Power TMOS® MOSFETs (Continued)

TO-247 Isolated Mounting Hole

TO-247 — N-Channel

Mfr.'s Type[4]	$V_{(BR)DSS}$ (V) Min.	$R_{DS(on)}$ (Ω) Max.	@ I_D (A)	I_D (Cont.) (A)	P_D[1] (W) Max.
MTW10N100E	1000	1.3000	5.00	10.0	250.00
MTW7N80E	800	1.0000	3.50	7.0	180.00
MTW8N60E	600	0.5000	4.00	8.0	180.00
MTW14N50E	500	0.3200	7.00	14.0	180.00
MTW20N50E	500	0.2400	10.00	20.0	250.00
MTW16N40E	400	0.3000	8.00	16.0	180.00
MTW24N40E	400	0.1600	12.00	24.0	250.00
MTW32N25E	250	0.1000	16.00	32.0	250.00
MTW32N20E	200	0.0750	16.00	32.0	180.00

TMOS V

TMOS V — DPAK

MTD3055V	60	0.1500	6.00	12.0	1.75[3]

TMOS V (Continued)

TMOS V —TO-220AB

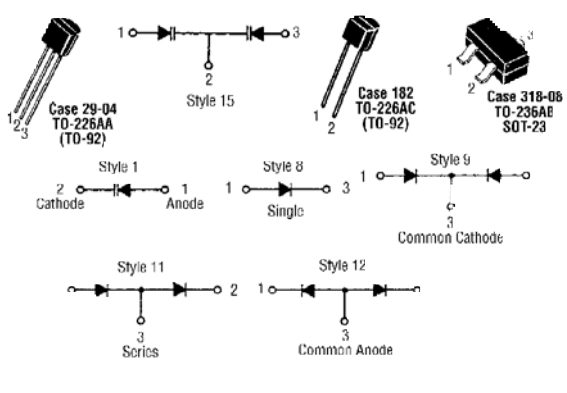
Mfr.'s Type[4]	$V_{(BR)DSS}$ (V) Min.	$R_{DS(on)}$ (Ω) Max.	@ I_D (A)	I_D (Cont.) (A)	P_D[1] (W) Max.
MTP3055V	60	0.1500	6.00	12.0	40.00
MTP15N06V	60	0.1200	7.50	15.0	53.00
MTP36N06V	60	0.0400	16.00	32.0	88.00
MTP50N06V	60	0.0280	22.50	42.0	107.00

SO-8

MMDF3N04HDR2	40	0.0800	3.40	3.4	2.00
MMDF6N02HDR2	20	0.0350	6.00	6.5	2.00
MMSF10N02ZR2	20	0.0150	10.00	10.0	2.50

[1]TC=25°C. [2]Indicates Logic Level. [3]Power rating when mounted on an FR-4 glass epoxy printed circuit board with the minimum recommended footprint.

Diodes



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Tuning Diodes

Abrupt Tuning Diodes Capacitance Ratio @ 2.0 Volts/30 Volts, General Purpose; Case 182 — TO-226AC (TO-92) — 2-Lead
These devices exhibit high Q characteristics.

Mfr.'s Type	C_T @ V_R=4.0 V,1.0 MHz (pF) Min.	(pF) Nominal	(pF) Max.	$V_{R(BR)R}$ (V)	Cap. Ratio C4/C30 Min.	Q 4.0 V, 50 MHz Typ.
MV2109	29.7	33.0	36.3	30	2.5	200

Abrupt Tuning Diodes for FM Radio — Dual; Case 29-04 — TO-226AA (TO-92)

Mfr.'s Type	C_T @ V_R[2] (pF) Min.	(pF) Max.	(V)	Cap Ratio C3/C30 Min.	Q 3.0 V, 50 MHz Min.	$V_{R(BR)R}$ (V)	Device Marking	Style
MV104	37	42	3.0	2.5	100	32	—	15

[2]Each Diode.

