

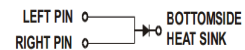
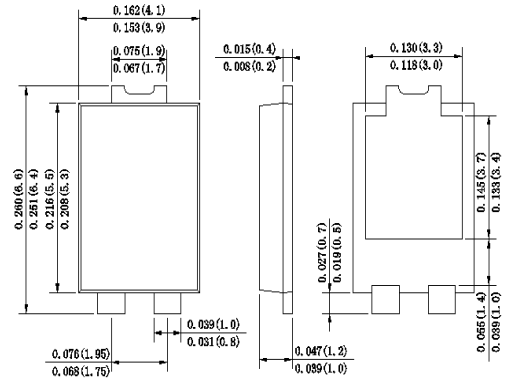
SP1040L~SP10100L

10.0Amp Surface Mounted Schottky Barrier Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low forward voltage drop
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds at terminals

TO-277B



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

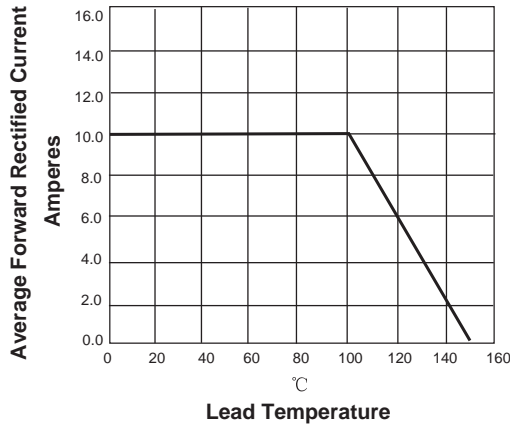
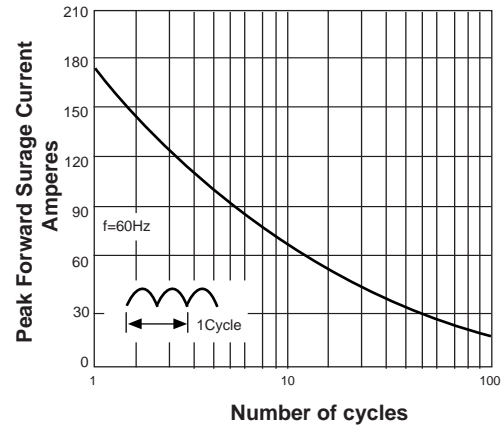
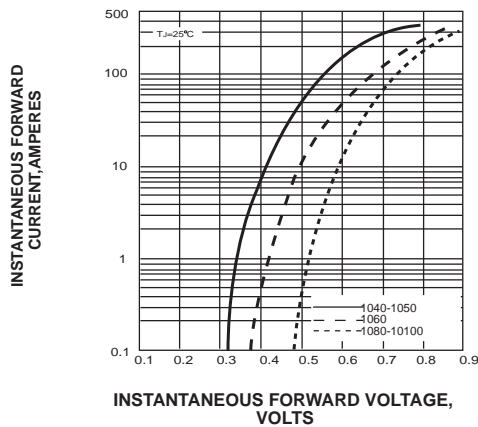
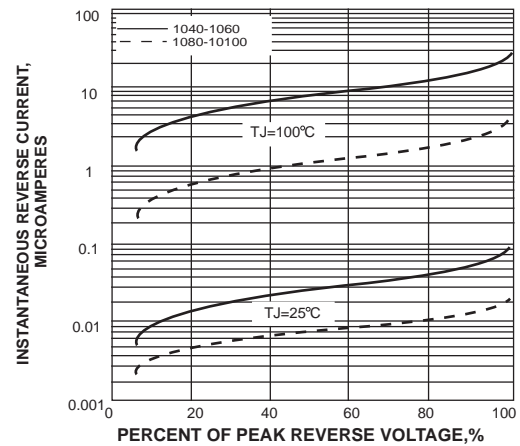
Weight : 0.003 ounce, 0.092 grams

Maximum Ratings And Electrical Characteristics

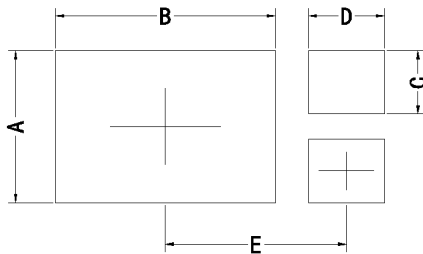
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SP1040L	SP1045L	SP1050L	SP1060L	SP1080L	SP10100L	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 $T_L=100^\circ\text{C}$	$I_{(AV)}$	10.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175.0						A
Maximum instantaneous forward voltage at 2.0A at 10.0A	V_F	0.35 0.48		0.40 0.55		0.45 0.70		V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	0.5 50				0.2 20		mA
Typical thermal resistance	R_{qJA}	60.0						$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +150						$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150						$^\circ\text{C}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	3.60	0.142
B	5.35	0.211
C	1.50	0.059
D	1.85	0.073
E	4.30	0.169