TOSHIBA
Leading Innovation

SEMICONDUCTOR GENERAL CATALOG

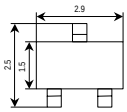
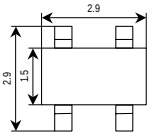
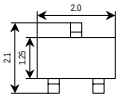
Radio-Frequency Devices

Radio-Frequency Bipolar Small-Signal Transistors
Radio-Frequency Small-Signal FETs
Radio-Frequency Power MOSFETs
Radio-Frequency Diodes
Small-Signal MMICs (Radio-Frequency Cell Packs)
Microwave Semiconductors

2010/8 SCE0004J

Radio-Frequency Bipolar Small-Signal Transistors

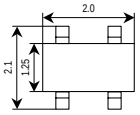
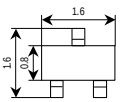
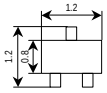
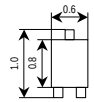
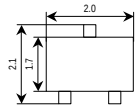
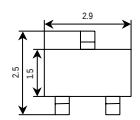
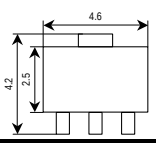
Radio-Frequency Bipolar Transistors

Part Number	Package	Applications	Absolute Maximum Ratings (Ta = 25°C)				Marking	TO-92 Equivalent Product	Remarks (Mini Transistors)
			V_{CEO} (V)	I_C (mA)	P_C (mW)	T_j (°C)			
2SC2714	S-MINI 	FM-band radio-frequency amps	30	20	150	125	Q☐	**2SC1923**	f_T = 550 MHz
2SC2715		AM-band frequency converter, FM-band IF amps	30	50	150	125	R☐	**2SC380TM**	
2SC2716		AM-band radio-frequency amps	30	100	150	125	F☐	**2SC941TM**	
2SC3123		VHF-band frequency converters, RF amps	20	50	150	125	HE	2SC3136	f_T = 1.4 GHz
2SC5064		VHF/UHF-band low-noise amps	12	30	150	125	MA☐	—	f_T = 7 GHz
2SC5084		VHF/UHF-band low-noise amps	12	80	150	125	MC☐	—	f_T = 7 GHz
2SC5089		VHF/UHF-band low-noise amps	10	40	150	125	MD☐	—	f_T = 10 GHz
2SC5106		VHF/UHF-band oscillators	10	30	150	125	MF☐	—	f_T = 6 GHz
2SC5109		VHF/UHF-band oscillators	10	60	150	125	MG☐	—	f_T = 5 GHz
MT3S03A		VHF/UHF-band low-voltage operation, low phase noise	5	40	150	125	MR	—	f_T = 10 GHz
MT3S04A		VHF/UHF-band low-voltage operation, low phase noise	5	40	150	125	AE	—	f_T = 7 GHz
MT3S106		VHF/UHF-band low noise, low-distortion amps	6	80	700 (Note 1)	150	R2	—	f_T = 13 GHz
2SC5087	SMQ 	VHF/UHF-band low-noise amps	12	80	150	125	C☐	—	f_T = 7 GHz
2SC5087R		VHF/UHF-band low-noise amps	12	80	150	125	ZP	—	f_T = 8 GHz
2SC5092		VHF/UHF-band low-noise amps	10	40	150	125	D☐	—	f_T = 10 GHz
MT4S03A		VHF/UHF-band low-voltage operation, low phase noise	5	40	150	125	MR	—	f_T = 10 GHz
MT4S04A		VHF/UHF-band low-voltage operation, low phase noise	5	40	150	125	AE	—	f_T = 7 GHz
2SC4215	USM 	FM-band radio-frequency amps	30	20	100	125	Q☐	2SC1923	f_T = 550 MHz
2SC4250		VHF-band frequency converters, RF amps	20	50	100	125	HE	2SC3136	f_T = 1.4 GHz
2SC5065		VHF/UHF-band low-noise amps	12	30	100	125	MA☐	—	f_T = 7 GHz
2SC5085		VHF/UHF-band low-noise amps	12	80	100	125	MC☐	—	f_T = 7 GHz
2SC5090		VHF/UHF-band low-noise amps	10	40	100	125	MD☐	—	f_T = 10 GHz
2SC5095		VHF/UHF-band low-noise amps	10	15	100	125	ME☐	—	f_T = 10 GHz
2SC5107		VHF/UHF-band oscillators	10	30	100	125	MF☐	—	f_T = 6 GHz
2SC5110		VHF/UHF-band oscillators	10	60	100	125	MG☐	—	f_T = 5 GHz
2SC5463		VHF/UHF-band low-noise amps	12	60	100	125	MX/MY	—	f_T = 7 GHz
MT3S03AU		VHF/UHF-band low-voltage operation, low phase noise	5	40	100	125	MR	—	f_T = 10 GHz
MT3S04AU		VHF/UHF-band low-voltage operation, low phase noise	5	40	100	125	AE	—	f_T = 7 GHz
MT3S16U		UHF-band low-voltage oscillators and amps	5	60	100	125	T4	—	f_T = 4 GHz

☐: Denotes a h_{FE} class.

