



SR1040L~SR10100L

10.0Amp 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

Mechanical Data

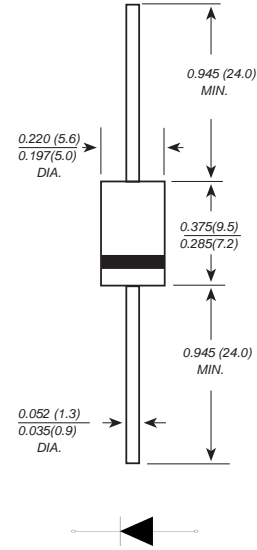
Case : Molded plastic body

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



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	SR1040L	SR1045L	SR1050L	SR1060L	SR1080L	SR10100L	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	50	60	80	100	V
Maximum RMS voltage	V _{RMS}	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	V _{DC}	40	45	50	60	80	100	V
Maximum average forward rectified current at T _L =100°C	I _(AV)	10.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200.0						A
Maximum instantaneous forward voltage at 10.0A	V _F	0.48			0.55	0.60		v
Maximum DC reverse current at rated DC blocking voltage T _A = 25°C T _A = 125°C	I _R	0.5 50				0.2 20		mA
Typical thermal resistance	R _{qJA}	55.0						°C/W
Operating junction temperature range	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C



Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

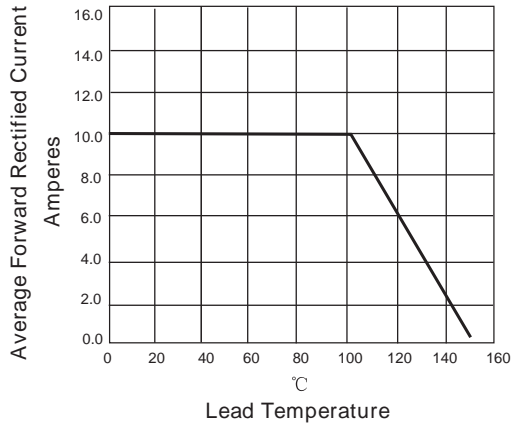


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

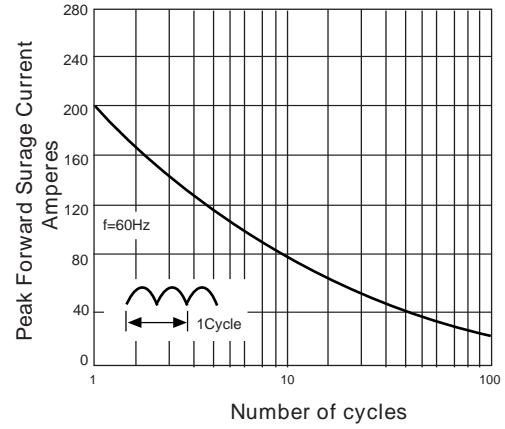


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

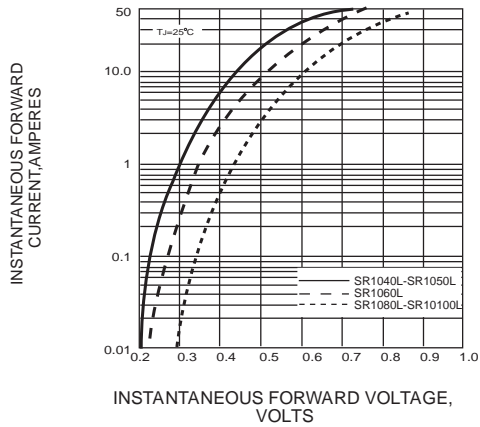
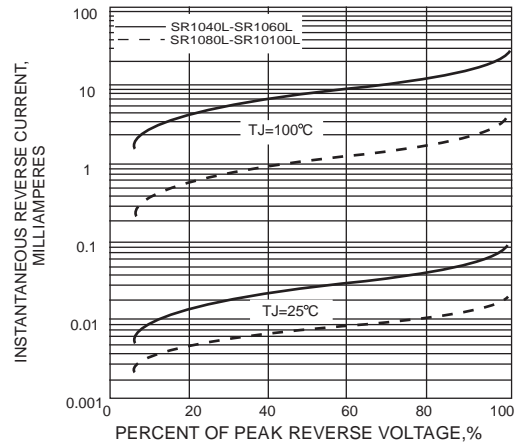
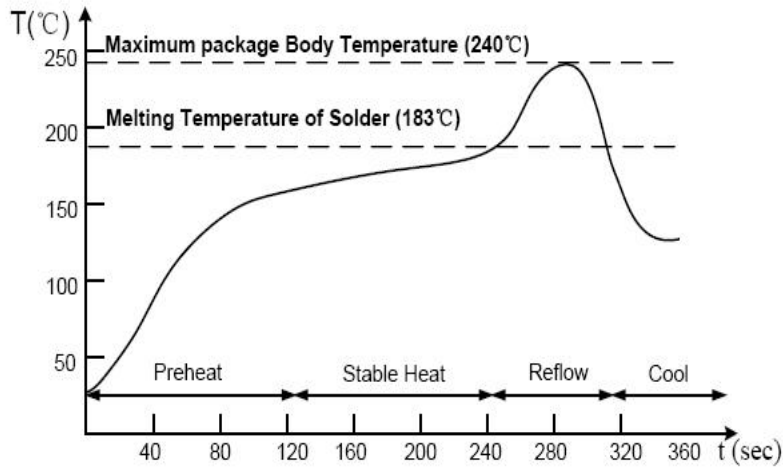


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





Suggested Soldering Temperature Profile

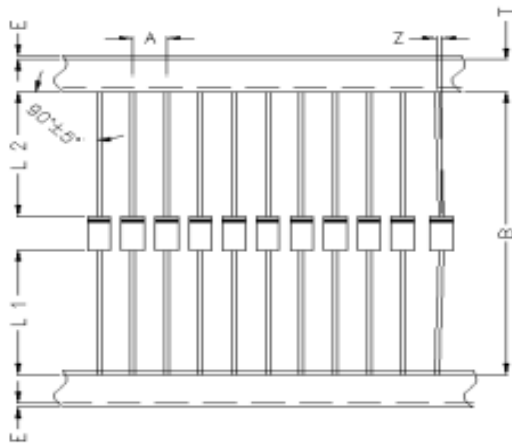


Note

- 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