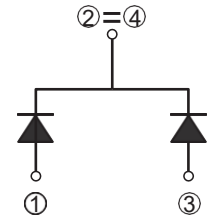


FAST RECOVERY EPI DIODES

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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



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	MURD1020D	MURD1040D	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.

Fig.1 Typical Forward Current Derating Curve

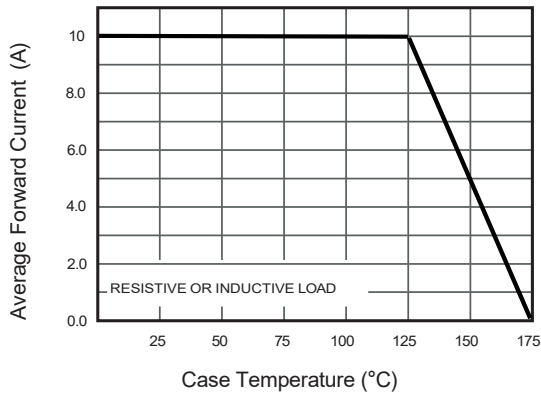


Fig.2 Typical Reverse Characteristics

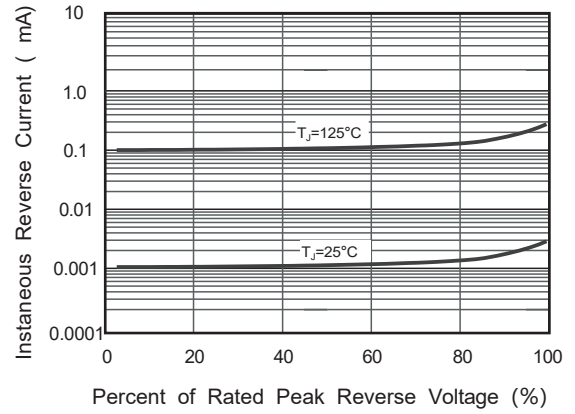


Fig.3 Typical Forward Characteristic

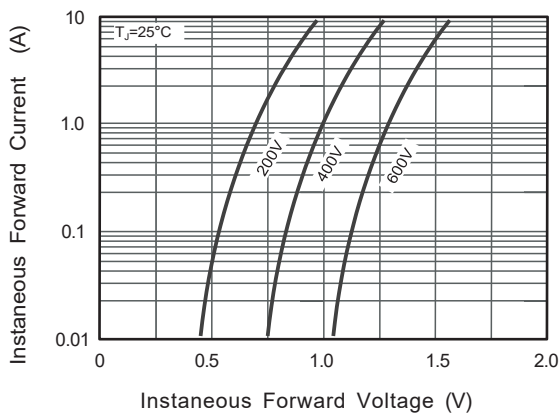
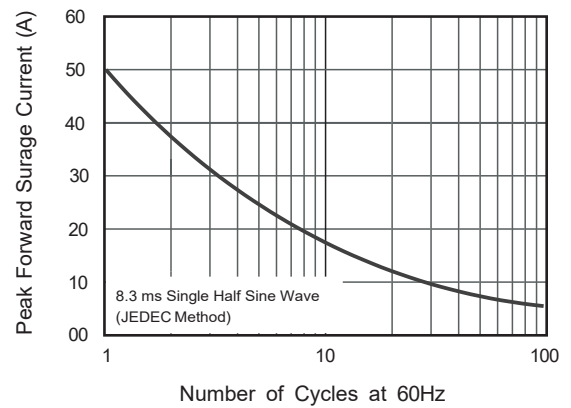


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.