

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds
- Component in accordance to RoHS 2015/863/EU



MECHANICAL DATA

- Case: JEDEC TO-263 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25 °C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters		Symbols	MUR 1620D1	MUR 1640D1	MUR 1660D1	Units
Maximum repetitive peak reverse voltage		VRRM	200	400	600	Volts
Maximum RMS voltage		VRMS	140	280	420	Volts
Maximum DC blocking voltage		VDC	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	8.0		Amps	
	Total device		16.0			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method,Total device)		IFSM	150			Amps
Maximum instantaneous forward voltage at 8.0 A per leg(Note 1)		VF	0.975	1.3	1.5	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Tj=25°C	IR	5			μA
	Tj=125°C		100			
Maximum Reverse Recovery Time (Note 2)		Trr	35			ns
Typical thermal resistance (Note 3)		RθJC	1.8			°C/W
Operating junction temperature range		TJ	-55 to+175			°C
Storage temperature range		TSTG	-55 to+175			°C

Notes: 1. Pulse test: 300μs pulse width,1% duty cycle
2. Reverse recovery test conditions IF=0.5A,IR=1.0A, Irr=0.25A
3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES MUR1620D1 THRU MUR1660D1

FIG.1-FORWARD CURRENT DERATING CURVE

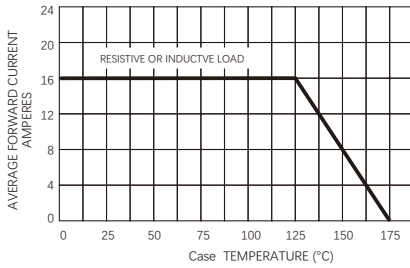


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

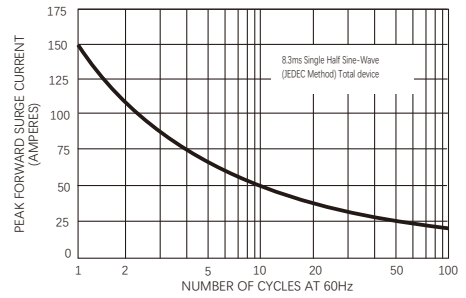


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

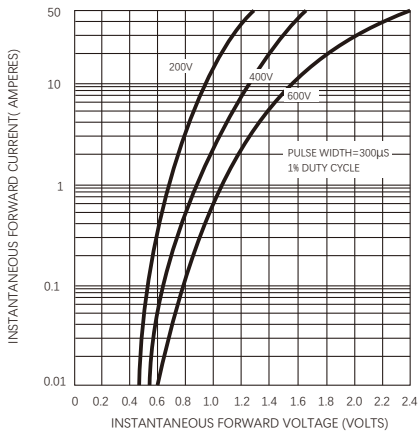


FIG.4-TYPICAL REVERSE CHARACTERISTICS

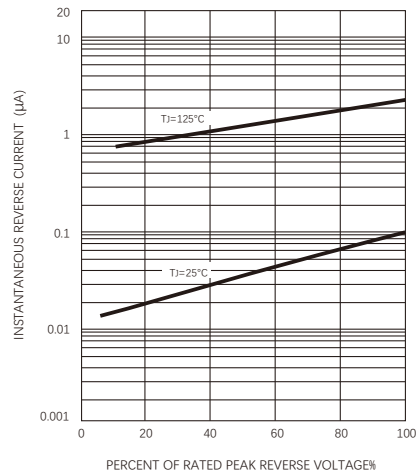


FIG.5-TYPICAL JUNCTION CAPACITANCE

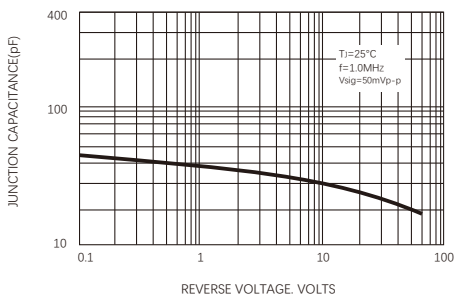
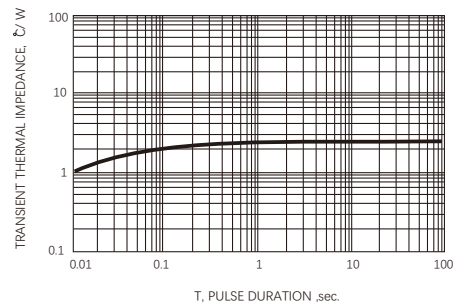
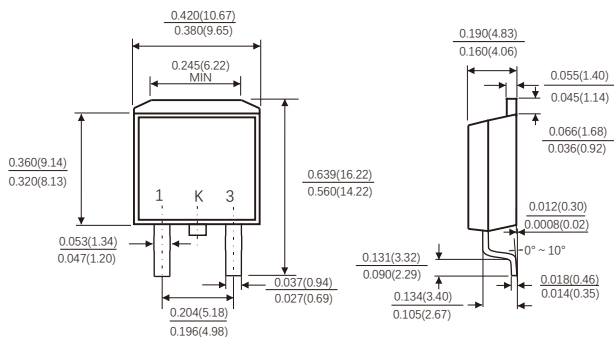


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

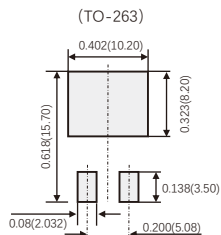


Dimensions in inches and (millimeters)

TO-263



Suggested Pad Layout



(设计者可参考推荐值根据焊接工艺要求自行确定适合的焊盘尺寸)
(Designers can refer to the recommended values according to the manufacturing process requirements to determine the appropriate pad size)

Friendship Reminder

- JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.
- JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of JH.
- JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.