MUR60120PT

POLYIMIDE PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage- 1200 Volts
Forward Current - 60.0Amperes

SEMICONDUCTOR

FEATURES

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

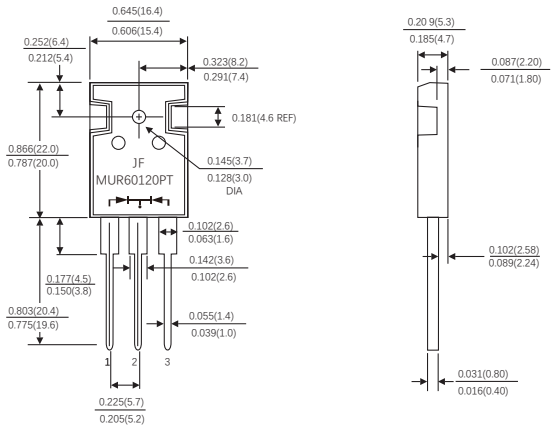
MECHANICAL DATA

- Case:TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Weight: 6.4 grams(approx)
- Mounting Position:Any

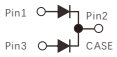
TYPICAL APPLICATIONS

- For use in boost stage in SMPS
- High frequency inverters for solar inverters
- DC/DC converters
- High frequency output rectification of battery chargers
- Free wheeling diodes in motor drivers
- Antiparallel diode for high frequency switching devices
- Antisaturation diode

TO-247AB



Dimensions in inches and (millimeters)



Maximum Ratings and Electrical Characteristics @T_A=25℃ unless otherwise specified

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

Characteristic	Symbol	Value		Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200		V
Maximum RMS Voltage	V_{RMS}	840		V
Maximum DC Blocking Voltage	V_{DC}	1200		V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	60		A
Peak Forward Surge Current : 8.3ms single half si ne-wave superimposed on rated load(JEDEC method),Total device	I_{FSM}	600		A
Maximum Forward Voltage at 30A per leg	V_F	Typ.	Max.	V
		2.0	2.4	
Maximum Reverse Recovery Time (Measured With IF=0.5A, IR=1.0A,IRR=0.25A)	Trr	Typ.	Max.	nS
		55	75	
Maximum DC Reverse Current at T_J=25℃ Rated DC Blocking Voltage T_J=125℃	I_R	5.0 100		uA
Maximum Thermal Resistance Junction to case	$R_{\theta JC}$	0.4		℃/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	45		℃/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150		℃

RATINGS AND CHARACTERISTIC OF MUR60120PT

Fig.1 FORWARD CURRENT DERATING CURVE

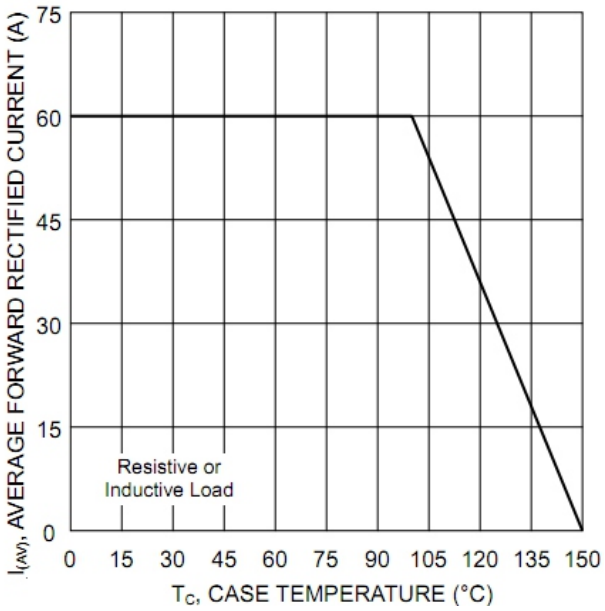


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

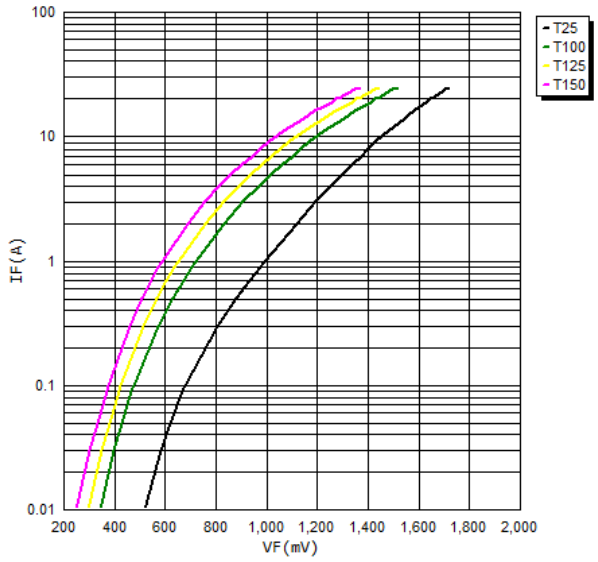


FIG.3TYPICAL REVERSE CHARACTERISTICS

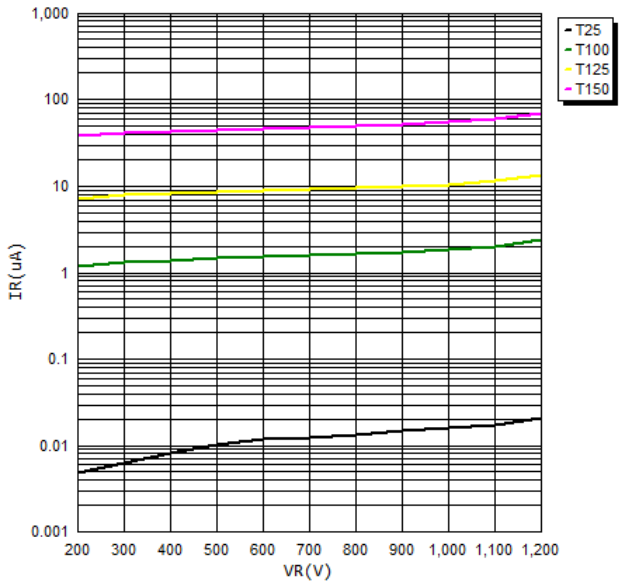
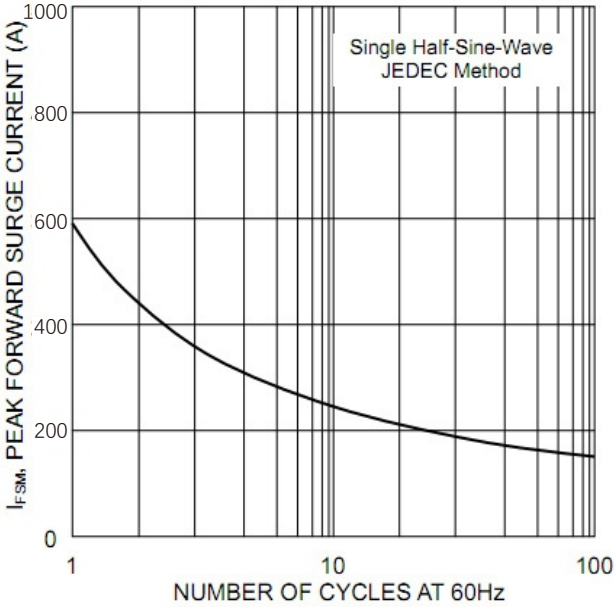


FIG.4 MAXIMUM NON-REPETITIVE SURGE CURRENT



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