Note 1: Mounted on a ceramic board

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Part Number	Package	Applications	Absolute Maximum Ratings (Ta = 25°C)				Marking	TO-92 Equivalent Product	Remarks
			V_{CEO} (V)	I_C (mA)	P_C (mW)	T_j (°C)			
2SC5088	USQ 	VHF/UHF-band low-noise amps	12	80	100	125	MC☐	—	f_T = 7 GHz
2SC5319		VHF/UHF-band low-noise amps	5	20	100	125	MT	—	f_T = 16 GHz
MT4S23U *		VHF/UHF-band low-noise amps	5	40	170 (Note 1)	150	MT	—	f_T = 16 GHz
MT4S03AU		VHF/UHF-band low-voltage operation, low phase noise	5	40	100	125	MR	—	f_T = 10 GHz
MT4S03BU *		VHF/UHF-band low-noise amps	5	40	175 (Note 1)	150	MR	—	f_T = 12 GHz
MT4S06U		VHF/UHF-band low-voltage operation, low noise	5	15	60	125	AC	—	f_T = 10 GHz
MT4S32U		VHF/UHF-band low-noise amps	4.5	15	67.5	125	U4	—	f_T = 16 GHz
2SC4915	SSM 	FM-band radio-frequency amps	30	20	100	125	Q☐	**2SC1923**	f_T = 550 MHz
2SC5066		VHF/UHF-band low-noise amps	12	30	100	125	M1/M2	—	f_T = 7 GHz
2SC5086		VHF/UHF-band low-noise amps	12	80	100	125	M5/M6	—	f_T = 7 GHz
2SC5091		VHF/UHF-band low-noise amps	10	40	100	125	M7/M8	—	f_T = 10 GHz
2SC5096		VHF/UHF-band low-noise amps	10	15	100	125	M9/MA	—	f_T = 10 GHz
2SC5108		VHF/UHF-band oscillators	10	30	100	125	MB/MC	—	f_T = 6 GHz
2SC5111		VHF/UHF-band oscillators	10	60	100	125	MD/ME	—	f_T = 5 GHz
2SC5322		VHF/UHF-band low-noise amps	5	10	100	125	MU	—	
2SC5464		VHF/UHF-band low-noise amps	12	60	100	125	MX/MY	—	f_T = 7 GHz
MT3S03AS		VHF/UHF-band low-voltage operation, low phase noise	5	40	100	125	MR	—	f_T = 10 GHz
MT3S04AS		VHF/UHF-band low-voltage operation, low phase noise	5	40	100	125	AE	—	f_T = 7 GHz
MT3S06S		VHF/UHF-band low-voltage operation, low noise	5	15	60	125	AC	—	f_T = 10 GHz
2SC4250FV	VESM 	VHF-band frequency converters, RF amps	20	50	150 (Note 1)	125	HE	2SC3136	f_T = 1.4 GHz
MT3S03AFS	fSM 	VHF/UHF-band low-voltage operation, low phase noise	5	40	85 (Note 1)	125	00	—	f_T = 10 GHz
MT3S04AFS		VHF/UHF-band low-voltage operation, low phase noise	5	40	85 (Note 1)	125	01	—	f_T = 7 GHz
MT3S05FS		VHF/UHF-band low-voltage operation, low phase noise	5	40	85 (Note 1)	125	02	—	f_T = 4.5 GHz
MT3S06FS		VHF/UHF-band low-voltage operation, low noise	5	15	85 (Note 1)	125	03	—	f_T = 10 GHz
MT3S07FS		VHF/UHF-band low-voltage operation, low noise	5	25	85 (Note 1)	125	04	—	f_T = 12 GHz
MT3S11FS		VHF/UHF-band low-voltage operation, low phase noise	6	40	85 (Note 1)	125	08	—	f_T = 6 GHz
MT3S12FS		VHF/UHF-band low-voltage operation, low phase noise	6	40	85 (Note 1)	125	09	—	f_T = 7 GHz
MT3S14FS		VHF/UHF-band low-voltage operation, low noise	2.5	30	85 (Note 1)	125	0H	—	f_T = 11 GHz
MT3S16FS		UHF-band low-voltage oscillators and amps	5	60	85 (Note 1)	125	0K	—	f_T = 4 GHz
MT3S35FS		VHF/UHF-band low-noise amps	4.5	24	100 (Note 1)	150	20	—	f_T = 20 GHz
MT3S36FS		VHF/UHF-band low-noise amps	4.5	36	100 (Note 1)	150	21	—	f_T = 19 GHz
MT3S37FS		VHF/UHF-band low-noise amps	4.5	50	100 (Note 1)	150	22	—	f_T = 19 GHz
MT3S41FS		VHF/UHF-band low-noise amps	4.5	80	100 (Note 1)	150	26	—	f_T = 15 GHz
MT3S11CT	CST3 	VHF/UHF-band low-voltage operation, low phase noise	6	40	105 (Note 1)	125	08	—	f_T = 6 GHz
MT3S15TU *	UFM 	VHF/UHF-band low-noise amps, low-distortion amps	6	80	900 (Note 2)	150	T3	—	f_T = 11.5 GHz
MT3S19TU *		VHF/UHF-band low-noise amps, low-distortion amps	6	80	900 (Note 2)	150	T6	—	f_T = 11 GHz
MT3S20TU *		VHF/UHF-band low-noise amps, low-distortion amps	12	80	900 (Note 2)	150	MU	—	f_T = 7 GHz
MT3S19 *	S-MINI 	VHF/UHF-band low-noise amps, low-distortion amps	6	80	800 (Note 2)	150	T6	—	f_T = 12 GHz
MT3S20P *	Pw-Mini 	VHF/UHF-band low-noise amps, low-distortion amps	12	80	1800 (Note 2)	150	MU	—	f_T = 7 GHz
MT3S21P *		VHF/UHF-band low-noise amps, low-distortion amps	6	80	1800 (Note 2)	150	T2	—	f_T = 9 GHz
MT3S22P *		VHF/UHF-band low-noise amps, low-distortion amps	6	80	1800 (Note 2)	150	T5	—	f_T = 8.5 GHz

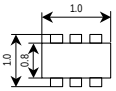
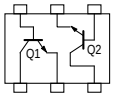
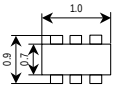
☐: Denotes a h_{FE} class. *: New product

Note 1: When mounted on a glass-epoxy PCB board

Note 2: Mounted on a ceramic board

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Dual Radio-Frequency Bipolar Transistor

Part Number	Package	Absolute Maximum Ratings (Ta = 25°C)			Structure (Q1/Q2)	fT (Q1/Q2) (GHz)	♦Internal Connections	Marking
		V_{CEO} (Q1/Q2) (V)	I_C (Q1/Q2) (mA)	P_C★ (mW)				
MT6L63FS	fS6 	5/6	25/40	110 (Note 1)	MT3S07FS/MT3S11FS	12/6		18
MT6L64FS		4.5/6	24/40	110 (Note 1)	MT3S35FS/MT3S11FS	19.5/6		19
MT6L65FS		4.5/6	36/40	110 (Note 1)	MT3S36FS/MT3S11FS	20/6		1F
MT6L67FS		4.5/6	36/80	110 (Note 1)	MT3S36FS/MT3S106FS	20/8.5		1J
MT6L68FS		5/6	15/40	110 (Note 1)	MT3S06FS/MT3S11FS	10/6		1K
MT6L71FS		5/6	25/40	105 (Note 1)	MT3S07FS/MT3S11AFS	12/6		1W
MT6L72FS		4.5/6	36/40	105 (Note 1)	MT3S36FS/MT3S11AFS	19/6		1X
MT6L75FS		5/6	25/80	110 (Note 1)	MT3S07FS/MT3S106FS	12/8.5		52
MT6L76FS		5/6	15/80	110 (Note 1)	MT3S06FS/MT3S106FS	10/8.5		53
MT6L77FS		6/6	40/80	110 (Note 1)	MT3S11FS/MT3S106FS	6/8.5		54
MT6L78FS		6/6	40/40	105 (Note 1)	MT3S11FS/MT3S11AFS	6/6		55
MT6L77FST	fS6T 	6/6	40/80	140	MT3S11FS/MT3S106FS	6/8.5		54

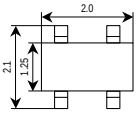
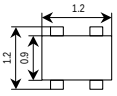
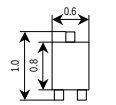
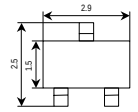
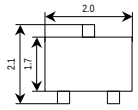
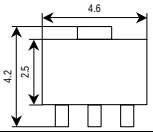
★P_C: Total power dissipation

♦The internal connection diagrams only show the general configurations of the circuits.

