

EMC Components

MEA Series MEA3216, MEA8020 Types

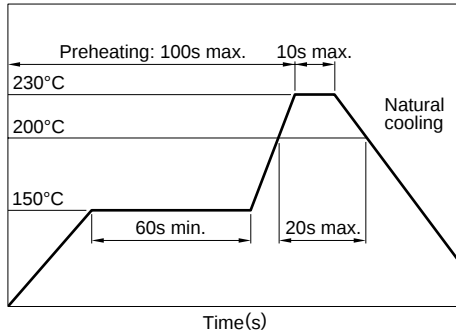
3-Terminal Filter for Signal Line and DC Power Line

SMD

4-LINE, MEA3216 TYPE

RECOMMEND SOLDERING CONDITION

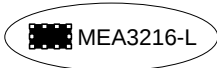
REFLOW SOLDERING



PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

TYPICAL APPLICATIONS

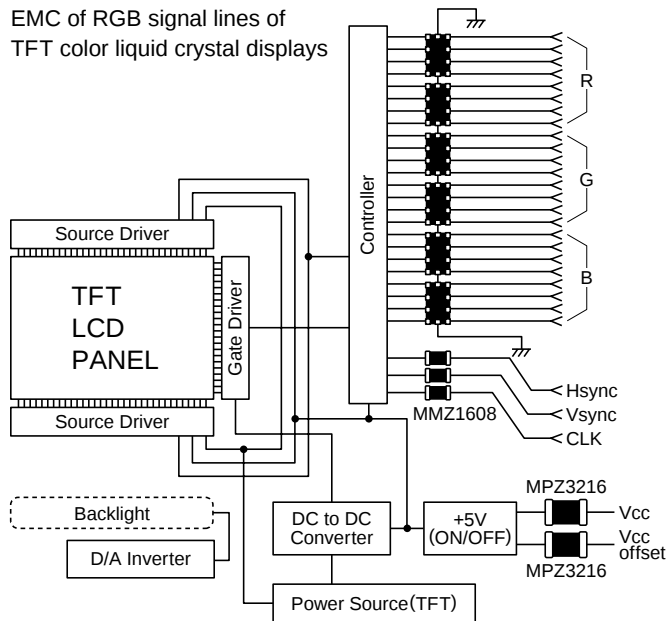


Multilayer chip impeder

MPZ3216 Large current type for power line

MMZ1608 Large current type for signal line

EMC of RGB signal lines of
TFT color liquid crystal displays



MAJOR APPLICATIONS

TFT color liquid crystal display (display interface), notebook PCs (high speed bus and interface lines), data terminals, various types of portable audio-visual equipment, high resolution printers, etc.

EMC Components

MEA Series MEA3216, MEA8020 Types

3-Terminal Filter for Signal Line and DC Power Line

SMD

8-LINE, MEA8020 TYPE

FEATURES

- These are multilayer 8-line T-type EMC filter arrays .
- Tape packaging allows use by automatic assembly equipment.

APPLICATIONS

Bus signal EMC removal for liquid crystal display panels, game machines, etc.

TEMPERATURE RANGES

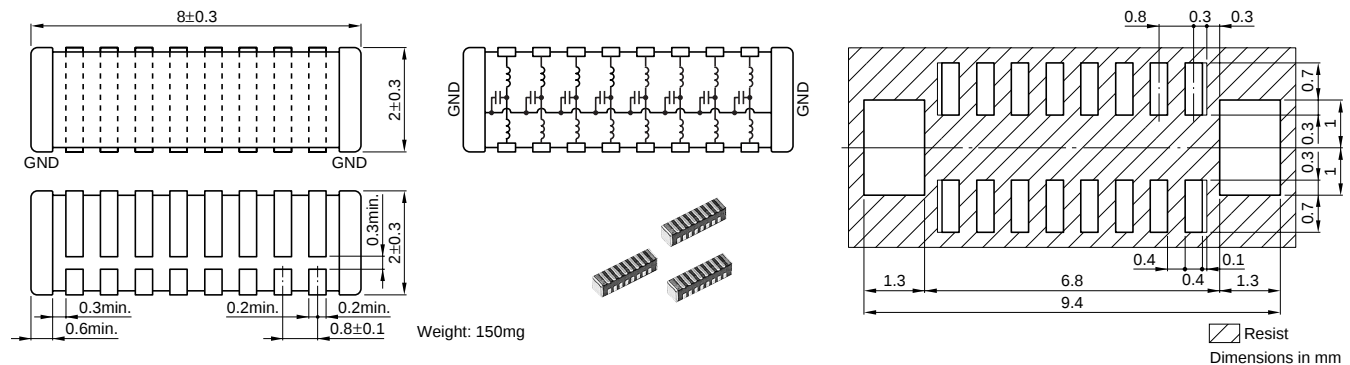
Operating	-40 to +85°C
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PRODUCT IDENTIFICATION

MEA	8020	T	10R0	T
(1)	(2)	(3)	(4)	(5)

- (1)Series name (4)Cutoff frequency (MHz)
 (2)Dimensions L×W 10R0:fc=10MHz
 (3)T type circuit (5)Packaging style T:Taping

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN

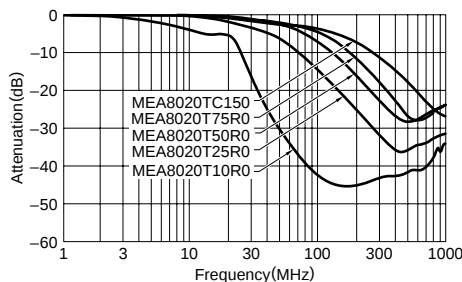


RATINGS AND CHARACTERISTICS

Part No.	MEA8020T10R0	MEA8020T25R0	MEA8020T50R0	MEA8020T75R0	MEA8020TC150
Rated voltage(V)	5	5	5	5	5
Rated current(mA)	60	60	90	90	90
Insertion loss(dB)min.	20[50MHz to 1GHz]	20[300MHz to 1GHz]	20[400MHz to 1GHz]	20[500MHz to 1GHz]	20[600MHz to 1GHz]
Operating Temperature range(°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +85

TYPICAL ELECTRICAL CHARACTERISTICS

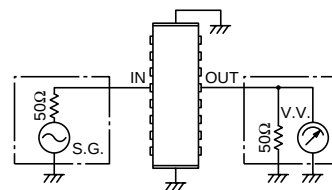
ATTENUATION vs. FREQUENCY CHARACTERISTICS



• TEST EQUIPMENT

- HP-8753B NETWORK ANALYZER or equivalent
 HP-85046A S-PARAMETER TEST SET or equivalent

MEASURING CIRCUIT



PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

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