

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20--- 200 V CURRENT: 5.0 A

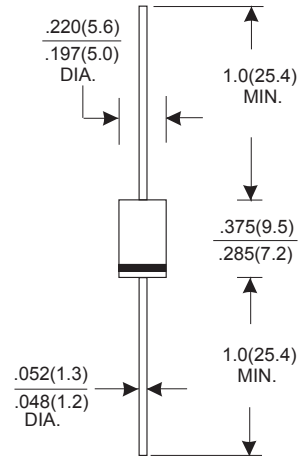
FEATURES

- 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 polarity protection applications
- High temperature soldering guaranteed:260°C/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 520	SR 530	SR 540	SR 550	SR 560	SR 580	SR 5100	SR 5200	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	35	42	57	71	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	$I_{F(AV)}$	5.0								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 5.0 A (Note 1)	V_F	0.55		0.70		0.85		0.90		V
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	0.5								mA
	@ $T_A=125^\circ C$	50.0				25.0				
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25								°C/W
Typical junction capacitance (Note 3)	C_j	500.0				400.0				pF
Storage Temperature	T_{STG}	- 55 ---- + 150								°C
Operation Junction Temperature	T_j	- 55 ---- + 120								°C

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

2.Thermal resistance from junction to lead vertical P.C.B. Mounted,0.375"(9.5mm) lead length

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



RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

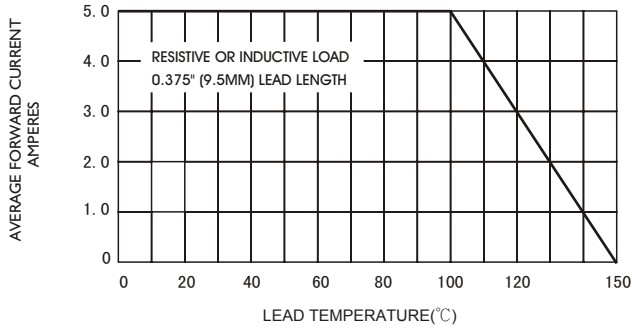


FIG.2-MAXIMUM NON-REPETITIVE PEAK

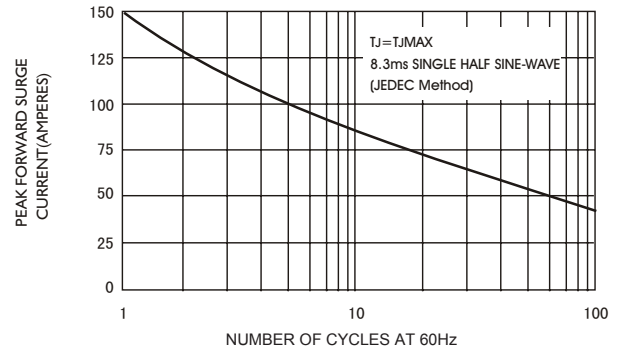


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

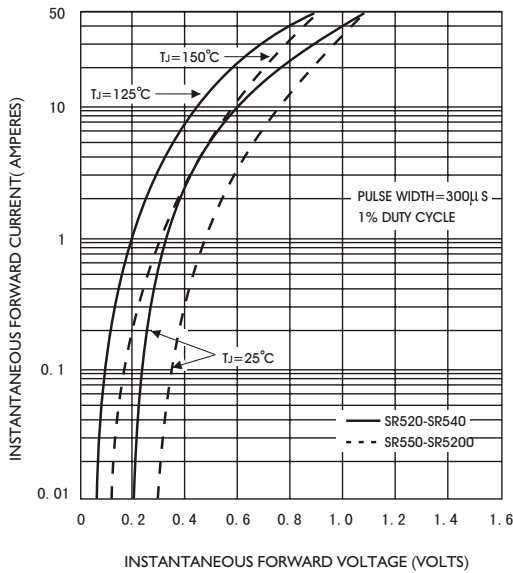


FIG.4-TYPICAL REVERSE CHARACTERISTICS

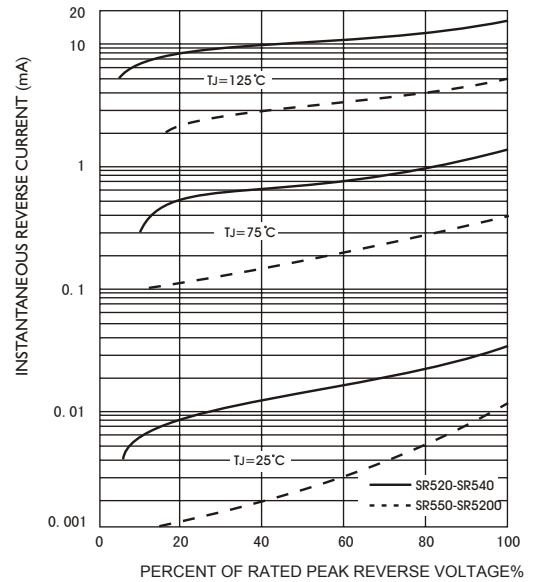


FIG.5-TYPICAL JUNCTION CAPACITANCE

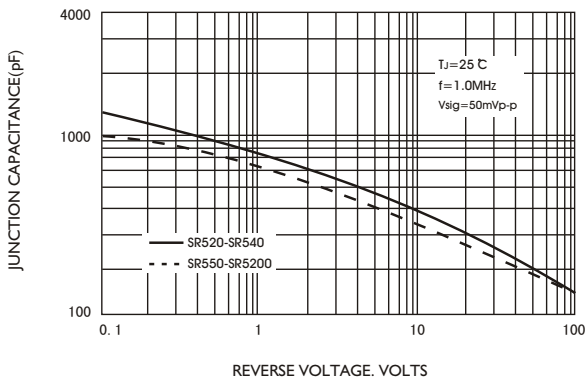


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