Note 1: When mounted on a glass-epoxy PCB board

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

SiGe HBTs

Part Number	Package	Applications	Absolute Maximum Ratings (Ta = 25°C)				Marking	Remarks
			V_{CEO} (V)	I_C (mA)	P_C (mW)	T_j (°C)		
MT4S100U	USQ 	VHF/UHF-band low-noise amps	3	15	45	150	P6	fT = 22 GHz
MT4S101U		VHF/UHF-band low-noise amps	3	10	30	150	P7	fT = 21 GHz
MT4S102U		UHF/SHF-band low-noise amps	3	20	60	150	P8	fT = 24 GHz
MT4S104U		UHF/SHF-band low-noise amps	3	10	30	150	P1	fT = 23 GHz
MT4S200U		UHF/SHF-band low-noise amps	4	35	140 (Note 1)	150	P2	fT = 30 GHz
MT4S300U *		UHF/SHF-band low-noise amps	4	50	100	150	P3	fT = 26.5 GHz, high ESD immunity
MT4S301U *		UHF/SHF-band low-noise amps	4	35	100	150	P4	fT = 27.5 GHz, high ESD immunity
MT4S100T	TESQ 	VHF/UHF-band low-noise amps	3	15	45	150	P6	fT = 23 GHz
MT4S101T		VHF/UHF-band low-noise amps	3	10	30	150	P7	fT = 23 GHz
MT4S102T		UHF/SHF-band low-noise amps	3	20	60	150	P8	fT = 25 GHz
MT4S104T		UHF/SHF-band low-noise amps	3	10	30	150	P1	fT = 25 GHz
MT4S200T		UHF/SHF-band low-noise amps	4	35	100	150	P2	fT = 30 GHz
MT4S300T *		UHF/SHF-band low-noise amps	4	50	100	150	P3	fT = 26.5 GHz, high ESD immunity
MT4S301T *		UHF/SHF-band low-noise amps	4	35	100	150	P4	fT = 27.5 GHz, high ESD immunity
MT3S106FS	fSM 	VHF/UHF-band low-voltage operation, low-noise amps	6	80	100 (Note 1)	150	41	fT = 8.5 GHz
MT3S111 *	S-MINI 	VHF/UHF-band low-noise, low-distortion amps	6	100	700 (Note 2)	150	R5	fT = 11.5 GHz
MT3S113 *		VHF/UHF-band low-noise, low-distortion amps	5.3	100	800 (Note 2)	150	R7	fT = 12.5 GHz
MT3S111TU *	UFM 	VHF/UHF-band low-noise, low-distortion amps	6	100	800 (Note 2)	150	R5	fT = 10 GHz
MT3S113TU *			5.3	100	900 (Note 2)	150	R7	fT = 11.2 GHz
MT3S111P *	Pw-Mini 	VHF/UHF-band low-noise, low-distortion amps	6	100	1000 (Note 2)	150	R5	fT = 8 GHz
MT3S113P *			5.3	100	1600 (Note 2)	150	R7	fT = 7.7 GHz

Note 1: When mounted on a glass-epoxy PCB board

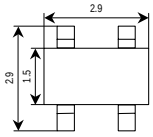
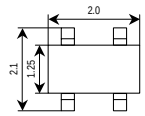
*: New product

Note 2: Mounted on a ceramic board

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

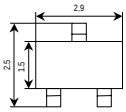
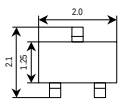
Radio-Frequency Small-Signal FETs

Radio-Frequency MOSFETs

Part Number	Package	Applications	Electrical Characteristics (Ta = 25°C)					Marking	Equivalent Product (Leaded Type)
			V_{DS} (V)	I_D (mA)	P_D (mW)	I_{DSS} (mA)	|Yfs| (mS) Typ.		
3SK291	SMQ 	UHF-band radio-frequency amps	12.5	30	150	0 to 0.1	26	UF	—
3SK292		VHF/UHF-band radio-frequency amps	12.5	30	150	0 to 0.1	23.5	UV	—
3SK293	USQ 	UHF-band radio-frequency amps	12.5	30	100	0 to 0.1	26	UF	—
3SK294		VHF/UHF-band radio-frequency amps	12.5	30	100	0 to 0.1	23.5	UV	—

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Radio-Frequency Junction FETs

Part Number	Package	Applications	Electrical Characteristics (Ta = 25°C)					Marking	Equivalent Product (Leaded Type)
			V_{GDO} V_{GDS} ◊ (V)	I_G (mA)	P_D (mW)	I_{DSS} (mA)	|Yfs| (mS) Typ.		
2SK210	S-MINI 	FM-band radio-frequency amps	−18	10	100	3.0 to 24	7	Y□	—
2SK711		AM-band radio-frequency amps	−20 ◊	10	150	6 to 32	25	RB□	2SK709
2SK1875	USM 	AM-band radio-frequency amps	−20 ◊	10	100	6 to 32	25	RB□	2SK709

□: Denotes a I_{DSS} class.

