

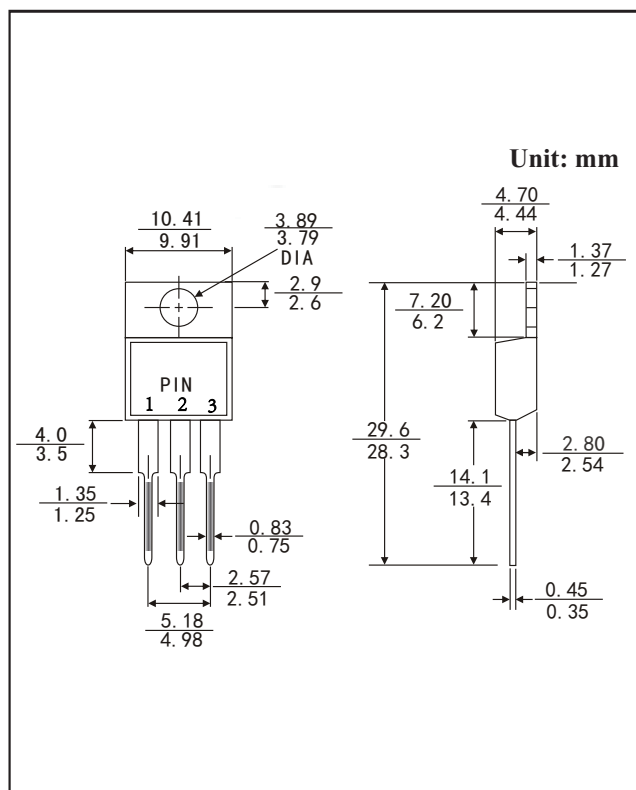
ITO-220AB PLASTIC SILICON RECTIFIERS

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,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 at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case: ITO-220AB molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

TYPE NUMBER		SYMBOL	MBR1020FCT	MBR1030FCT	MBR1045FCT	MBR1050FCT	MBR1060FCT	MBR1080FCT	MBR10100FCT	MBR10200FCT	UNITS
Maximum recurrent peak reverse voltage		V _{RRM}	20	30	45	50	60	80	100	200	V
Maximum RMS voltage		V _{RMS}	14	21	31	35	42	56	70	140	V
Maximum DC blocking voltage		V _{DC}	20	30	45	50	60	80	100	200	V
Maximum Average Forward rectified Current0.375"(9.5mm) lead length		I _{F(AV)}	5.0 10.0								A
Peak forw ard surge current 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	150.0								A
Maximum instantaneous forwardvoltage at 10.0 A(Note1)		V _F	0.60			0.75		0.85		0.95	V
Maximum reverse current at rated DC blocking voltage per diode	@T _A =25°C	I _R	0.2								mA
	@T _A =120°C		15			50					
Typical Thermal Resistance (Note 2)		R _{θJC}	2.5								°C/W
Storage Temperature		T _{STG}	- 65 ---- + 150								°C
Operation Junction Temperature		T _j	- 65 ---- + 125								°C

