SR320 --- SR3200

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20--- 200 V CURRENT: 3.0 A

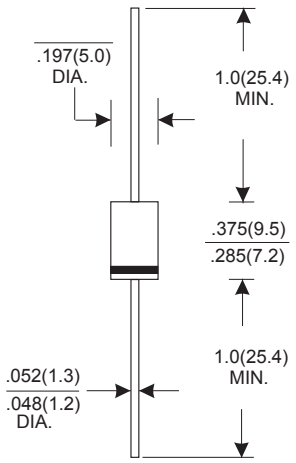
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Low power loss,high efficiency
- High current capability,Low forward voltage drop
- High surge capability
- For use in low voltage,high frequency inverters free wheeling, and polarlity protection applications
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case:DO-27 molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any

DO-27



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 320	SR 330	SR 340	SR 350	SR 360	SR 380	SR 3100	SR 3200	UNITS
Maximum recurrent peak reverse voltage		V_{RRM}	20	30	40	50	60	80	100	200	V
Maximum RMS voltage		V_{RMS}	14	21	28	42	56	63	71	140	V
Maximum DC blocking voltage		V_{DC}	20	30	40	50	60	80	100	200	V
Maximum Average Forward rectified Current0.375"(9.5mm) lead length		$I_{F(AV)}$	3.0								A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load		I_{FSM}	80.0								A
Maximum instantaneous forward voltage at3.0 A(Note1)		V_F	0.55			0.70		0.85		0.90	V
Maximum reverse current	@T_A=25℃	I_R	0.5								mA
at rated DC blocking voltage perdiode	@T_A=125℃		20.0			10.0					
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	40								℃/W
Typical junction capacitance(Note 3)		C_j	250.0			160					pF
Storage Temperature		T_{STG}	- 55 ---- + 150								℃
Operation Junction Temperature		T_j	- 55 ---- + 120								℃

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

2.Thermal resistance from junction to lead vertical P.C.B. Mounted,0.5”(12.7mm) lead length with 2.5”×2..5”(63.5×63.5mm)Copper pads

3.Measured at 1MHz and reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

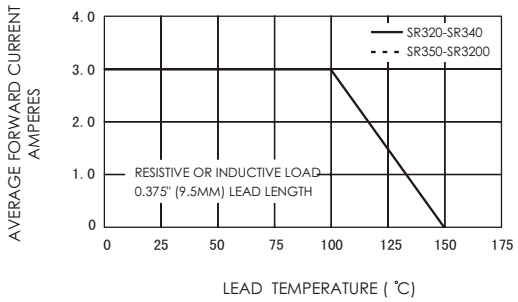


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

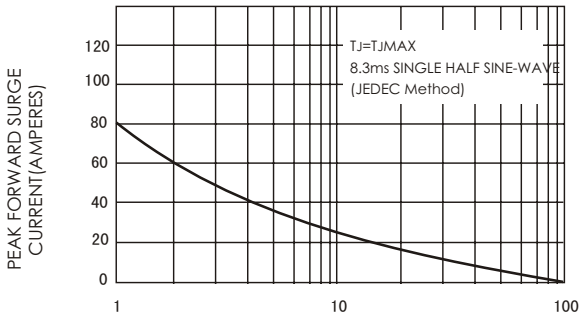


FIG.3-TYPICAL INSTANTANEO US FORWARD

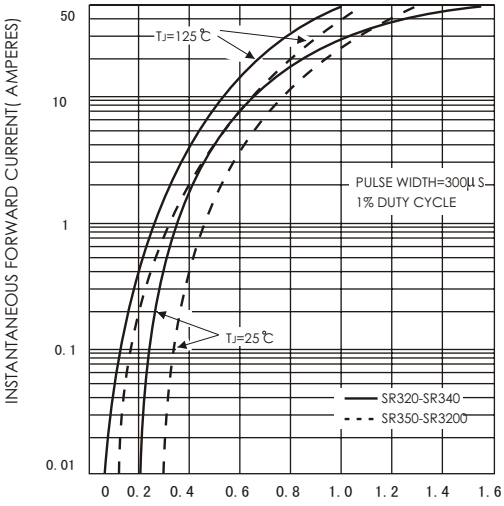


FIG.4-TYPICAL PEVERSE CHARACTERISTICS

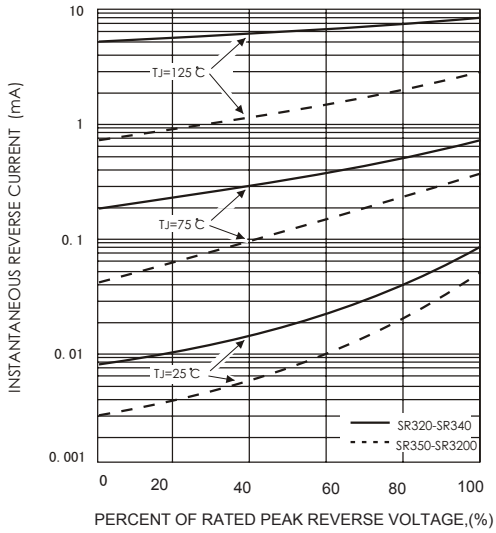


FIG.5-TYPICAL JUNCTION CAPACITANCE

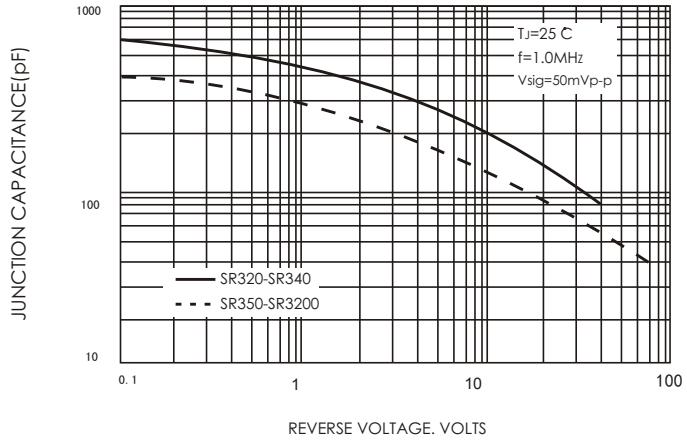


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE