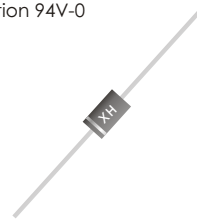
星合电子
XINGHE ELECTRONICS

SR320L THRU SR3200L

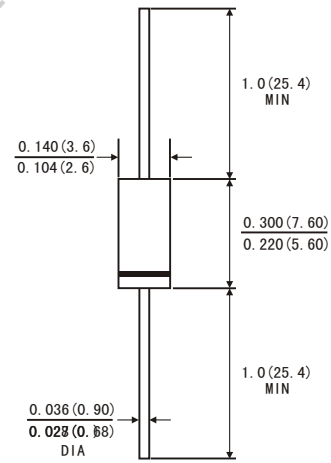
SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 20 to 200 Volts
Forward Current - 3.0Amperes

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
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: JEDEC DO-15 molded plastic body
- *Terminals*: Plated axial leads, solderable per MIL-STD-750,method 2026
- *Polarity*: color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.014ounce, 0.39 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SR 320L	SR 330L	SR 340L	SR 350L	SR 360L	SR 380L	SR 3100L	SR 3150L	SR 3200L	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (See Fig.1)	$I_{(AV)}$	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0									Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)	V_F	0.45			0.50		0.68		0.80	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_A=25°C	I_R	0.2									mA
T_A=100°C		20			10						
Typical junction capacitance(Note 3)	C_J	250			160						pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	40.0 10.0									°C/W
Operating junction temperature range	T_J	-65 to+150									°C
Storage temperature range	T_{STG}	-65 to+150									°C

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

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.5"(12.7mm)lead length with 2.5X2.5"(63.5X63.5mm)copper pads

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

FIG.1-FORWARD CURRENT DERATING CURVE

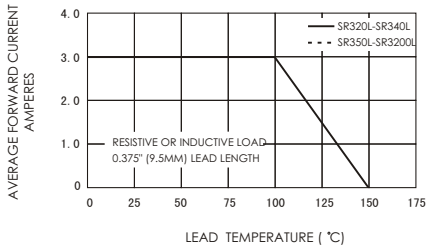


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

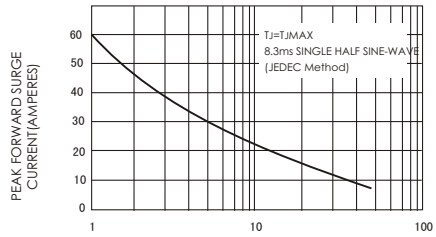


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

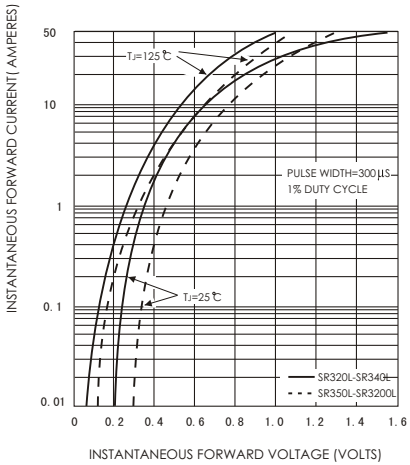


FIG.4-TYPICAL REVERSE CHARACTERISTICS

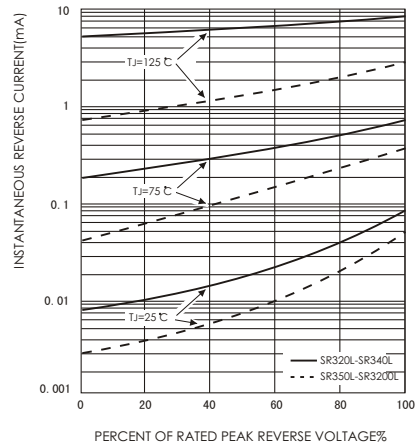


FIG.5-TYPICAL JUNCTION CAPACITANCE

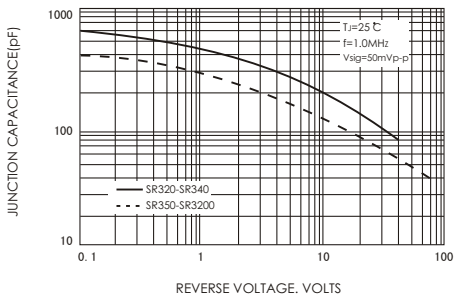


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE