

MUR1020D1 THRU MUR1060D1

GLASS PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 100 -600 Volts

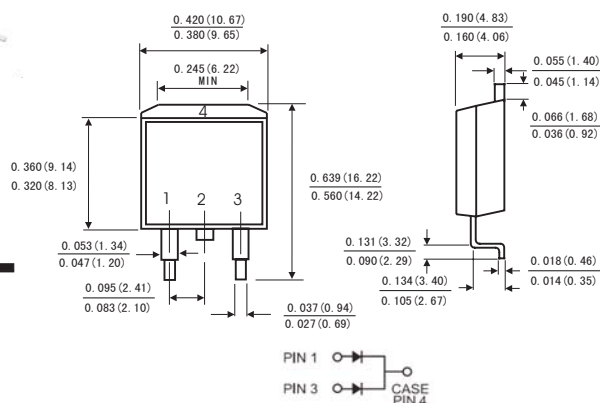
Forward Current - 10.0Ampers

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, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



TO-263AB D2PAK



MECHANICAL DATA

- Case: JEDEC TO-263AB molded plastic body
- Terminals: Solderable per MIL-STD-202,method 208
- 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%.)

	Symbols	MUR 1020D1	MUR 1030D1	MUR 1040D1	MUR 1060D1	Units
Maximum repetitive peak reverse voltage	V_{RRM}	200	300	400	600	Volts
Maximum RMS voltage	V_{RMS}	140	210	280	420	Volts
Maximum DC blocking voltage	V_{DC}	200	300	400	600	Volts
Maximum average forward rectified current(see Fig.1)	$I_{(AV)}$	5.0 10.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100				Amps
Maximum instantaneous forward voltage at 5.0 A per leg(Note 1)	V_F	0.975	1.3	1.7		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I_R	5				μA
		50				
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35				ns
Typical thermal resistance (Note 3)	$R_{\theta JC}$	2.5				°C/W
Operating junction temperature range	T_J	-40 to+150				°C
Storage temperature range	T_{STG}	-40 to+150				°C

- Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle
 2. Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.5A$
 3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES MUR1020D1 THRU MUR1060D1

FIG.1-FORWARD CURRENT DERATING CURVE

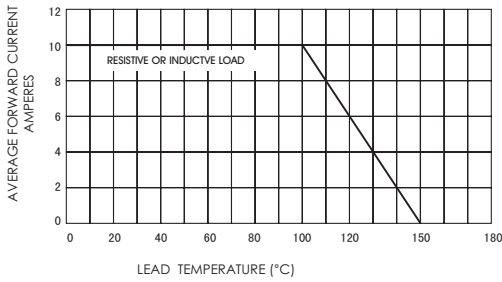


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

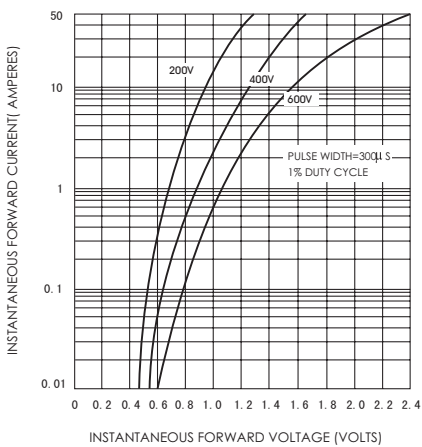


FIG.5-TYPICAL JUNCTION CAPACITANCE

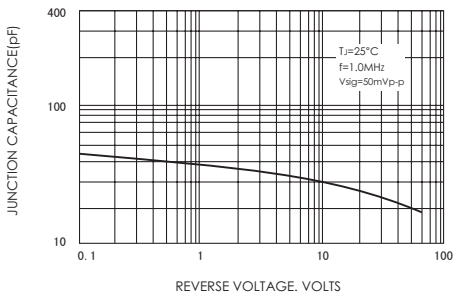


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

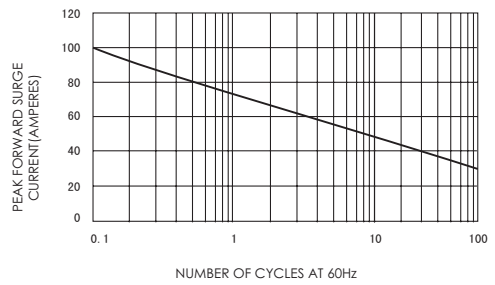


FIG.4-TYPICAL REVERSE CHARACTERISTICS

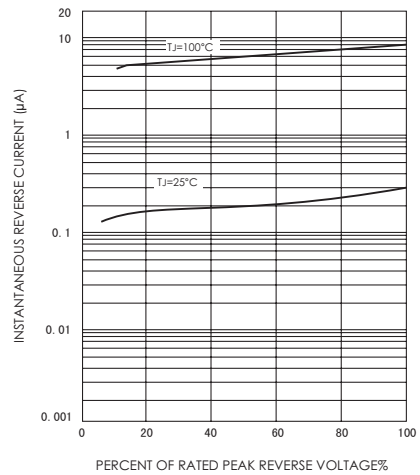


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