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Radio-Frequency Power MOSFETs

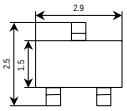
Part Number	Package	Applications	Absolute Maximum Ratings (Tc = 25°C)			Po (W)			
							Test Conditions		
			V_{DSS} (V)	P_D (W)	I_D (A)	Min	V_{DD} (V)	f (MHz)	Pi (W)
RFM08U9X *	PW-X	UHF/VHF Professional radios	36	20	5	7.5	9.6	520	0.5
2SK3075	PW-X		30	20	5	7.5	9.6	520	0.5
2SK3074	PW-MINI		30	3	1	0.63	9.6	520	0.02
RFM12U7X *	PW-X		20	20	4	11.5	7.2	520	1.0
RFM01U7P *	PW-MINI		20	3	1	1.0	7.2	520	0.1
2SK3476	PW-X		20	20	3	7.0	7.2	520	0.5
2SK3475	PW-MINI		20	3	1	0.63	7.2	520	0.02
RFM04U6P *	PW-MINI	GMRS	16	7	2	3.5	6.0	470	0.2
2SK4037	PW-X		12	20	3	3.55	6.0	470	0.3
2SK2854	PW-MINI	UHF/VHF Professional radios	10	0.5	0.5	0.2	6.0	849	0.02
2SK3079A	PW-X	FRS/GMRS	10	20	3	2.24	4.5	470	0.1
2SK3756	PW-MINI		7.5	3	1	1.26	4.5	470	0.1
2SK3078A	PW-MINI		10	3	0.5	0.63	4.5	470	0.1
2SK3077	USQ	Driver	10	0.25	0.1	0.032	4.8	915	0.001
RFM03U3CT *	RF-CST3	GMRS	16	7	2.5	2.3	3.6	520	0.1
RFM00U7U *	USQ	Driver	20	0.25	0.1	0.1	7.2	520	0.01

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

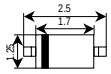
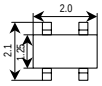
*: New product

Radio-Frequency Diodes

Variable Capacitance Diodes (Diodes for Electronic Tuning)

Part Number / Package	V_R (V)	C_T (pF)	V_R (V)	C_T (pF)	V_R (V)	Applications
S-MINI 						
1SV225	32	18.5 to 21	3	6.6 to 7.7	30	FM Hi-Fi tuners
1SV228	15	28.5 to 32.5	3	11.7 to 13.7	8	FM car radios, portable radios
JDV3C34	12	67.9 to 72.1	2	26.1 to 27.8	6	FM tuners

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Part Number / Package					V_R (V)	C_T (pF)	V_R (V)	C_T (pF)	V_R (V)	Applications
USC 	ESC 	USQ 	fSC 	SC2 						
1SV324	1SV325				10	44 to 49.5	1	9.2 to 12.2	4	VCXO
	JDV2S36E				10	44 to 49.5	1	5.4 to 7.3	6	VCXO
1SV231					30	41 to 49.5	2	2.7 to 3.4	25	CATV tuners
1SV288	**1SV290B**				30	41 to 49.5	2	2.5 to 3.2	25	CATV tuners
1SV262	**1SV282**				34	33 to 38	2	2.6 to 3.0	25	CATV tuners
1SV269	**1SV283B**				34	29 to 34	2	2.5 to 2.9	25	CATV tuners
1SV232					30	28 to 32	2	2.75 to 3.1	25	CATV tuners
1SV215					30	26 to 32	2	2.5 to 3.2	25	CATV tuners
1SV322	**1SV323**				10	26 to 30	1	6 to 7.1	4	VCXO
1SV304	**1SV305**	JDV4P08U	JDV2S08FS		10	17.3 to 19.3	1	5.3 to 6.6	4	VHF/UHF VCO
	1SV331				10	17 to 19	1	4.25 to 5.43	4	VCXO
			JDV2S26FS	JDV2S26SC	10	15.35 to 16.31	1	5.27 to 5.60	4	VHF/UHF VCO
1SV270	**1SV281**				10	15 to 17	1	7.3 to 8.7	4	VHF/UHF VCO
1SV276	**1SV284**				10	15 to 17	1	7.0 to 8.5	4	VHF/UHF VCO
	1SV286				30	14.5 to 16.1	2	1.56 to 1.86	20	CATV converters
1SV214	**1SV278B**				30	14.16 to 16.25	2	2.11 to 2.43	25	VHF/UHF TV tuners
1SV229	**1SV279**		**JDV2S41FS***		15	14 to 16	2	5.5 to 6.5	10	VHF/UHF VCO
				JDV2S31SC	10	9.93 to 10.77	1	4.37 to 4.93	4	VHF/UHF VCO
1SV310	**1SV311**				10	9.7 to 11.1	1	4.45 to 5.45	4	VHF/UHF VCO
	1SV314		JDV2S10FS		10	7.3 to 8.4	0.5	2.75 to 3.4	2.5	VHF/UHF VCO
				JDV2S38SC*	10	7 to 7.74	0.5	2.76 to 3.12	2.5	VHF/UHF VCO
	JDV2S71E				30	6 to 7.2	1	0.49 to 0.64	25	UHF/SHF tuners
	1SV329		JDV2S13FS		10	5.7 to 6.7	1	1.85 to 2.45	4	VHF/UHF VCO
			JDV2S25FS	JDV2S25SC	10	5.62 to 5.99	1	1.91 to 2.12	4	VHF/UHF VCO
			JDV2S07FS		10	4.0 to 4.9	1	1.85 to 2.35	4	L-Band VCO
	1SV285				10	4.0 to 4.9	1	1.85 to 2.35	4	VHF/UHF VCO
	JDV2S05E		JDV2S05FS		10	3.85 to 4.55	1	1.94 to 2.48	4	VHF/UHF VCO
1SV239	**1SV280**		JDV2S40FS		15	3.8 to 4.7	2	1.5 to 2.0	10	L-Band VCO
			JDV2S29FS	JDV2S29SC	10	3.59 to 3.87	1	1.26 to 1.40	4	VHF/UHF VCO
1SV245	**1SV309**				30	3.31 to 4.55	2	0.61 to 0.77	25	BS tuners
	JDV2S01E				10	2.85 to 3.45	1	1.35 to 1.81	4	VHF/UHF VCO

