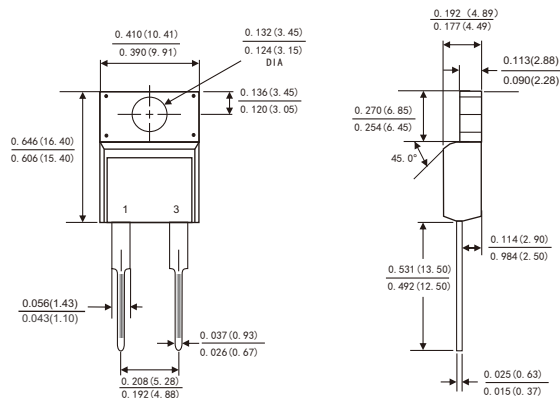


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Planar Die Construction
- Low forward voltage drop
- Low Reverse Voltage Current
- Soft Recovery Characteristics
- For use in high frequency SMPS, free wheeling ,inverters and AS Free Wheeling Diodes
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



ITO-220AC



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC ITO-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%.)

Parameters	Symbols	MURF3020	Units
Maximum repetitive peak reverse voltage	V_{RRM}	200	Volts
Maximum RMS voltage	V_{RMS}	140	Volts
Maximum DC blocking voltage	V_{DC}	200	Volts
Maximum average forward rectified current(see Fig.1)	$I_{(AV)}$	30.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	220	Amps
Maximum instantaneous forward voltage at 30.0 A(Note 1)	V_F	1.1	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	I_R	5 μA
	$T_A=125^{\circ}C$		250 μA
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	-55 to +175	$^{\circ}C$
Storage temperature range	T_{STG}	-55 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 MURF3020

FIG.1-FORWARD CURRENT DERATING CURVE

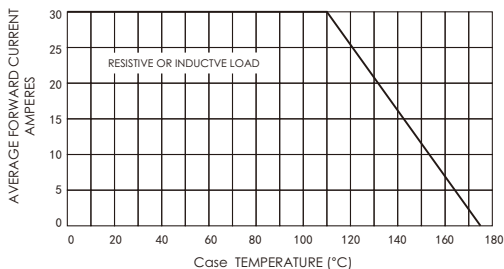


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

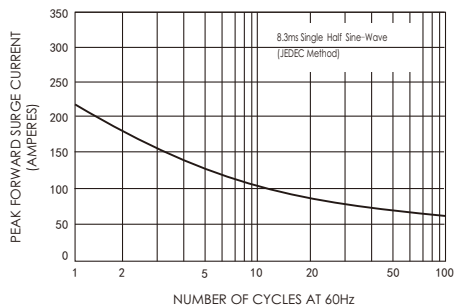


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

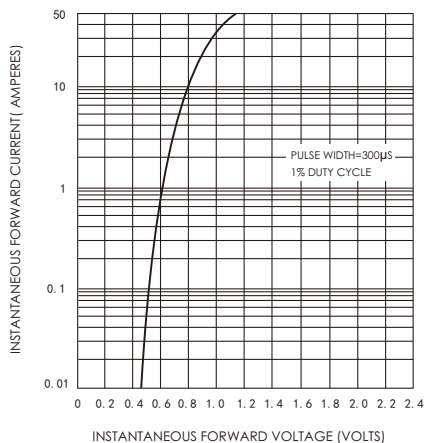


FIG.4-TYPICAL REVERSE CHARACTERISTICS

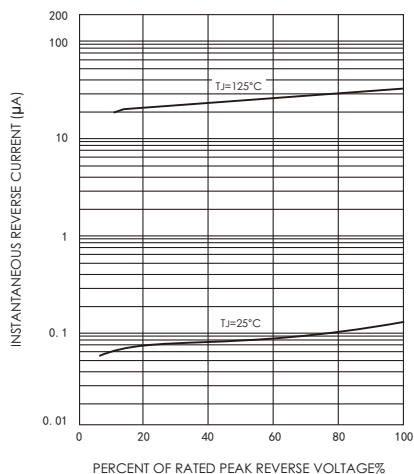


FIG.5-TYPICAL JUNCTION CAPACITANCE

