

# SR1045L THRU SR10150L

Reverse Voltage - 45 to 150 Volts Forward Current - 10.0 Ampere

## Surface Mount Schottky Barrier Rectifiers

### Features

- ◆ Schottky Barrier Chip  
High Thermal Reliability
- ◆ Patented Super Barrier Rectifier Technology
- ◆ High Forward Surge Capability
- ◆ Ultra Low Power Loss, High Efficiency
- ◆ Excellent High Temperature Stability  
Plastic material-UL flammability 94V-0

### Mechanical Data

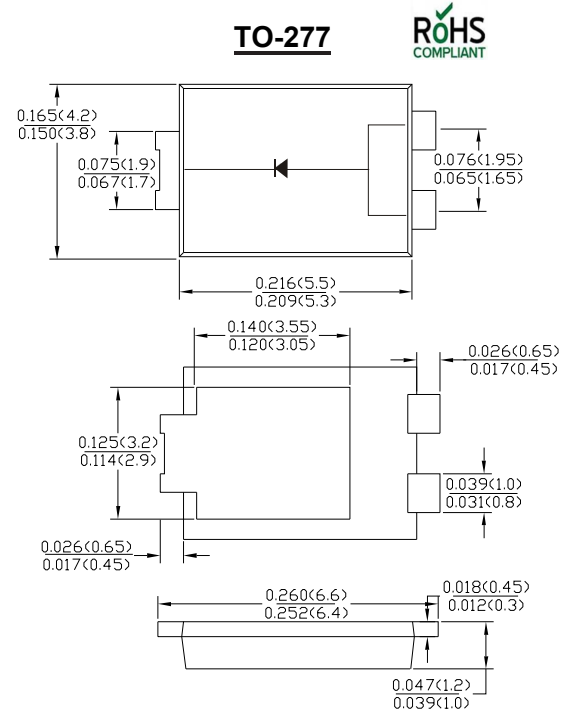
**Case** : JEDEC TO-277 Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any

**Weight** : 0.003 ounce, 0.0092 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SR 1045L	SR 1050L	SR 1060L	SR 1080L	SR 10100L	SR 10150L	UNITS
Marking Code								
Maximum repetitive peak reverse voltage	$V_{RMM}$	45	50	60	80	100	150	V
Maximum RMS voltage	$V_{RMS}$	32	35	42	56	70	105	V
Maximum DC blocking voltage	$V_{DC}$	45	50	60	80	100	150	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1) (Note1)	$I_{AV}$	10.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Note2)	$I_{FSM}$	275.0						A
Maximum instantaneous forward voltage at 10.0A	$V_F$	0.42	0.45	0.47	0.75	0.78		V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.3						mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		15.0						
Typical junction capacitance (NOTE 1)	$C_J$	80						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	15.0						$^\circ\text{C}/\text{W}$
Operating junction and storage	$T_J$	-65 to +150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150						$^\circ\text{C}$

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.

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## Ratings And Characteristic Curves

Fig.1 - Forward Current Derating Curve

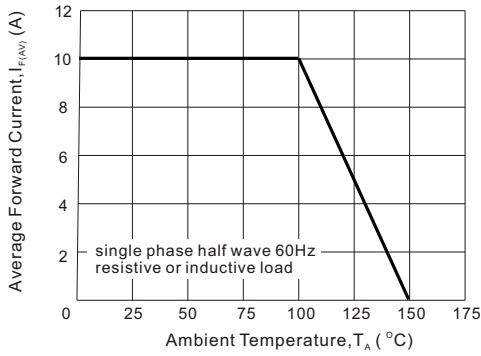


Fig.2 : Instantaneous Forward Voltage

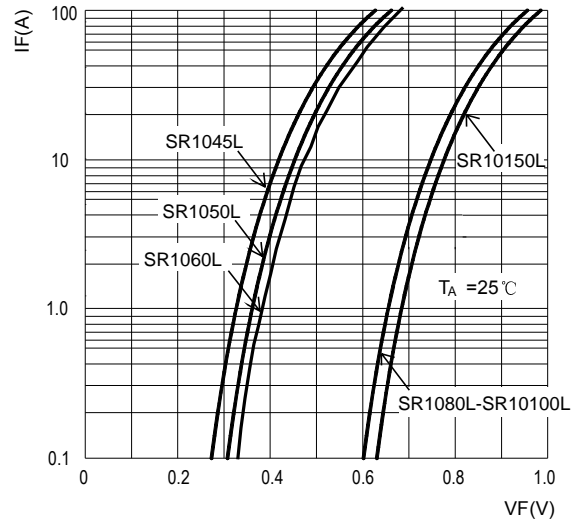


Fig.3: Surge Forward Current Capability

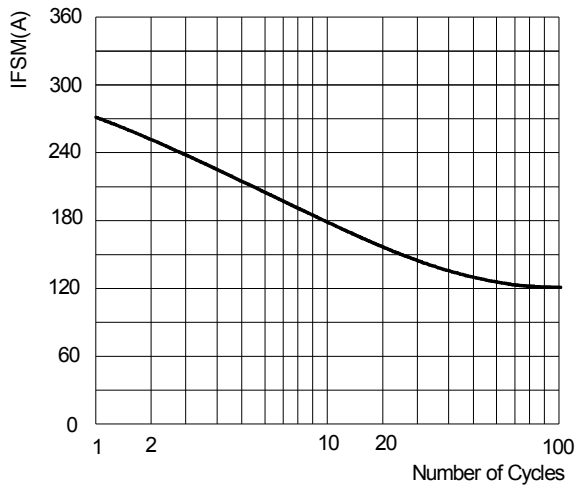


Fig.4: Typical Reverse Characteristics

