



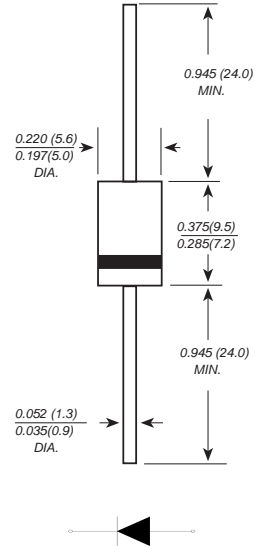
# SR540L~SR5100L

## 5.0Amp Schottky Barrier Rectifiers

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Low forward voltage drop
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

DO-27



Dimensions in inches and (millimeters)

### Mechanical Data

Case : Molded plastic body  
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity : Polarity symbol marking on body  
 Mounting Position : Any  
 Weight : 0.0345 ounce, 0.98 grams

### 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	SR540L	SR545L	SR550L	SR560L	SR580L	SR5100L	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	45	50	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	40	45	50	60	80	100	V
Maximum average forward rectified current at T <sub>L</sub> =100°C	I <sub>(AV)</sub>	5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120.0						A
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.48			0.55	0.70		v
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> = 25°C T <sub>A</sub> = 125°C	I <sub>R</sub>	0.5 50				0.2 20		mA
Typical thermal resistance	R <sub>qJA</sub>	55.0						°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150						°C
Storage temperature range	T <sub>STG</sub>	-55 to +150						°C



## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

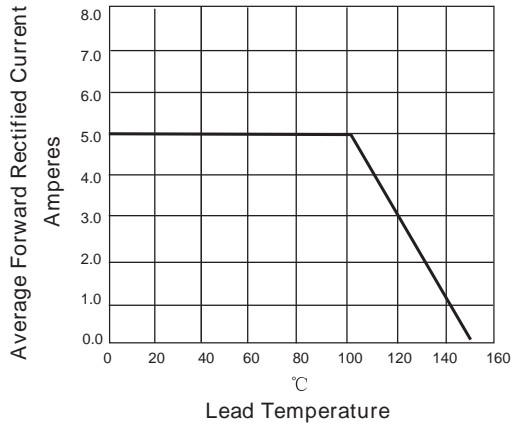


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

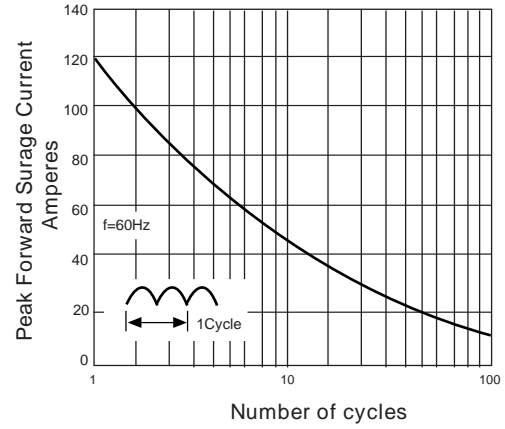


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

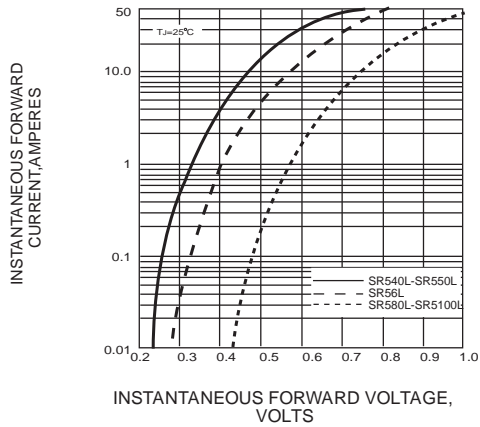
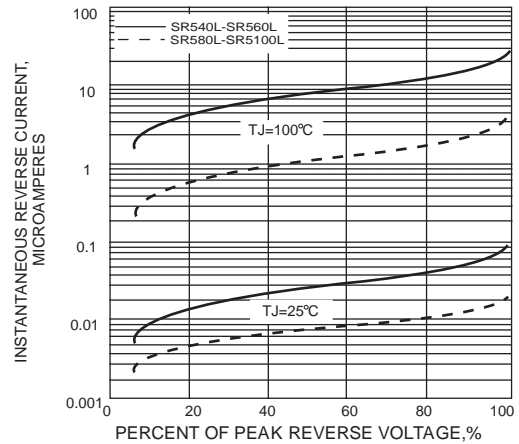
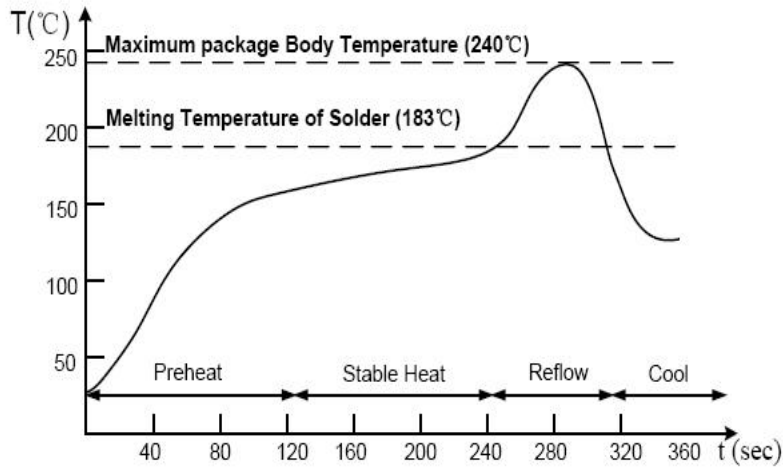


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





### Suggested Soldering Temperature Profile

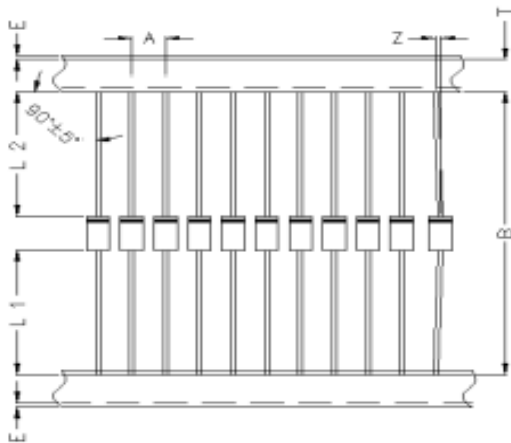


**Note**

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

### Package Information

**Taping Specifications**



Item	Symbol	Specifications(mm)
Component Pitch	A	10.0±0.5
Inner Tape Pitch	B	52.4±1.5
Component alignment	Z	1.2 Max
Tape width	T	6.0±0.5
Exposed adhesive	E	0.8 Max
Body eccentricity	L1-L2	1.0 Max

**Ammunition Package Specifications**

Package	Inner Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
DO - 27	255*150*75	1.25	420*276*312	12.5