

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20--- 200 V CURRENT: 10.0 A

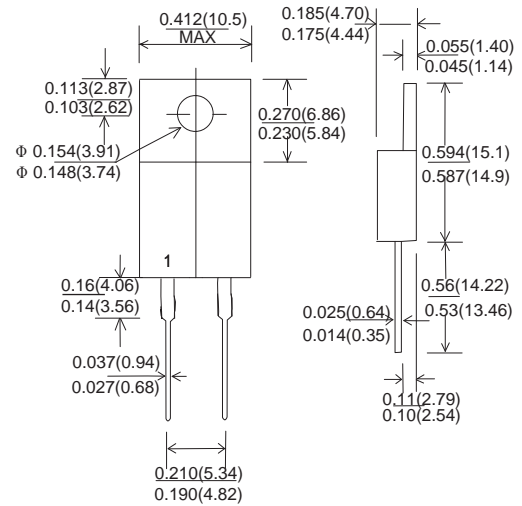
FEATURES

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

MECHANICAL DATA

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

TO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

TYPE NUMBER	SYMBOL	SR	SR	SR	SR	SR	SR	SR	SR	UNITS	
		1020	1030	1040	1050	1060	1080	10100	10200		
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	200	V	
Maximum Average Forward rectified Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	10.0								A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0								A	
Maximum instantaneous forward voltage at 8.0 A (Note 1)	V_F	0.65		0.75		0.80		0.85		V	
Maximum reverse current at rated DC blocking voltage per diode	I_R	@ $T_A=25^\circ C$	0.2								mA
		@ $T_A=120^\circ C$	15		50						
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	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

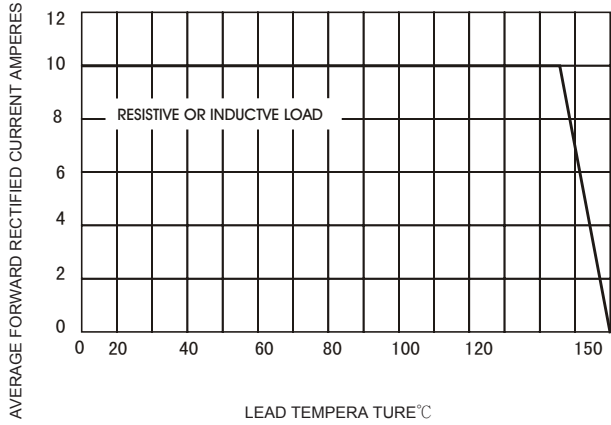


FIG.2 -- PEAK FORWARD SURGE CURRENT

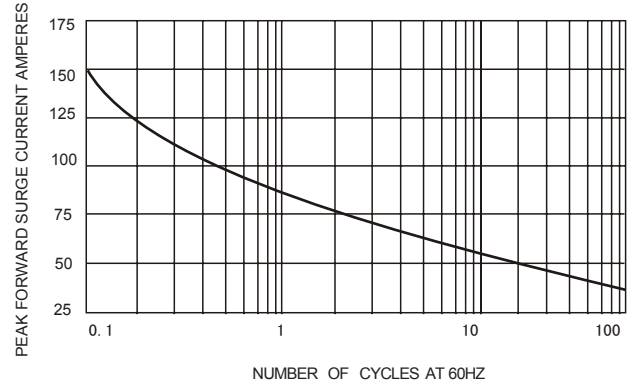


FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

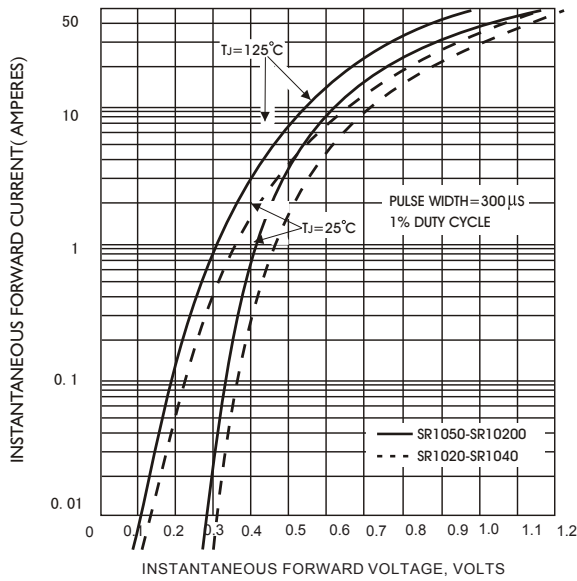


FIG.4-TYPICAL REVERSE CHARACTERISTICS

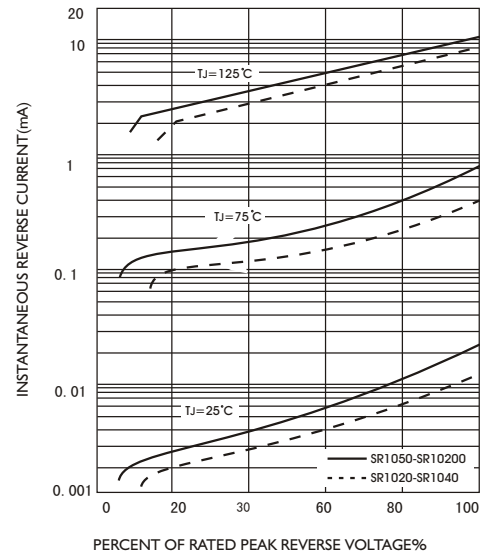


FIG.5-TYPICAL JUNCTION CAPACITANCE

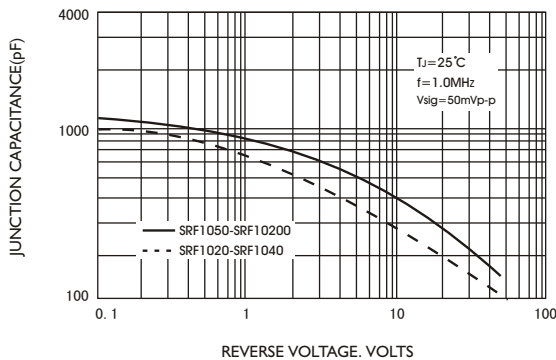


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