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product

Radio-Frequency Switching Diodes

Radio-Frequency Switching Diodes

Part Number	Applications		V_R (V)	I_R (Max)		V_F (Max)		C_T (Typ.)		r_s (Typ.)			Package
				(μA)	V_R (V)	(V)	I_F (mA)	(pF)	V_R (V)	(Ω)	I_F (mA)	f (MHz)	
1SS314	TV band switch	Single	30	0.1	15	0.85	2	0.7	6	0.5	2	100	USC
1SS381			30	0.1	15	0.85	2	0.7	6	0.5	2	100	ESC
1SS268		Twin	30	0.1	15	0.85	2	0.8	6	0.6	2	100	S-MINI
1SS269			30	0.1	15	0.85	2	0.8	6	0.6	2	100	S-MINI
1SS312			30	0.1	15	0.85	2	0.8	6	0.6	2	100	USM
1SS313			30	0.1	15	0.85	2	0.8	6	0.6	2	100	USM
1SS364			30	0.1	15	0.85	2	0.85	6	0.6	2	100	SSM
JDP2S12CR *	Switch, ATT	Single	180	10	50	1.0	50	1.0	40	0.4	10	100	S-FLAT
1SV307			30	0.1	30	1.0	50	0.5	1	1	10	100	USC
1SV308			30	0.1	30	1.0	50	0.5	1	1	10	100	ESC
JDP2S01E			30	0.1	30	0.95	50	0.65	1	0.65	10	100	ESC
JDP2S02AFS			30	0.1	30	0.94	50	0.3	1	1	10	100	fSC
JDP2S05FS			20	0.1	20	0.94	50	0.32	1	1.5	1	100	fSC
JDP2S05CT	Switch		20	0.1	20	0.94	50	0.32	1	1.5	1	100	CST2
JDP2S02ACT			30	0.1	30	1.0	50	0.3	1	1	10	100	CST2
JDP2S05SC	Switch, ATT		20	0.1	20	0.95	50	0.24	1	1.5	1	100	SC2
JDP2S08SC	Switch		30	0.1	30	0.95	50	0.21	1	1	10	100	SC2
JDP3C02AU *	Switch, ATT	Twin	30	0.05	30	0.89 (Typ.)	50	0.28	1	1.06	10	100	USM
JDP4P02AT			30	0.1	30	1.0	50	0.3	1	1	10	100	TESQ
JDP4L08CTC *	Switch	2 in 1	30	0.1	30	0.95	50	0.21	1	1	10	100	CST4C
JDP4P08CTC *			30	0.1	30	0.95	50	0.21	1	1	10	100	CST4C

- The products shown in bold are also manufactured in offshore fabs.
- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product

Radio-Frequency Schottky Barrier Diodes

Part Number	Applications	V_R ♣V_{RM} (V)	I_F (mA)	V_F (Typ.)		C_T (Typ.)		Package
				(V)	I_F (mA)	(pF)	V_R (V)	
1SS154	VHF to S-band mixers	6	30	0.5	10	0.8	0	S-MINI (Single)
1SS271		6	30	0.5	10	0.8	0	S-MINI (Twin)
1SS295	UHF MIX	4	30	0.25	2	0.6	0.2	S-MINI (Twin)
1SS315		♣5	30	0.25	2	0.6	0.2	USC
JDH2S01FS		4	25	0.25	2	0.6	0.2	fSC
JDH3D01S		4	25	0.25	2	0.6	0.2	SSM (Twin)
JDH3D01FV		4	25	0.25	2	0.6	0.2	VESM (Twin)
JDH2S02FS		10	10	0.24	1	0.3	0.2	fSC
JDH2S02SC		10	10	0.24	1	0.3	0.2	SC2
JDH2S04FS *		10	10	0.18	1	0.4	0.2	fSC

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product

Small-Signal MMICs (Radio-Frequency Cell Packs)

Wideband Amp ICs

Part Number	Package	Applications	Functions	Electrical Characteristics	Supply Voltage (V)
TA4000F	SM6	BS tuners, communications equipment, VHF/UHF amps	Wideband amp	B/W = 1.3 GHz Gp = 15dB @f = 400 MHz, V_{CC} = 5 V	5.0
TA4001F	SMQ			B/W = 2.4 GHz Gp = 12.5dB @f = 500 MHz, V_{CC} = 5 V	5.0
TA4002F	SMQ			B/W = 1.3 GHz Gp = 23dB @f = 500 MHz, V_{CC} = 5 V	5.0
TA4004F	SMV			B/W = 1.2 GHz Gp = 10.5dB @f = 500 MHz, V_{CC} = 2 V	2.0 to 5.0
TA4011AFE	ESV	Communications equipment, VHF/UHF amps	Wideband amp	B/W = 2.4 GHz Po1dB = −6dBmW @V_{CC} = 2 V	2.0
TA4011FU	USV				2.0
TA4012AFE	ESV	Communications equipment, VHF/UHF amps	Wideband amp	B/W = 2.0 GHz Po1dB = 0dBmW @V_{CC} = 2 V	2.0
TA4012FU	USV				2.0
TA4022F	SM8	TV tuners IF amps	Differential amp	$\|S_{21}\|^2$ = 19dB, IM3 = 58dBc @V_{CC} = 5 V, f = 45 MHz, Pin = −21dBmW, Zl = 250 Ω	5.0
TA4023F	SM8			$\|S_{21}\|^2$ = 28dB, IM3 = 51dBc @V_{CC} = 5 V, f = 45 MHz, Pin = −33dBmW, Zl = 250 Ω	5.0
TA4024CT	CST8	TV tuners, Communications equipment, VHF/UHF amps	Differential amp	$\|S_{21}\|^2$ = 26dB, IM3 = 53dBc, I_{CC} = 26 mA @V_{CC} = 3.3 V, f = 45 MHz	3.0 to 3.6
TA4025CT	CST8			$\|S_{21}\|^2$ = 25dB, IM3 = 52dBc, I_{CC} = 21 mA @V_{CC} = 3.3 V, f = 45 MHz	3.0 to 3.6
TA4026CT	CST8			$\|S_{21}\|^2$ = 26dB, IM3 = 54dBc, I_{CC} = 35 mA @V_{CC} = 3.3 V, f = 45 MHz	3.0 to 3.6
TA4027CT	CST8			$\|S_{21}\|^2$ = 34.5dB, IM3 = 55dBc, I_{CC} = 23 mA @V_{CC} = 3.3 V, f = 45 MHz	3.0 to 3.6
TA4028CT	CST8			$\|S_{21}\|^2$ = 34.5dB, IM3 = 55dBc, I_{CC} = 14 mA @V_{CC} = 3.3 V, f = 45 MHz	3.0 to 3.6
TA4029CTC	CST6C	TV tuners, Communications equipment, VHF/UHF amps	Low-noise amp with a pass-through mode	$\|S_{21}\|^2$ = 13dB, IIP3 = −5dBmW (LNA_ON) $\|S_{21}\|^2$ = −2dB (LNA_OFF) @V_{CC} = 2.5 V, f = 1 GHz	2.3 to 3.3
TA4029TU	UF6				2.3 to 3.3
TA4031CT	CST8	TV tuners IF variable amps	Differential gain control amp	$\|S_{21}\|^2$ = 49dB, IM3 = 54dBc, NF = 5.5dB @V_{CC} = 3.3 V/V_{AGC} = 2.5 V, f = 45 MHz, GCR = 53dB	3.0 to 3.6
TA4031F	SM8				
TA4032FT	TESQ	GPS、W-LAN modules Amplifiers	Low-noise amp	$\|S_{21}\|^2$ = 14.8dB, NF = 1dB, I_{CC} = 5 mA @V_{CC} = 3.0 V, f = 1.575 GHz	2.5 to 5
TB7600CTC	CST6C	TV tuners, Communications equipment, VHF/UHF amps	Low-noise amp with a pass-through mode	$\|S_{21}\|^2$ = 12dB, NF = 1.7dB, I_{CC} = 2.7 mA (LNA_ON) $\|S_{21}\|^2$ = −2.5dB, I_{CC} < 3 μA (LNA_OFF) @V_{CC} = 2.5 V, f = 1 GHz	2.3 to 3.6
TB7600TU	UF6				2.3 to 3.6
TB7601CTC	CST6C			$\|S_{21}\|^2$ = 14dB, NF = 1.4dB, I_{CC} = 4.0 mA (LNA_ON) $\|S_{21}\|^2$ = −2.5dB, I_{CC} < 3 μA (LNA_OFF) @V_{CC} = 2.5 V, f = 1 GHz	2.3 to 3.6
TB7601TU	UF6				2.3 to 3.6
TB7602CTC	CST6C			$\|S_{21}\|^2$ = 15dB, NF = 1.3dB, I_{CC} = 6.0 mA (LNA_ON) $\|S_{21}\|^2$ = −2.5dB, I_{CC} < 3 μA (LNA_OFF) @V_{CC} = 2.5 V, f = 1 GHz	2.3 to 3.6
TB7602TU	UF6				2.3 to 3.6
TB7603CTC	CST6C			Inverted logic version of the TB7600CTC	2.3 to 3.6
TB7603TU	UF6			Inverted logic version of the TB7600TU	2.3 to 3.6
TB7604CTC	CST6C			Inverted logic version of the TB7601CTC	2.3 to 3.6
TB7604TU	UF6			Inverted logic version of the TB7601TU	2.3 to 3.6
TB7605CTC	CST6C			Inverted logic version of the TB7602CTC	2.3 to 3.6
TB7605TU	UF6			Inverted logic version of the TB7602TU	2.3 to 3.6