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

2. Thermal resistance from junction to case.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

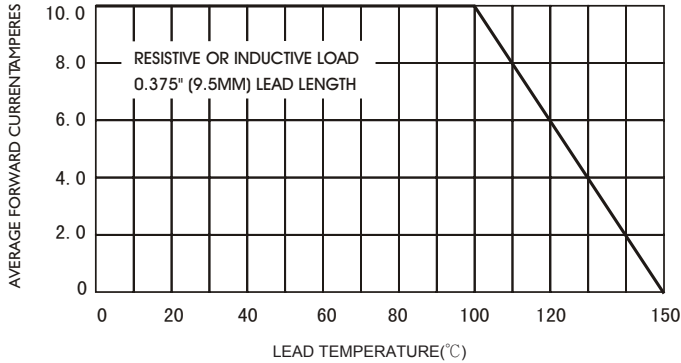


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

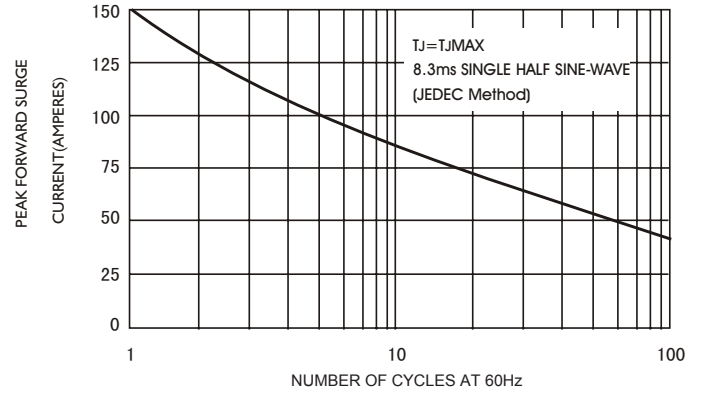


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

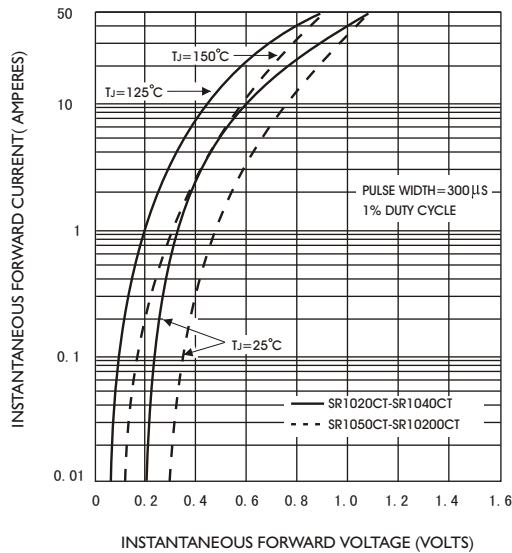


FIG.4 -TYPICAL REVERSE CHARACTERISTICS

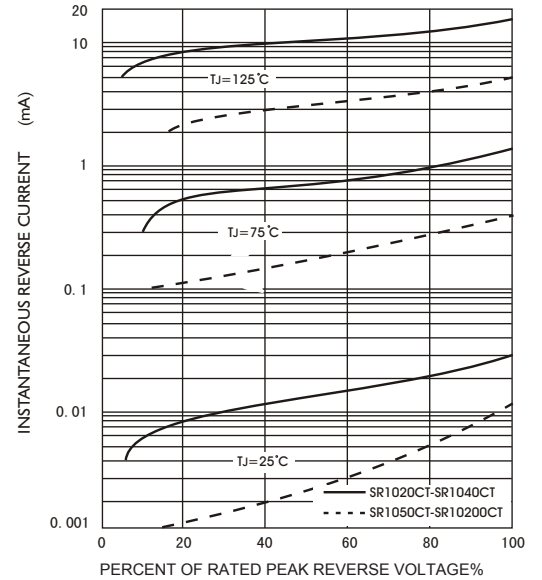


FIG.5-TYPICAL JUNCTION CAPACITANCE

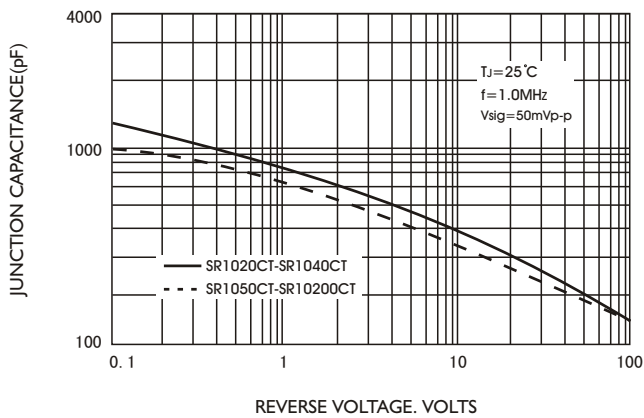


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

