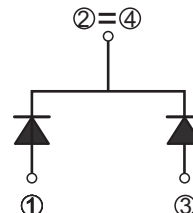
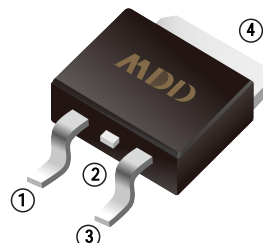


FAST RECOVERY EPI DIODES

TO-252(D-PAK)

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°C 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 on rated 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 $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=125^{\circ}C$	I_R	10 100			μA
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			$^{\circ}C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +175			$^{\circ}C$

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

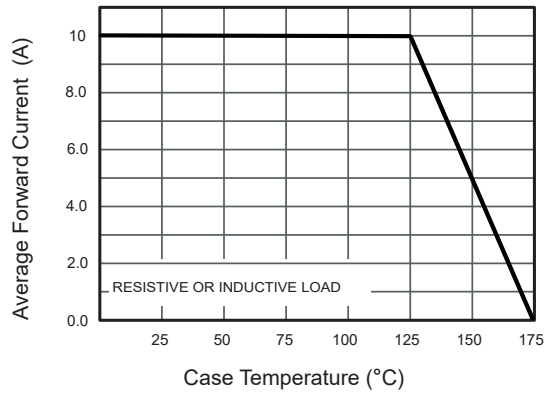


Fig.2 Typical Reverse Characteristics

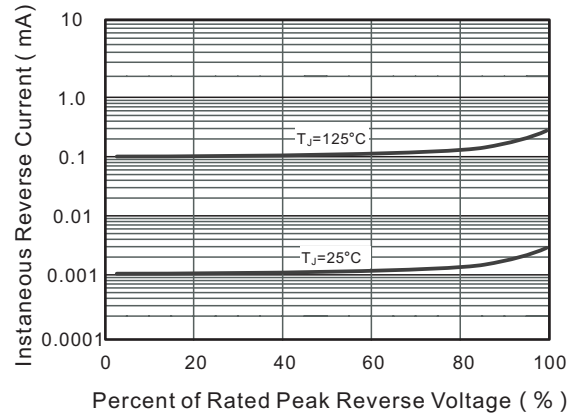


Fig.3 Typical Forward Characteristic

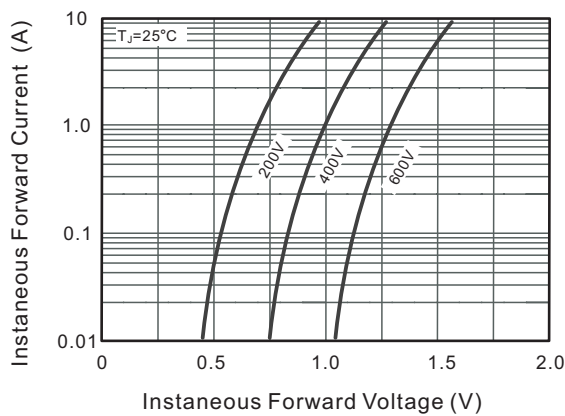
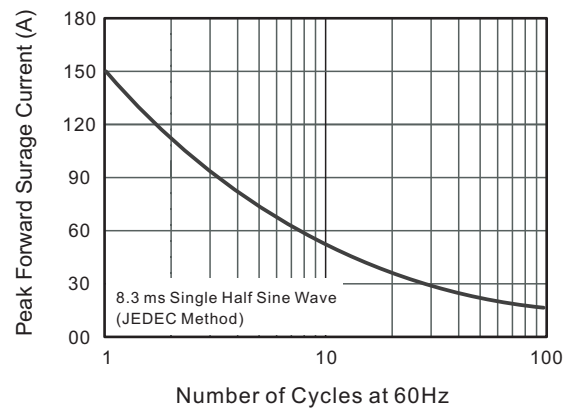


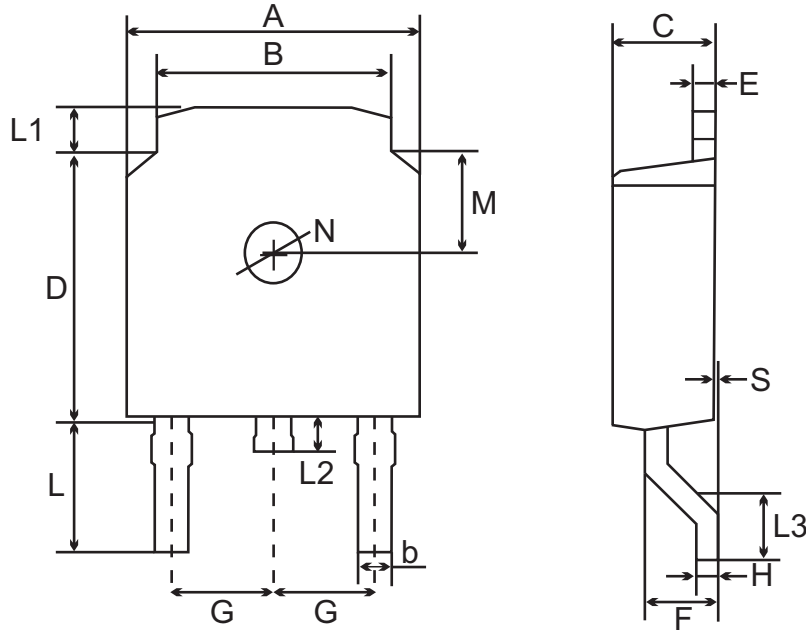
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



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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