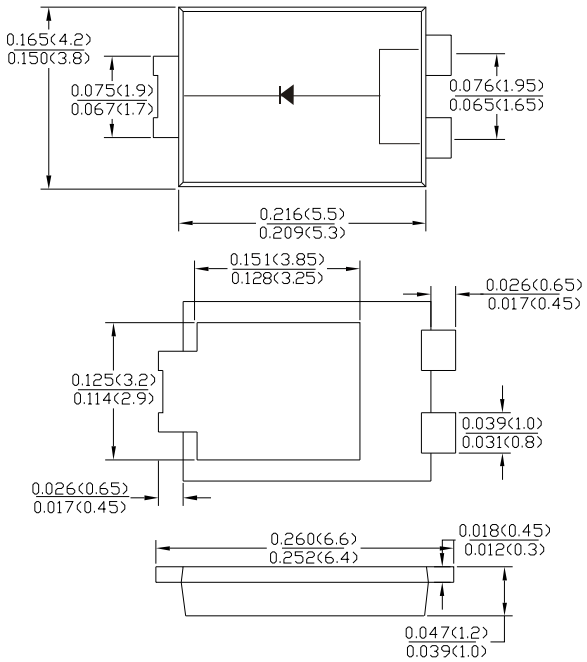
SR1045L THRU SR1080L

10.0A Surface Mount Schottky Barrier Rectifiers

Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow Power Loss,High Efficiency
- Excellent High Temperature Stability

TO-277B



dimensions in inches and (millimeters)

Mechanical Data

- Case: TO-277B, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

Maximum Ratings and Electrical Characteristics @T_A =25℃ unless otherwise specified

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

Parameter	Symbol	SR1045L	SR1050L	SR1060L	SR1080L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V_{RRM} V_{RWM} V_{DC}	45	50	60	80	V
RMS Rectified Voltage	$V_{R(RMS)}$	28	35	42	56	V
Average Rectified Output Current (Note1)	IF(AV)	10				A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	275				A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	313.844				A^2s
Forward Voltage Drop T_A =25℃ @ IF=10A	V_{FM}	0.42	0.45	0.50	0.75	V
Peak Reverse Curent T_A =25℃ At Rated DC Blocking Voltage T_A =100℃	I_R	0.3 15				mA
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15				℃/W
Operating junction temperature range	T_J	-55 to +150				℃
storage temperature range	T_{STG}	-55 to +150				℃

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.
2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

Fig.1 - Forward Current Derating Curve

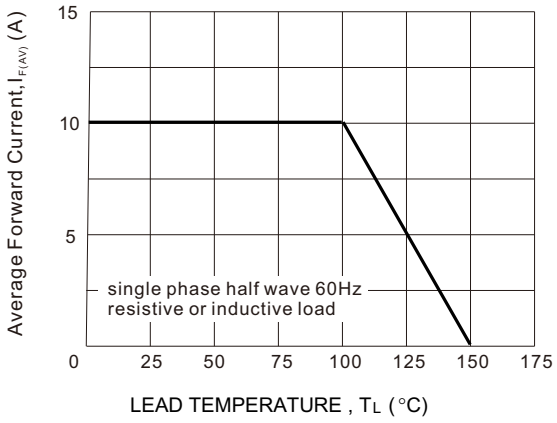


Fig.2 :Instantaneous Forward Voltage

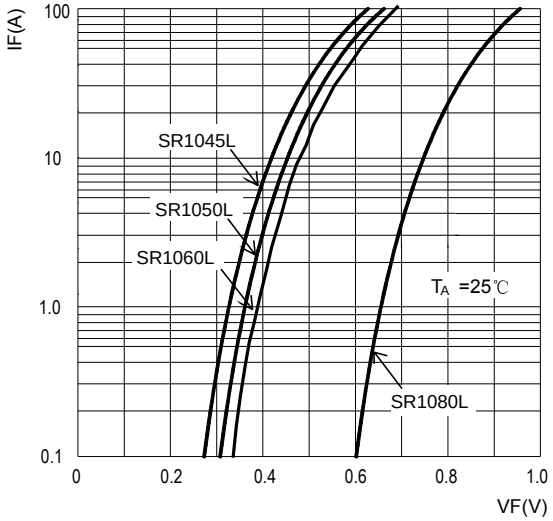


Fig.3: Surge Forward Current Capadility

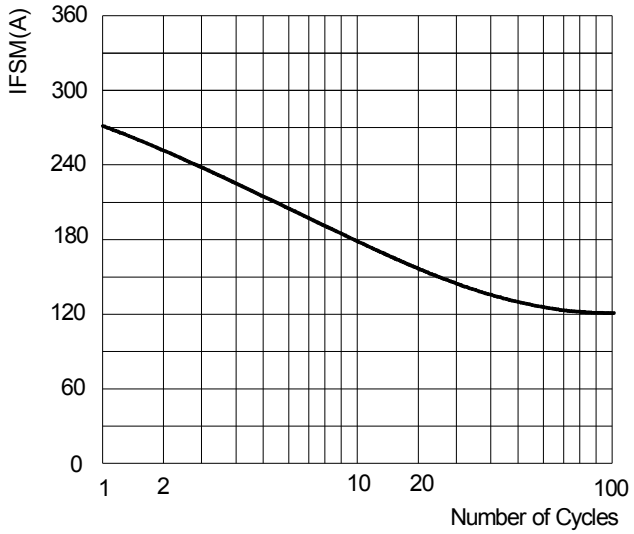


Fig.4: Typical Reverse Characteristics

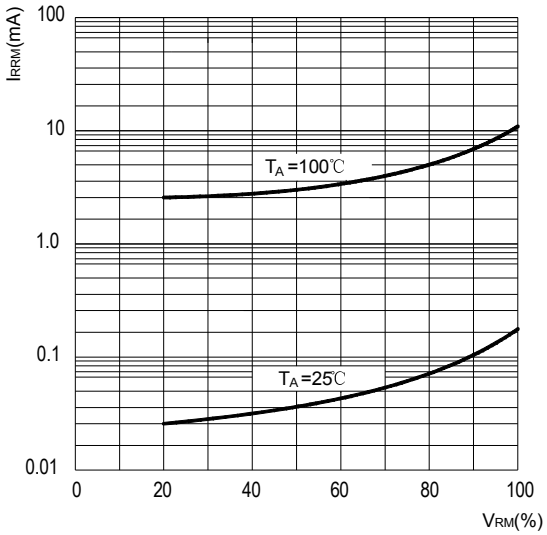


FIG.5 MOUNTING PAD LAYOUT