

MUR2040 MURF2040

POLYIMIDE PASSIVATED SUPER FAST RECTIFIER

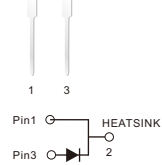
Reverse Voltage - 400 Volts

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 2011/65/EU

TO-220AC



ITO-220AC



MECHANICAL DATA

- Case: JEDEC TO-220AC、 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%.)

Parameter	Symbols	Value	Units
Maximum repetitive peak reverse voltage	V_{RRM}	400	Volts
Maximum RMS voltage	V_{RMS}	280	Volts
Maximum DC blocking voltage	V_{DC}	400	Volts
Maximum average forward rectified current(see Fig.1)	$I_{(AV)}$	20.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200	Amps
Maximum instantaneous forward voltage at 20.0 A(Note 1)	V_F	1.35	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_a = 25^\circ\text{C}$	5	μA
	$T_a = 125^\circ\text{C}$	250	
Maximum Reverse Recovery Time (Note 2)	t_{rr}	40	ns
Typical thermal resistance (Note 3)	TO-220AC	2.0	$^\circ\text{C}/\text{W}$
	ITO-220AC	3.0	
Operating junction temperature range	T_J	-55 to +175	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +175	$^\circ\text{C}$

Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle

2. Reverse recovery test conditions $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES MUR2040 MURF2040

FIG.1-FORWARD CURRENT DERATING CURVE

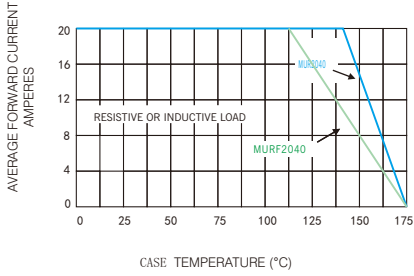


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

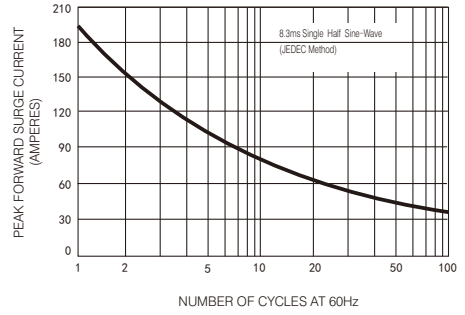


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

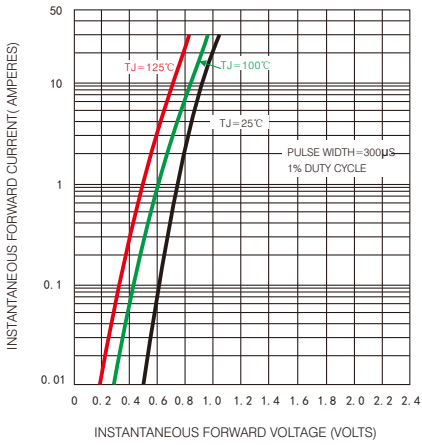
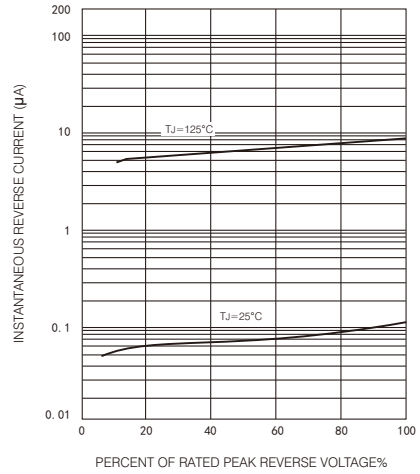


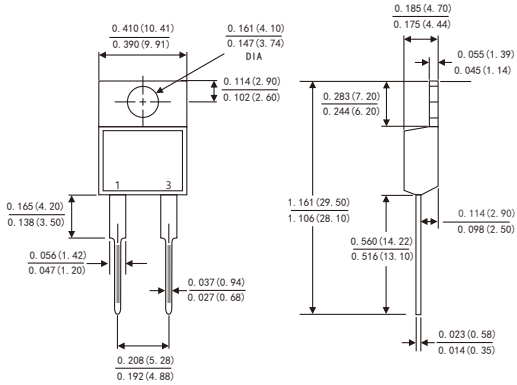
FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

Dimensions in inches and (millimeters)

TO-220AC



ITO-220AC

