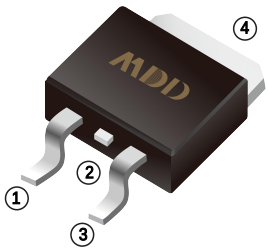
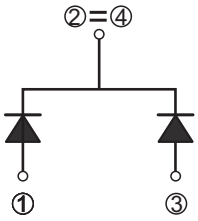
MURD1020D THRU MURD1060D

Reverse Voltage -200 -600 Volts Forward Current - 10.0 Ampere

FAST RECOVERY EPI DIODES

TO-252(D-PAK)





RoHS COMPLIANT

FEATURES

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

MECHANICAL DATA

Case: TO-252 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.0141 ounce(approx), 0.4 grams (approx)

PACKAGE SPECIFICATIONS

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
TO-252	13'	330	2500	340×336×29	2500	353×346×365	25000

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

MCHARACTERISTICS	SYMBOL	MDD MURD1020D	MDD MURD1040D	MDD MURD1060D	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward rectified current	$I_{(AV)}$	10			A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	50			A
Maximum instantaneous forward voltage at 5A	V_F	1.0	1.3	1.6	V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	10 100			uA
Typical junction capacitance (NOTE 1)	C_J	45			pF
Maximum Reverse Recovery Time	T_{rr}	35			ns
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50			℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +175			℃

Note:1.Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2.Mounted on 10cm x 10cm x 1mm copper pad area
3.The typical data above is for reference only.

Rating and Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

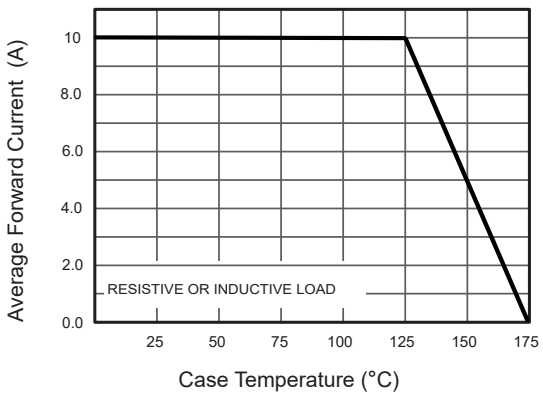


Fig.2 Typical Reverse Characteristics

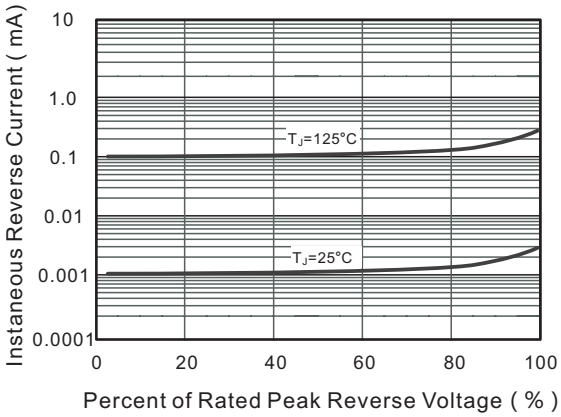


Fig.3 Typical Forward Characteristic

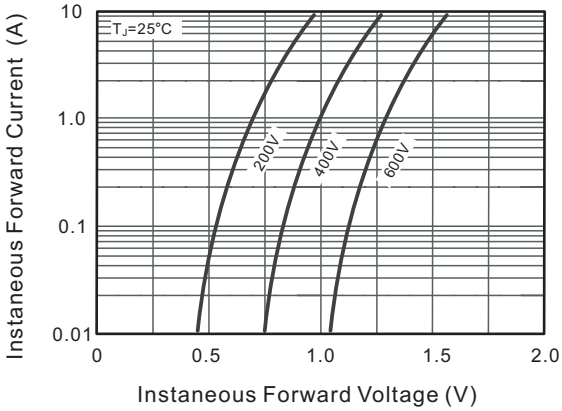
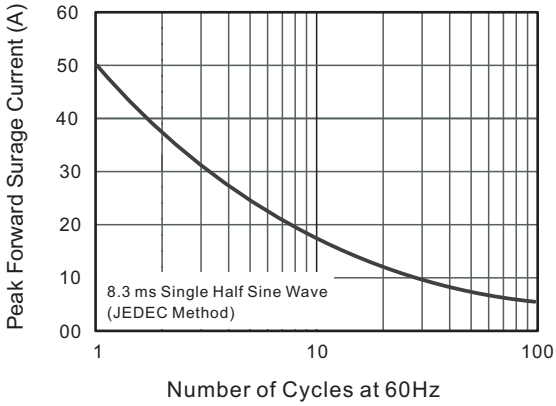


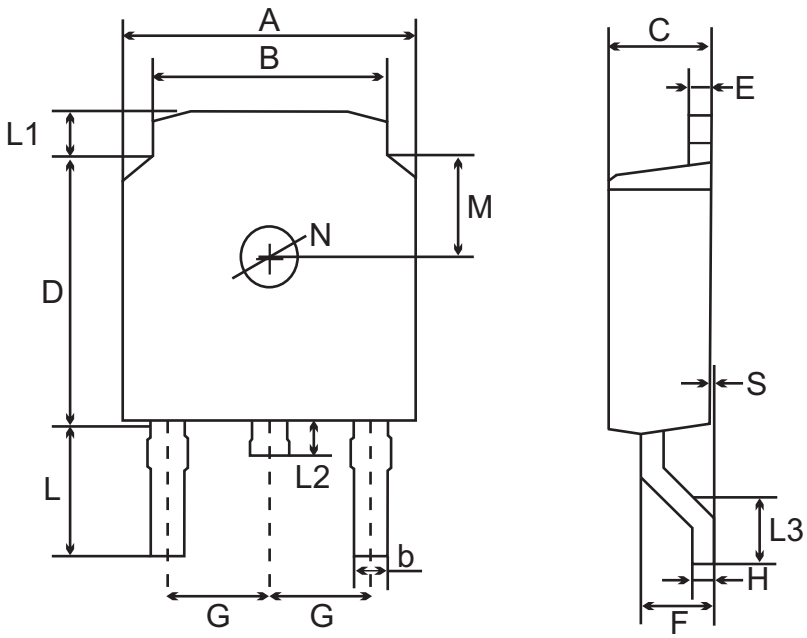
Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.

Outlitne Drawing

TO-252(D-PAK) Package Outline Dimensions



TO-252(D-PAK) mechanical data

UNIT		A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N
mm	max	6.7	5.53	0.86	2.5	6.3	0.6	1.8	2.29 TYPICAL	0.60	3.4	1.2	1.0	1.75	0.15	1.98	1.3
	min	6.3	5.1	0.66	2.1	5.9	0.4	1.3		0.40	2.7	0.8	0.6	1.40	0.0	1.58	1.2

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