MURD1620D THRU MURD1660D

Reverse Voltage - 200 - 600 Volts Forward Current 16.0 Ampere

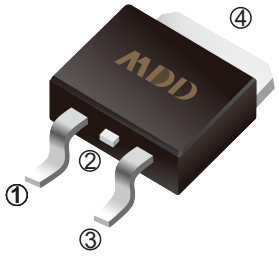
FAST RECOVERY EPI DIODES

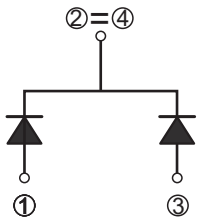
Features

TO-252(D-PAK)

RoHS COMPLIANT

- 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)

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MDD MURD1620D	MDD MURD1640D	MDD MURD1660D	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	$I_{(AV)}$	16			A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	100			A
Maximum instantaneous forward voltage at 8.0A	V_F	1.0	1.30	1.6	V
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ / T_A=125℃	I_R	10 / 100			uA
Typical junction capacitance (NOTE 1)	C_J	45			pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50			℃/W
Maximum Reverse Recovery Time(Note3)	Trr	35			ns
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +175			℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance from junction to case.
3.Reverse Rcovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A.

Rating and Characteristic Curves

Fig.1 Maximum Average Forward Current Rating

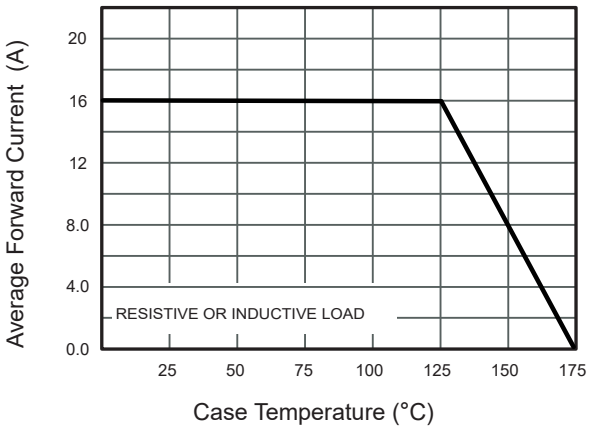


Fig.2 Typical Reverse Characteristics

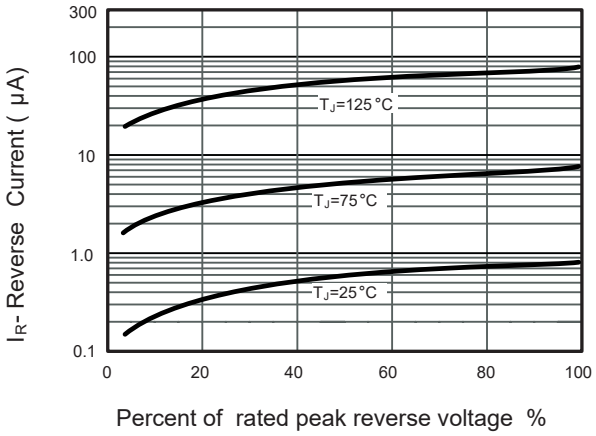


Fig.4 Typical Forward Characteristics

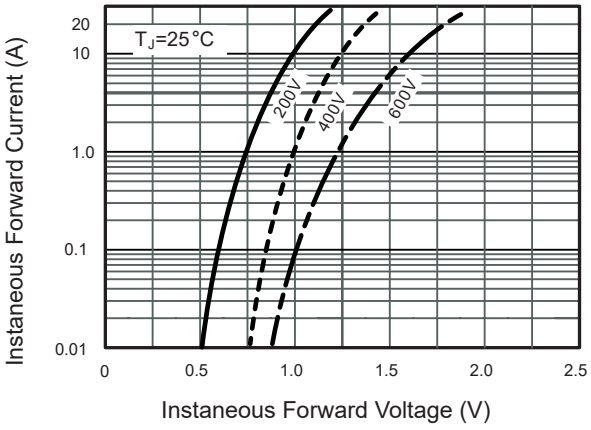


Fig.4 Typical Junction Capacitance

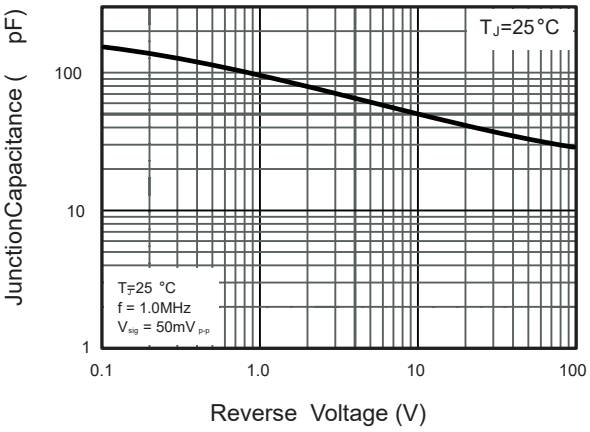


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

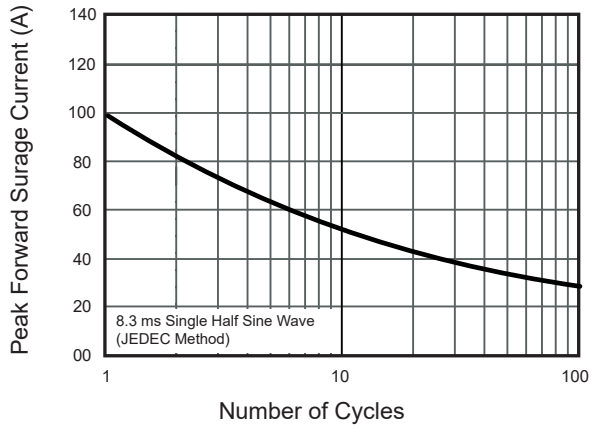
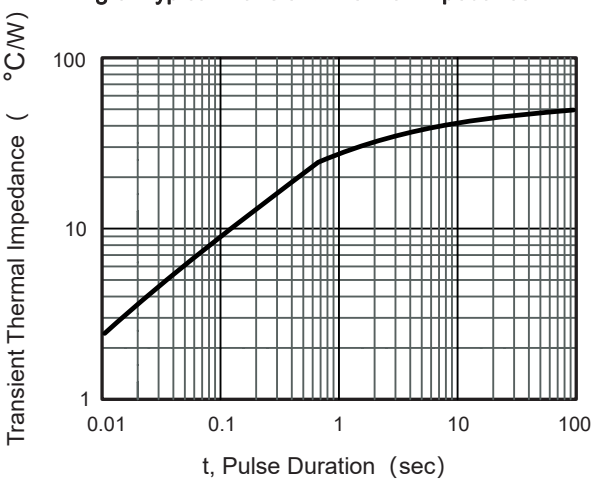


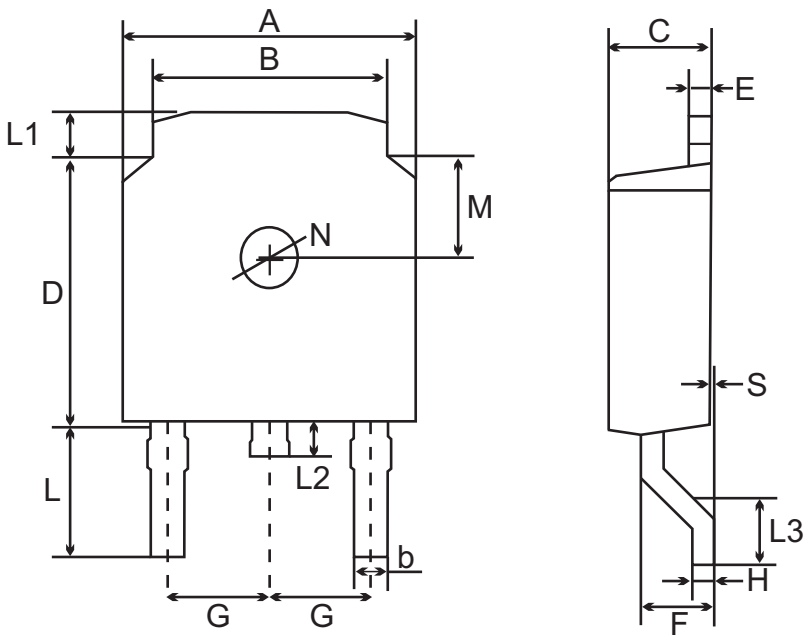
Fig.6- Typical Transient Thermal Impedance



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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