MURF1620CT~MURF1660CT

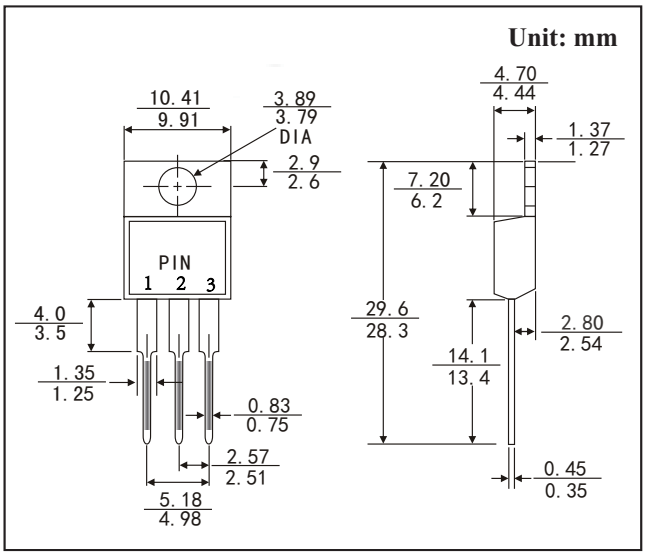
TO-220AB PLASTIC SILICON RECTIFIERS

FEATURES

- 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 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case style:TO-220AB molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

		Symbols	MURF 1620CT	MURF 1640CT	MURF 1660CT	Units
Maximum repetitive peak reverse voltage		V_{RRM}	200	400	600	Volts
Maximum RMS voltage		V_{RMS}	140	280	420	Volts
Maximum DC blocking voltage		V_{DC}	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	$I_{(AV)}$	8.0			Amps
	Total device					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	100			Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)		V_F	0.975	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_A=25°C	I_R	5	10		uA
	T_A=25°C		500			
Maximum Reverse Recovery Time (Note 2)		Trr	35			ns
Typical thermal resistance (Note 3)		$R_{\theta JC}$	3.0			°C/W
Operating junction temperature range		T_J	-65 to+175			°C
Storage temperature range		T_{STG}	-65 to+175			°C

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

2. Reverse recovery test conditions I_F=0.5A,I_R=1.0A, Irr=0.25A

3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

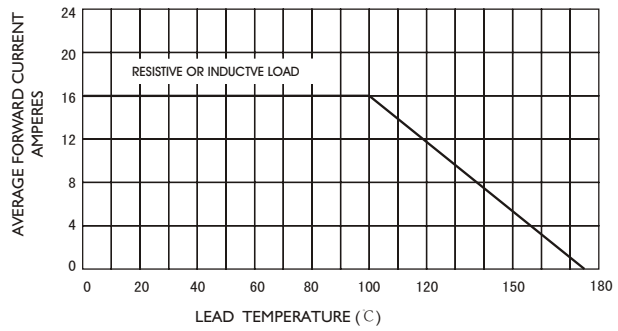


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

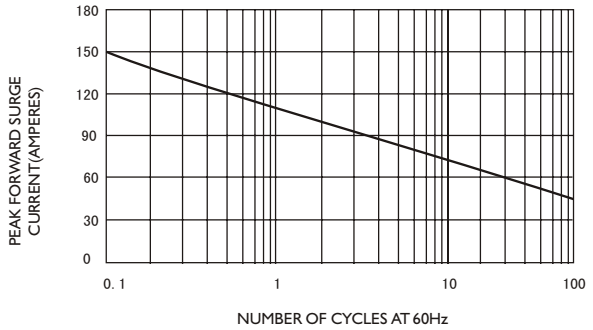


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

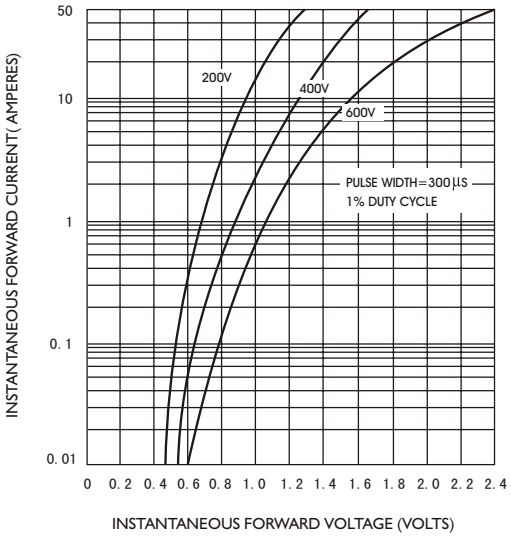


FIG.4-TYPICAL REVERSE CHARACTERISTICS

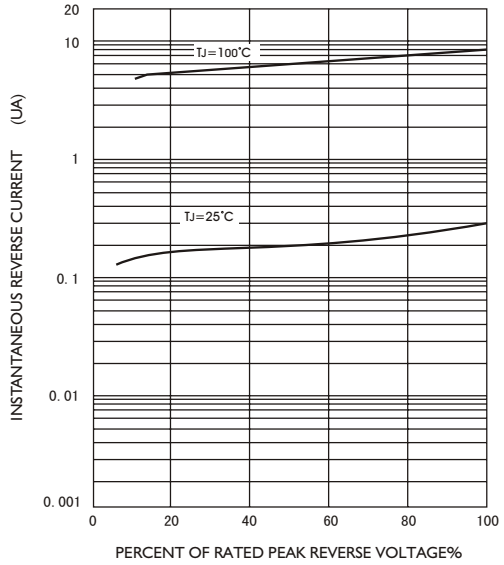


FIG.5-TYPICAL JUNCTION CAPACITANCE

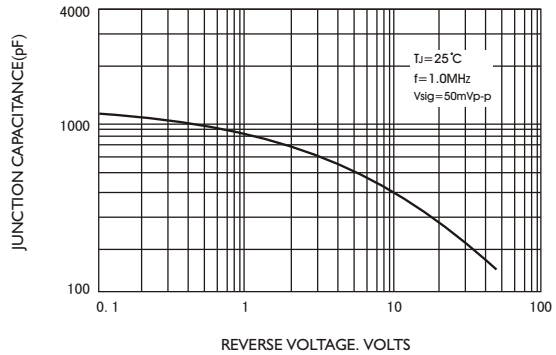


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE