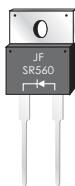
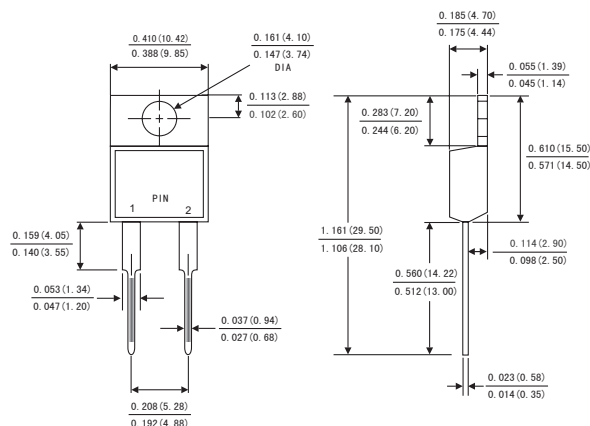


FEATURES

- 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-220AC



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-220AC 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%.)

	Symbols	MUR1230				Units	
Maximum repetitive peak reverse voltage	V_{RRM}	300				Volts	
Maximum RMS voltage	V_{RMS}	210				Volts	
Maximum DC blocking voltage	V_{DC}	300				Volts	
Maximum average forward rectified current(see Fig.1)	$I(AV)$	12.0				Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150				Amps	
Maximum instantaneous forward voltage at 12.0 A(Note 1)	$T_A=25^{\circ}C$	V_F	1.2				Volts
	$T_A=125^{\circ}C$		0.95				
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	I_R	5				μA
	$T_A=125^{\circ}C$		TYP.	20	MAX.	50	
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35				ns	
Typical thermal resistance (Note 3)	$R_{\theta JC}$	2.5				$^{\circ}C/W$	
Operating junction temperature range	T_J	-65 to+175				$^{\circ}C$	
Storage temperature range	T_{STG}	-65 to+175				$^{\circ}C$	

- 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

RATINGS AND CHARACTERISTIC CURVES MUR1230

FIG.1-FORWARD CURRENT DERATING CURVE

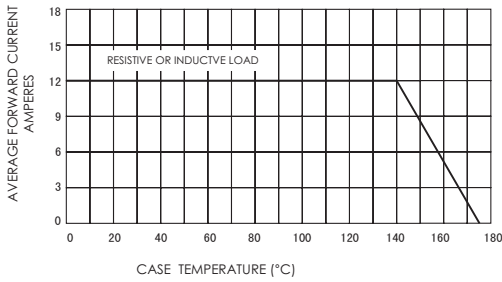


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

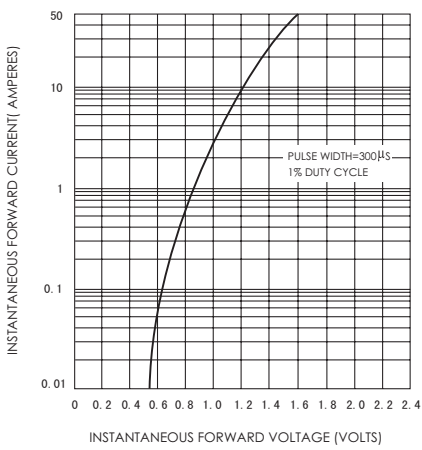


FIG.5-TYPICAL JUNCTION CAPACITANCE

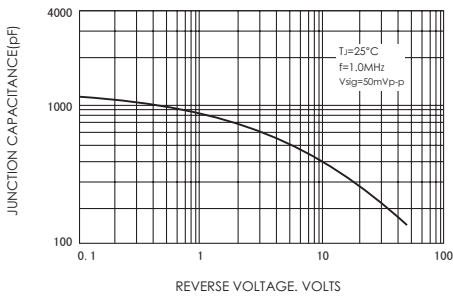


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

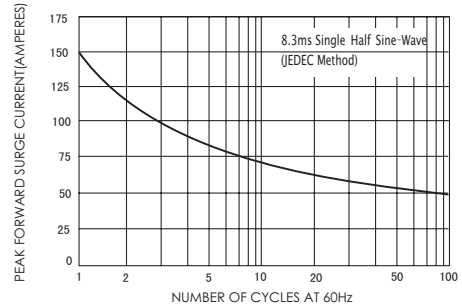


FIG.4-TYPICAL REVERSE CHARACTERISTICS

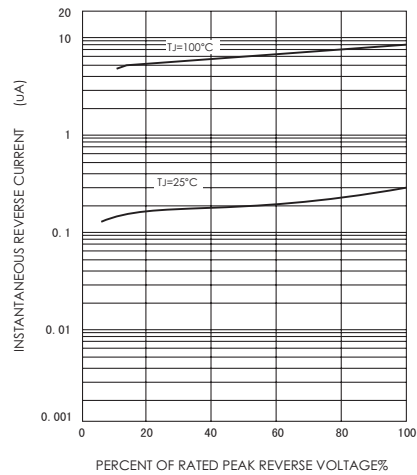


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