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Frequency Converters

Part Number	Package	Applications	Functions	Electrical Characteristics	Supply Voltage (V)
TA4107F	SM8	CATV analog digital tuner	Bipolar linear down-converter	C • Gain = −0.5dB, IIP3 = 12dBmW @f_{RF} = 1 GHz, f_{LO} = 950 MHz, V_{CC} = 4.5 V	4.5

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Microwave Semiconductors

GaAs FETs (Power GaAs FETs)

Part Number	Appropriate Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.	f (test) (GHz)	V_{DS} (V)
S8834	2 to 10	21.0	9.0	28	8	10
S8835		24.0	8.0	26	8	10
S8836A		29.5	7.5	30	8	10
S8836B	6 to 9					
S8837A		32.0	7.0	28	8	10
S8850A	2 to 18	21.5	9.0	21	15	10
		20.5	9.0	20	15	8
JS8850A-AS ☆		21.5	9.0	21	15	10
		21.0	8.5	19	18	
		20.5	9.0	20	15	8
		20.0	8.5	18	18	
S8851		24.0	8.0	26	15	10
JS8851-AS ☆		24.0	8.0	26	15	10
		23.0	7.0	18	18	
S8853		28.0	7.0	25	15	10
JS8853-AS ☆		28.0	7.0	25	15	10
		27.0	6.0	18	18	
S8855		31.5	6.5	23	15	10
JS8855-AS ☆		31.5	7.0	23	15	10
		31.0	6.0	18	18	

☆: Dry-packed

Note: JS denotes a chip product.

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

GaAs MMICs

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	I_{DD} (A) Typ.	IM_3 (dBc) Typ.	V_{DD} (V)
TMD1925-3	1.9 to 2.5	35.0	29.0	1.6	—	10
TMD5872-2	5.8 to 7.2	34.0	29.0	1.2	-45■	10
TMD7185-2	7.1 to 8.5	33.0	28.0	1.4	-45■	10
TMD1013-1-431	9.5 to 12.0	33.0	25.0	1.4	-45●	10
TMD1414-2C	13.75 to 14.5	34.5	26.0	1.4	—	7

IM_3 :

●: 2-tone test P_O = 19.0dBm (single-carrier level)

■: 2-tone test P_O = 22.0dBm (single-carrier level)

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

(L-, S-Band Partially Matched Power GaAs FETs)

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.
		V_{DS} = 12 V		
TPM1919-60	1.9	48.0	13.0	40
TPM2323-60	2.3	48.0	10.0	39
TPM2626-60	2.6	48.0	10.0	39

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Part Number	Frequency Band (GHz)	P_{2dB} (dBm) Typ.	G_{2dB} (dB) Typ.	η add (%) Typ.
		V_{DS} = 12 V		
TPM2828-9 #	2.8 to 2.9	39.5	11.5	30
TPM2828-60 ##		48.0	7.5	29

#: I_{DS}set ≅ 2.0 A

##: I_{DS}set ≅ 10.0 A

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Electronic Systems Marketing Dept.
Microwave Solid State Group
TEL 03-3457-3117
http://microwave.toshiba.co.jp

(C-Band Internally Matched Power GaN HEMT)

Part Number	Frequency Band (GHz)	Pout (dBm) at Pin = 44dBm Typ.	GL (dB) at Pin = 20dBm Typ.	η add (%) Typ.	IM3 (dBc) Min.	V_{DS} (V)
TGI7785-120L #	7.7 to 8.5	51.0	11.0	42	-25◇	24

#: I_{DS}set = 4.0 A

IM_3 :

◇: 2-tone test P_O = 44.0dBm (single-carrier level)

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

(X-Band Internally Matched Power GaN HEMT)

Part Number	Frequency Band (GHz)	Pout (dBm) at Pin = 41dBm Typ.	GL (dB) at Pin = 20dBm Typ.	η add (%) Typ.	V_{DS} (V)
TGI8596-50 #	8.5 to 9.6	47.0	9.0	31	24
TGI0910-50 #	9.5 to 10.6	47.0	9.0	31	24

#: I_{DS}set ≅ 1.5 A

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

(Ku-Band Internally Matched Power GaN HEMT)

Part Number	Frequency Band (GHz)	Pout (dBm) at Pin = 42dBm Typ.	GL (dB) at Pin = 20dBm Typ.	η add (%) Typ.	IM_3 (dBc) Min.	V_{DS} (V)
TGI1314-50L #	13.75 to 14.5	47.0	8.0	29	-25◇	24
TGI1414-50L #	14.0 to 14.5	47.0	8.0	29	-25◇	24

#: I_{DS}set ≅ 2.0 A

IM_3 :

◇: 2-tone test P_O = 40.0dBm (single-carrier level)

- Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

(X-, Ku-Band Internally Matched Power GaAs FETs)

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.	IM_3 (dBc) Typ.	V_{DS} (V)
TIM8596-2	8.5 to 9.6	33.5	7.5	24	—	9
TIM8596-4		36.5	7.5	24	—	
TIM8596-8		39.5	6.0	22	—	
TIM8596-15		42.0	7.0	31	—	
TIM8996-30 #	8.9 to 9.6	45.0	7.0	25	—	10
TIM0910-2	9.5 to 10.5	33.5	7.5	24	—	9
TIM0910-4		36.5	7.5	24	—	
TIM0910-5		37.5	7.0	25	—	
TIM0910-8		39.5	6.0	22	—	
TIM0910-10		40.5	6.0	23	—	
TIM0910-15L		42.0	7.0	31	-45☆	

(X-, Ku-Band Internally Matched Power GaAs FETs) (Continued)

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.	IM_3 (dBc) Typ.	V_{DS} (V)
TIM1011-2L	10.7 to 11.7	33.5	7.5	24	-45◎	9
TIM1011-2UL ##		33.5	9.5	36	-45□	10
TIM1011-4L		36.5	7.5	24	-45▽	9
TIM1011-4UL &		36.5	9.5	36	-45◇	10
TIM1011-5L		37.5	7.0	25	-45△	9
TIM1011-8L		39.5	6.0	22	-45▼	
TIM1011-8UL ###		39.5	9.0	39	-45◆	10
TIM1011-8ULA ###		39.5	9.0	39	-45◆	
TIM1011-10L		40.5	6.0	23	-45■	9
TIM1011-15L		42.0	7.0	31	-45☆	
TIM1112-2	11.7 to 12.7	33.5	7.5	24	—	9
TIM1112-4		36.5	7.5	24	—	
TIM1112-4UL &		36.5	9.5	36	-45◇	10
TIM1112-8		39.5	5.0	20	—	9
TIM1112-15L		42.0	6.0	29	-45☆	
TIM1213-2L	12.7 to 13.2	33.5	7.5	24	-45◎	9
TIM1213-4L		36.5	7.5	24	-45▽	
TIM1213-4UL &		36.5	8.0	34	-45◇	10
TIM1213-8L		39.5	5.0	20	-45▼	9
TIM1213-8ULA ###		39.5	8.0	39	-45◆	10
TIM1213-10L		40.5	6.0	23	-45■	9
TIM1213-15L		42.0	6.0	29	-45☆	
TIM1414-2-252	13.75 to 14.5	33.0	6.0	20	—	9
TIM1414-4-252		36.0	5.5	19	—	
TIM1414-5-252		37.0	5.5	20	—	
TIM1414-7-252		38.0	6.0	23	—	
TIM1414-8-252		39.0	5.0	18	—	
TIM1314-9L		39.5	6.0	26	-25*▲	
TIM1414-10LA-252		39.5	5.5	18	-45■	
TIM1414-15-252		40.5	5.5	20	—	
TIM1314-15UL ####		42.0	7.0	32	-45☆	10
TIM1414-18L-252		42.0	6.0	24	-25*★	9
TIM1314-30L #		45.0	5.0	20	-25*○	10
TIM1414-2L	14.0 to 14.5	33.5	6.5	23	-45◎	9
TIM1414-4LA		36.5	6.5	23	-45▽	
TIM1414-4UL &		36.5	8.0	34	-45◇	10
TIM1414-5L		37.5	6.0	23	-45△	9
TIM1414-7		38.5	6.5	27	—	
TIM1414-8L		39.5	5.0	20	-45▼	
TIM1414-9L		39.5	6.0	26	-25*▲	
TIM1414-10LA		40.5	6.0	23	-45■	
TIM1414-15L		42.0	6.0	29	-45☆	
TIM1414-18L		42.5	6.0	28	-25*★	
TIM1414-30L #		45.0	5.5	21	-25*○	10
TIM1415-2	14.5 to 15.0	33.5	6.0	22	—	9

#: I_{DS}set ≅ 7.0 A for TIM1314/1414-30L, TIM8996-30

##: I_{DS}set ≅ 0.5 A for TIM1011-2UL

###: I_{DS}set ≅ 2.0 A for TIM1011-8UL, TIM1011-8ULA, TIM1213-8ULA

####: I_{DS}set ≅ 4.0 A for TIM1314-15UL

&: I_{DS}set ≅ 1.0 A for TIM1011-4UL, TIM1112-4UL, TIM1213-4UL, TIM1414-4UL

IM_3 :

□: 2-tone test P_O = 21.0dBm (single-carrier level) ◎: 2-tone test P_O = 22.0dBm (single-carrier level)

◇: 2-tone test P_O = 24.0dBm (single-carrier level) ▽: 2-tone test P_O = 25.0dBm (single-carrier level)

△: 2-tone test P_O = 26.0dBm (single-carrier level) ◆: 2-tone test P_O = 27.0dBm (single-carrier level)

▼: 2-tone test P_O = 28.0dBm (single-carrier level) ■: 2-tone test P_O = 29.0dBm (single-carrier level)

☆: 2-tone test P_O = 30.0dBm (single-carrier level) ▲: 2-tone test P_O = 33.0dBm (single-carrier level)

★: 2-tone test P_O = 36.0dBm (single-carrier level) ○: 2-tone test P_O = 38.0dBm (single-carrier level)

*: IM_3 (Min.)

