Schottky Barrier Rectifier

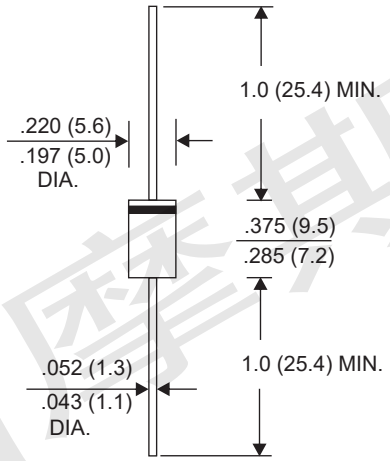
SR/SB1540L THRU SR/SB15200L 40 to 200 V 15.0A

RoHS COMPLIANT

DO-27(DO-201AD)

Features And Mechanical Data

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage 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:260℃ MAX at 10 seconds, per JESD 22-B106 or MIL-STD-750,method 2026
- Case: JEDEC DO-27(DO-201AD) molded plastic body



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

Device Marking	Symbols	SR/SB 15L40 1540L	SR/SB 15L45 1545L	SR/SB 15L60 1560L	SR/SB 15L80 1580L	SR/SB 15L100 15100L	SR/SB 15L120 15120L	SR/SB 15L150 15150L	SR/SB 15L200 15200L	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	60	80	100	120	150	200	Volts
Maximum RMS Voltage	V_{RMS}	28	31.5	42	56	70	84	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	40	45	60	80	100	120	150	200	Volts
Maximum Average Forward Rectified Current. Lead Length @Ta(Fig 1)	$I_{(AV)}$	15.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) (Rating of per diode)	I_{FSM}	175								Amp
Maximum instantaneous forward voltage at $I_{(AV)}$	V_F	0.47		0.60	0.76			0.84	0.88	Volts
Maximum DC reverse current at rated DC blocking voltage per Tj=25℃	I_R	0.2			0.1					mA
Tj=100℃		50			10					
Typical Thermal Resistance	$R_{\theta JC}$	25								℃/W
Junction Temperature	T_J	-65 to +150								℃
Storage Temperature Range	T_{STG}	-65 to +150								℃

Ordering Information (Example)

Prefered P/N	Package code	Unit weight(g)	Minimum Package(pcs)	Inner box Quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DO-27	T1	about 1.05	1250	1250	12500	Tape
DO-201AD	B1	about 1.05	250	250	12500	Bulk
DO-201AE	B2	about 1.05	250	250	10000	Bulk

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RATINGS AND CHARACTERISTIV CURVES

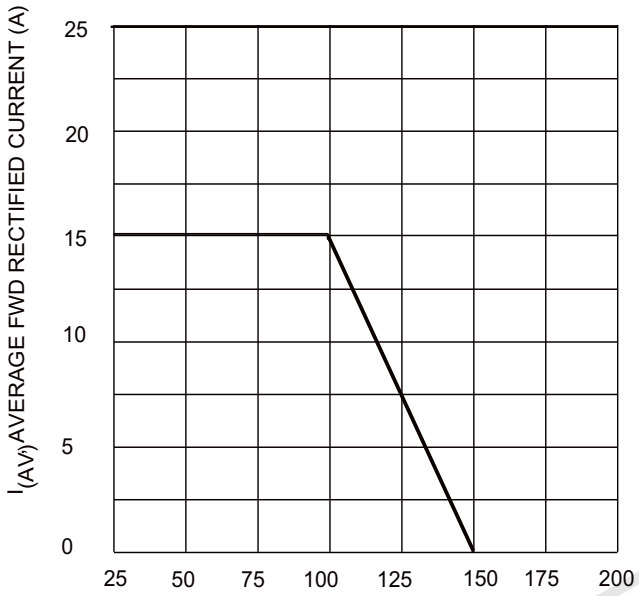


Fig. 1 Forward Derating Curve

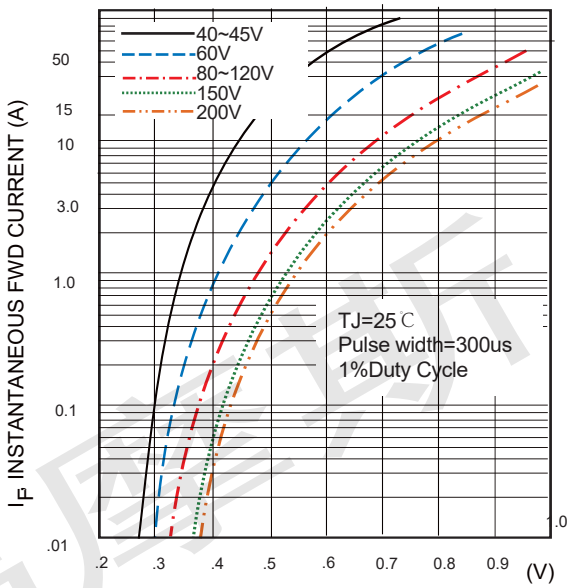


Fig. 2 Typical Forward Characteristics

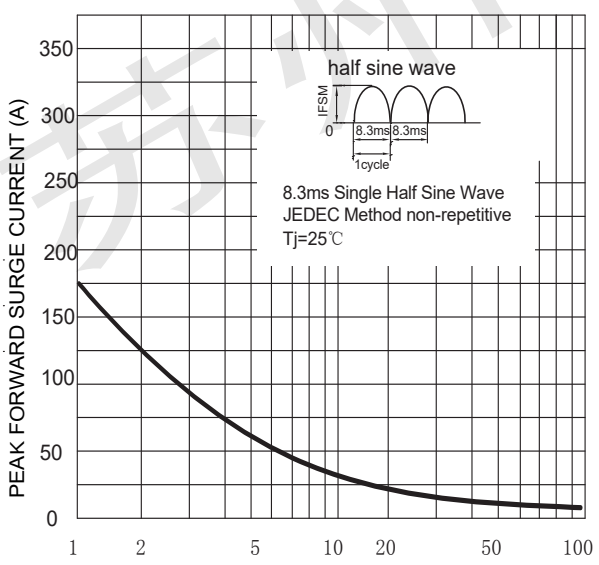


Fig. 3 Peak Forward Surge Current

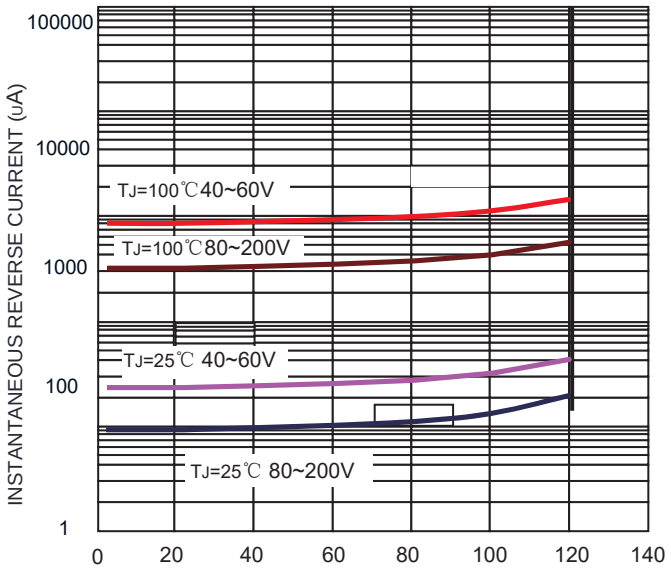


Fig.4-Typical Forward Characteristics