星合电子
XINGHE ELECTRONICS

SR520LTHRU SR5200L

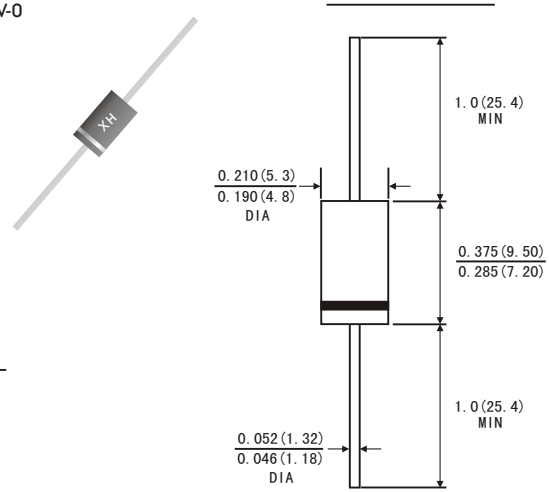
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts
Forward Current - 5.0Amperes

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 C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

DO-201AD



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: JEDEC DO-201AD molded plastic body
- *Terminals*: Plated axial leads, solderable per MIL-STD-750,method 2026
- *Polarity*: color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.041ounce, 1.15 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SR 520L	SR 530L	SR 540L	SR 550L	SR 560L	SR 580L	SR 5100L	SR 5150L	SR 5200L	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	45	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	31	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	45	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{(AV)}$	5.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T_L)	I_{FSM}	150.0									Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1)	V_F	0.45			0.5		0.68		0.80	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) $T_A=25℃$	I_R	0.5									mA
$T_A=100℃$		50			25						
Typical junction capacitance(Note 3)	C_J	500			400						pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	25.0 8.0									℃/W
Operating junction temperature range	T_J	-65 to+150									℃
Storage temperature range	T_{STG}	-65 to+150									℃

Notes: 1.Pulse test: 300μ s 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

FIG.1-FORWARD CURRENT DERATING CURVE

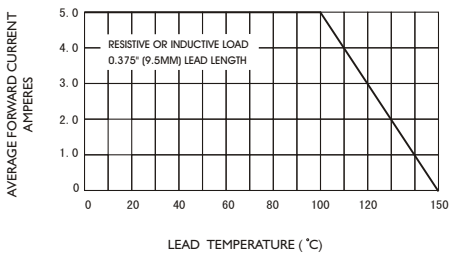


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

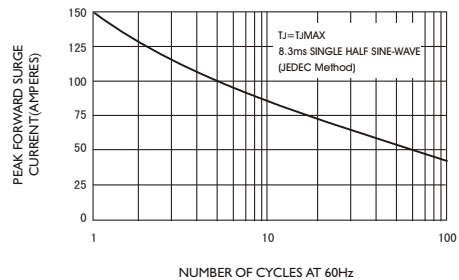


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

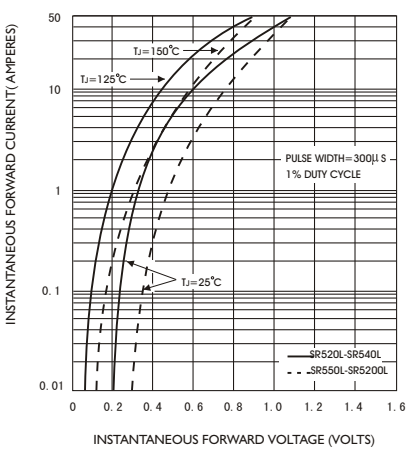


FIG.4-TYPICAL REVERSE CHARACTERISTICS

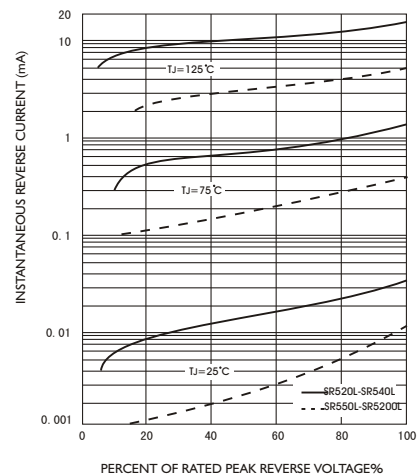


FIG.5-TYPICAL JUNCTION CAPACITANCE

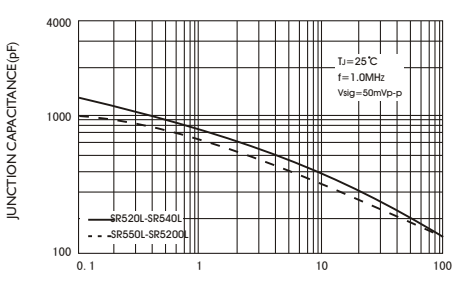


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