Hyper-Abrupt Tuning Diodes For Telecommunications — Single; Case 182 — TO-226AC (TO-92)

Mfr.'s Type	C_T @ V_R (f=1.0 MHz) (pF) Min.	(pF) Max.	(V)	Cap. Ratio @ V_R Min.	Max.	(V)	Q 3.0 V Min.	50 MHz Max.	$V_{(BR)R}$ (V)	Device Marking	Case Style
MV209	26.0	32.0	3.0	5.0	6.5	3/25	200	—	30	—	1

Hyper-Abrupt Tuning Diodes For Telecommunications — Single; Case 318-07 — TO-236AB (SOT-23)

MMBV105GLT1	1.8	2.8	25.0	4.0	6.0	3/25	200	—	30	M4E	8
MMBV109LT1	26.0	32.0	3.0	5.0	6.5	3/25	200	—	30	M4A	8

Hyper-Abrupt Tuning Diodes for Communications — Dual; Case 318-07 — TO-236AB (SOT-23)

MMBV609LT1	26.0	32.0	3.0	1.8	2.4	3/8	250	—	20	5L	9

Hot-Carrier Diodes

Case 182 — TO-226AC (TO-92)
The following is a listing of hot carrier (Schottky) diodes that exhibit low forward voltage drop for improved circuit efficiency.

Mfr.'s Type	$V_{(BR)R}$ (V)	C_T @V_R (pF) Max.	V_F @ 10 mA (V) Max.	I_R @ V_R (nA) Max.	Minority Lifetime (ps) Typ.	Device Marking	Style
MBD701	70.0	1.0 @ 20 V	1.0	200 @ 35.0 V	15	—	1
MBD301	30.0	1.5 @ 15 V	0.6	200 @ 25.0 V	15	—	1

Hot-Carrier Diodes (Continued)

Case 318-08 — TO-236AB (SOT-23)

Mfr.'s Type	$V_{(BR)R}$ (V)	C_T @V_R (pF) Max.	V_F @ 10 mA (V) Max.	I_R @ V_R (nA) Max.	Minority Lifetime (ps) Typ.	Device Marking	Style
MMBD701LT1	70.0	1.0 @ 20 V	1.0	200 @ 35.0 V	15	5H	8
MMBD301LT1	30.0	1.5 @ 15 V	0.6	200 @ 25.0 V	15	4T	8
MMBD101LT1	7.0	1.0 @ 0 V	0.6	250 @ 3.0 V	—	4M	8

PIN Switching Diodes

Case 182 — TO-226AC (TO-92)
The following PIN diodes are designed for VHF band switching and general-purpose low current switching applications.

Mfr.'s Type	$V_{(BR)R}$ (V) Min.	C_T @ V_R @ 1.0 MHz (pF) Max.	(V)	IR @ V_R (nA) Max.	Series Resistance (Ω) Max.	Device Marking	Style
MPN3404	20	2.0	15	0.1 @ 25 V	0.85 @ 10 mA	—	1

Case 318-08 — TO-236AB (SOT-23)

MMBV3401LT1	35	1.0	20	0.1 @ 25 V	0.70 @ 10 mA	4D	8

General-Purpose Signal and Switching Diodes — Dual

Case 318-08 — TO-236AB (SOT-23)
The following is a listing of small-signal switching diodes in surface mount packages. These diodes are intended for low current switching and signal steering applications.

Mfr.'s Type	Marking	$V_{(BR)R}$ @ I_{BR} (μA)	Min. (V)	I_R Max. (μA)	@ V_R (V)	V_F Min. (V)	Max. (V)	@ I_F (mA)	C_T[1] Max. (pF)	t_{rr} Max. (ns)	Case Style
MMBD7000LT1	M5C	100.0	100	0.300	50.0	0.75	1.10	100	1.5	4	11
MMBD6100LT1	5BM	0.1	70	0.100	50	0.85	1.10	100	2.5	4	9
BAV70LT1	A4	70.0	100	5.000	70.0	0.75	1.00	50	1.5	6	9
BAV99LT1	A7	70.0	100	2.500	70.0	—	1.00	50	1.5	4	11
BAW56LT1	A1	70.0	100	2.500	70.0	—	1.00	50	2.0	6	12

Low-Leakage Medium Speed Switching Diodes — Single

Case 318-08 — TO-236AB (SOT-23)

BAS116LT1	JV	75.0	100	0.005	75.0	—	1.00	10	2.0	3000	8