

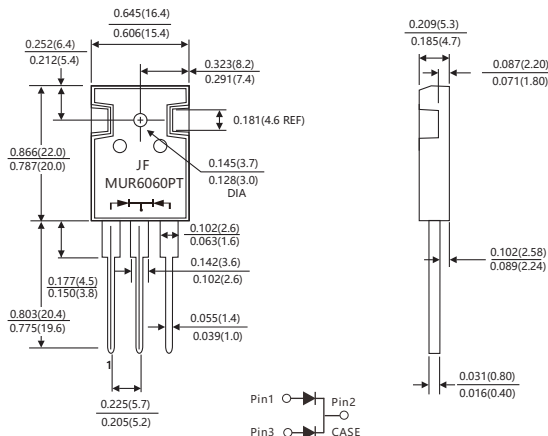
FEATURES

- Fred Chip Planar Construction
- Super Fast Switching,High Efficiency
- Low Power loss, High Efficiency
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0

TO-247

MECHANICAL DATA

- Case: TO-247AB, Molded Plast
- Terminals:Pure tin Plated ,Lead free Solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting Position:Any



Dimensions in inches and (millimeters)

TYPICAL APPLICATIONS

- For use in High Frequency Rectifier of Switching Mode Power Supplies, Freewheeling Diode, DC/DC Converters or polarity Protection Application

Maximum Ratings and Electrical Characteristics @ $T_J = 25^\circ\text{C}$ unless otherwise specified

(Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameters	Symbol	MUR6020PT	MUR6030PT	MUR6040PT	MUR6060PT	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	300	400	600	V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	60				A
Peak Forward Surge Current : 8.3ms single half sine wave superimposed on rated load (JEDEC method, Total device)	I_{FSM}	350				A
Maximum Forward Voltage at 30A per leg (Note2)	V_F	1.05	1.35	1.70		V
Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_J = 125^\circ\text{C}$	I_R	5 50				μA
Maximum Reverse Recovery Time (Measured With $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$)	T_{rr}	35	50			nS
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	1.0				$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +175				$^\circ\text{C}$

Note: (1). Thermal resistance from junction to case
(2). Pulse test: 300us pulse width, 1% duty cycle

Fig-1 FORWARD CURRENT DERATING CURVE

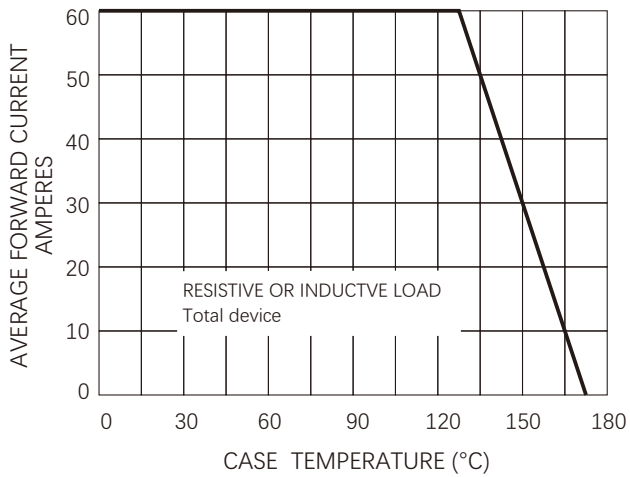


Fig-2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

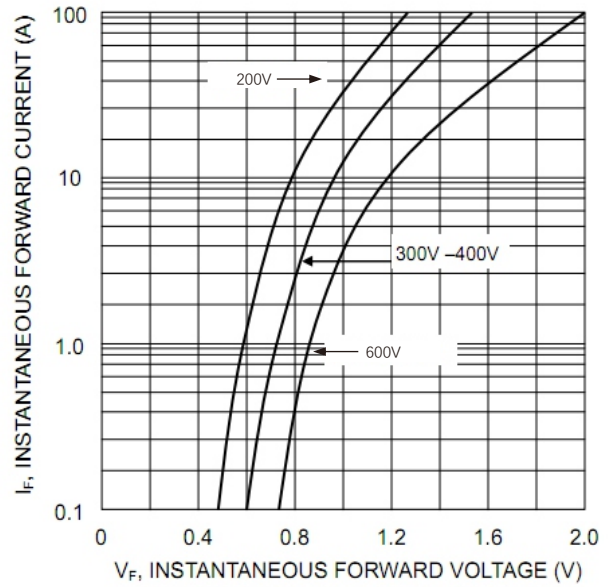


Fig-3 TYPICAL REVERSE CHARACTERISTICS

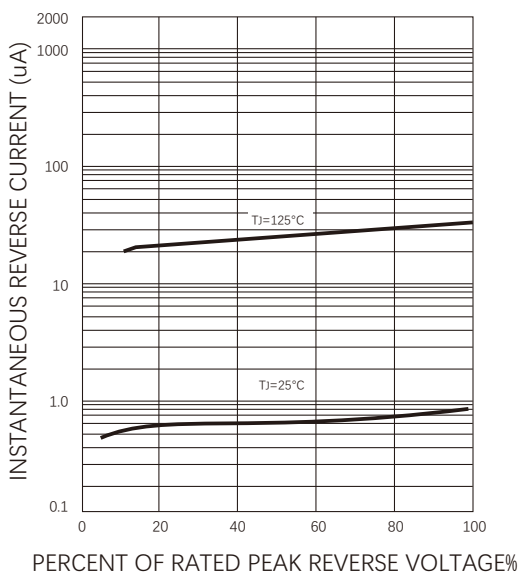
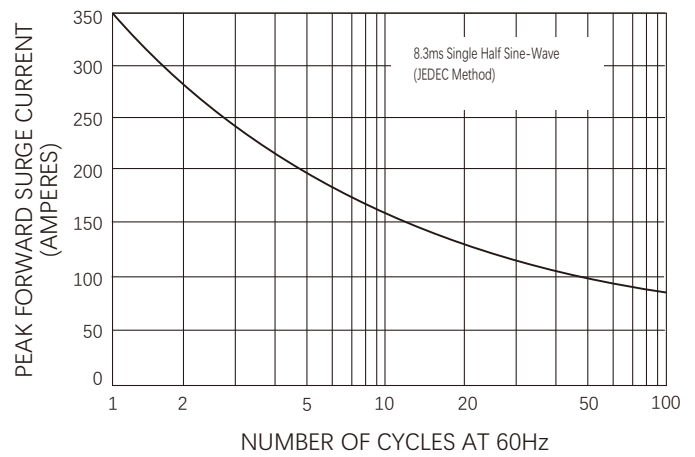


Fig-4 MAXIMUM NON-REPETITIVE SURGE CURRENT



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