

MUR2020PT THRU MUR2060PT

POLYIMIDE PASSIVATED SUPER FAST RECTIFIER

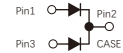
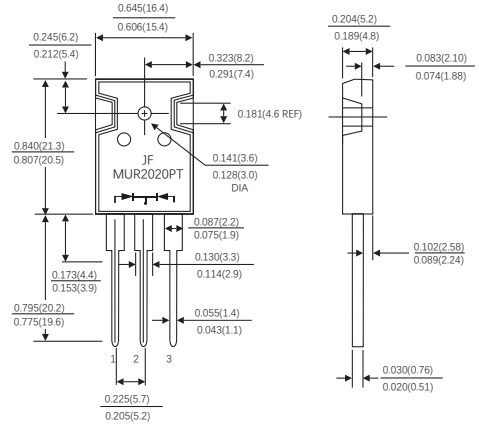
Reverse Voltage - 200 -600 Volts

Forward Current - 20.0Amperes

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 2015/863/EU

TO-247AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Weight: 0.22ounce, 6 grams
- 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 2020PT	MUR 2040PT	MUR 2060PT	Units
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)	Per leg Total device	$I(AV)$		10.0 20.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load Per leg (JEDEC method)	I_{FSM}	120			Amps
Maximum instantaneous forward voltage at 10.0 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)	$T_j = 25^{\circ}C$	5			μA
	$T_j = 125^{\circ}C$	250			
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35			ns
Maximum thermal resistance Per leg (Note 3)	$R_{\theta JC}$	1.2			$^{\circ}C/W$
Operating junction temperature range	T_j	-55 to+150			$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150			$^{\circ}C$

- Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle
 2. Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
 3. Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

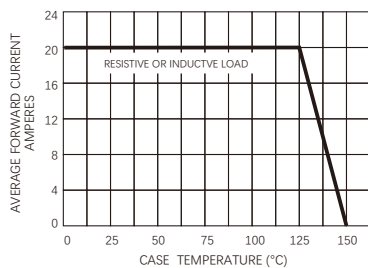


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

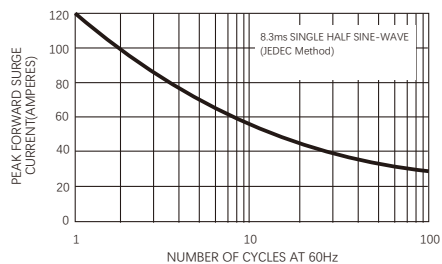


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

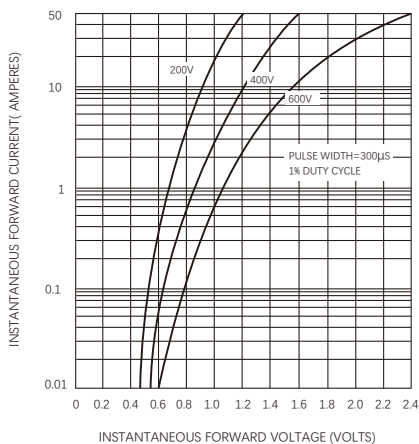


FIG.4-TYPICAL REVERSE CHARACTERISTICS

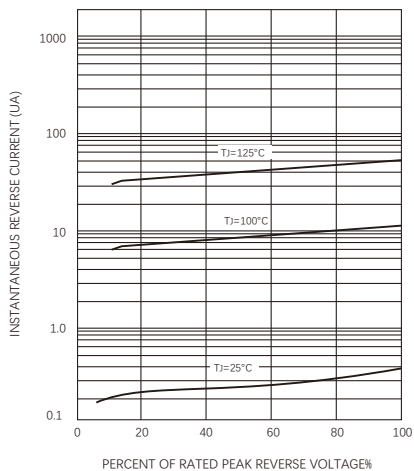
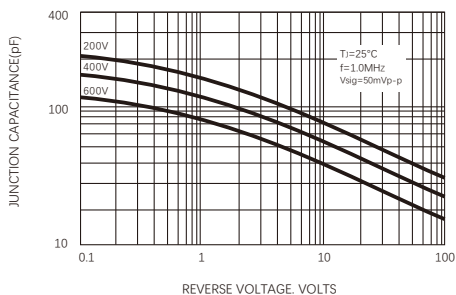


FIG.5-TYPICAL JUNCTION CAPACITANCE



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