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(C-Band Internally Matched Power GaAs FETs)

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.	IM_3 (dBc) Typ.
		V_{DS} = 10 V			
TIM3742-4SL-341	3.3 to 3.6	36.5	11.0	37	-45◎
TIM3742-8SL-341		39.5	11.0	37	-45△
TIM3742-16SL-341		42.5	11.0	37	-45■
TIM3742-30SL-341		45.0	11.0	42	-45★
TIM3742-45SL-341		46.5	11.0	43	-45◇
TIM3438-12UL	3.4 to 3.8	41.5	12.5	42	-47▼
TIM3438-16SL		42.5	12.5	38	-45■
TIM3742-4UL		36.5	12.0	38	-47◎
TIM3742-8UL		39.5	11.0	37	-47△
TIM3742-12UL		41.5	11.5	41	-47▼
TIM3742-16UL		42.5	10.5	37	-47■
TIM3742-30SL		45.0	10.0	41	-45★
TIM3742-35SL		45.5	10.0	40	-45○
TIM3742-45SL		46.5	10.5	42	-45◇
TIM4450-4UL	4.4 to 5.0	36.5	11.0	37	-47◎
TIM4450-8UL		39.5	10.5	37	-47△
TIM4450-12UL		41.5	10.5	40	-47▼
TIM4450-16UL		42.5	10.0	36	-47■
TIM4450-35SL		45.5	9.5	39	-45○
TIM4450-45SL		46.5	9.5	41	-45◇
TIM4450-60SL #		48.0	9.5	42	-45□
TIM5053-4SL	5.0 to 5.3	36.5	9.5	36	-45◎
TIM5053-8SL		39.5	9.0	35	-45△
TIM5053-16SL		42.5	8.5	35	-45■
TIM5053-35SL		45.5	9.0	39	-45○
TIM5359-4UL	5.3 to 5.9	36.5	10.5	37	-47◎
TIM5359-8UL		39.5	10.0	36	-47△
TIM5359-16UL		42.5	10.0	36	-47■
TIM5359-35SL		45.5	8.5	38	-45○
TIM5359-45SL		46.5	9.0	41	-45◇
TIM5359-60SL #		48.0	9.0	42	-45□
TIM5359-80SL ###		49.0	7.5	36	-30●
TIM5964-4UL	5.9 to 6.4	36.5	10.0	37	-47◎
TIM5964-6UL		38.5	10.0	40	-47▽
TIM5964-8UL		39.5	10.0	36	-47△
TIM5964-12UL		41.5	10.0	40	-47▼
TIM5964-16UL		42.5	10.0	36	-47■
TIM5964-30UL ####		45.0	10.0	41	-47▲
TIM5964-35SLA		45.5	9.0	39	-45○
TIM5964-45SL		46.5	9.0	41	-45◇
TIM5964-60SL #		48.0	8.5	41	-45□
TIM5964-80SL ###		49.0	7.0	35	-30●
TIM5964-4SL-422	5.85 to 6.75	36.5	9.0	35	-45◎
TIM5867-8UL		39.5	10.0	36	-47△
TIM5867-15UL ##		42.0	10.0	41	-47☆
TIM5964-16SL-422		42.5	9.0	35	-45■
TIM5867-30UL ####		45.0	10.0	41	-47▲
TIM5964-35SLA-422		45.5	9.0	39	-45○
TIM5964-60SL-422 #		48.0	8.0	40	-45□
TIM6472-4UL	6.4 to 7.2	36.5	9.5	36	-47◎
TIM6472-6UL		38.5	9.5	39	-47▽
TIM6472-8UL		39.5	9.5	36	-47△
TIM6472-12UL		41.5	9.5	39	-47▼
TIM6472-16UL		42.5	9.5	36	-47■
TIM6472-16EL &		42.5	11.0	37	-45▼
TIM6472-30UL ####		45.0	9.5	40	-47▲
TIM6472-35SL		45.5	8.0	37	-45○
TIM6472-45SL		46.5	8.0	39	-45◇
TIM6472-60SL #		48.0	7.5	39	-45□

Part Number	Frequency Band (GHz)	P_{1dB} (dBm) Typ.	G_{1dB} (dB) Typ.	η add (%) Typ.	IM_3 (dBc) Typ.
		V_{DS} = 10 V			
TIM7179-4UL	7.1 to 7.9	36.5	9.0	35	-47◎
TIM7179-6UL		38.5	9.0	39	-47▽
TIM7179-8UL		39.5	9.0	35	-47△
TIM7179-12UL		41.5	9.0	39	-47▼
TIM7179-16UL		42.5	8.5	35	-47■
TIM7179-16EL &		42.5	10.5	37	-45▼
TIM7179-30UL ####		45.0	8.5	39	-47▲
TIM7179-35SL		45.5	6.5	34	-45○
TIM7179-45SL		46.5	6.5	36	-45◇
TIM7179-60SL #		48.0	6.5	37	-45□
TIM7785-4UL	7.7 to 8.5	36.5	8.5	35	-47◎
TIM7785-6UL		38.5	8.5	38	-47▽
TIM7785-8UL		39.5	8.5	35	-47△
TIM7785-12UL		41.5	8.5	38	-47▼
TIM7785-16UL		42.5	8.5	35	-47■
TIM7785-16EL &		42.5	10.0	36	-45▼
TIM7785-30UL ####		45.0	8.5	39	-47▲
TIM7785-35SL		45.5	6.0	33	-45○
TIM7785-45SL		46.5	6.0	35	-45◇
TIM7785-60SL #		48.0	6.0	36	-45□
TIM7785-60UL #####		48.0	7.5	36	-30◆

#: I_{DS}set ≅ 9.5 A for TIM4450/5359/5964/6472/7179/7785-60SL, TIM5964-60SL-422

##: I_{DS}set =3.2A for TIM5867-15UL

###: I_{DS}set = 10.0 A for TIM5359-80SL, TIM5964-80SL

####: I_{DS}set = 6.4 A for TIM5964-30UL, TIM5867-30UL, TIM6472-30UL, TIM7179-30UL, TIM7785-30UL

#####: I_{DS}set = 9.5 A for TIM7785-60UL

&: I_{DS}set = 2.8 A for TIM6472-16EL, TIM7179-16EL, TIM7785-16EL

IM_3 :

◎: 2-tone test P_O = 25.5dBm (single-carrier level) ▽: 2-tone test P_O = 27.5dBm (single-carrier level)

△: 2-tone test P_O = 28.5dBm (single-carrier level) ▼: 2-tone test P_O = 30.5dBm (single-carrier level)

☆: 2-tone test P_O = 31.0dBm (single-carrier level) ■: 2-tone test P_O = 31.5dBm (single-carrier level)

▲: 2-tone test P_O = 34.0dBm (single-carrier level) ★: 2-tone test P_O = 34.5dBm (single-carrier level)

○: 2-tone test P_O = 35.0dBm (single-carrier level) ◇: 2-tone test P_O = 35.5dBm (single-carrier level)

□: 2-tone test P_O = 36.5dBm (single-carrier level) ◆: 2-tone test P_O = 41.0dBm (single-carrier level)

●: 2-tone test P_O = 42.0dBm (single-carrier level)

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