



Features

TO-277B



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

Mechanical Data

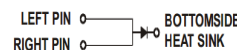
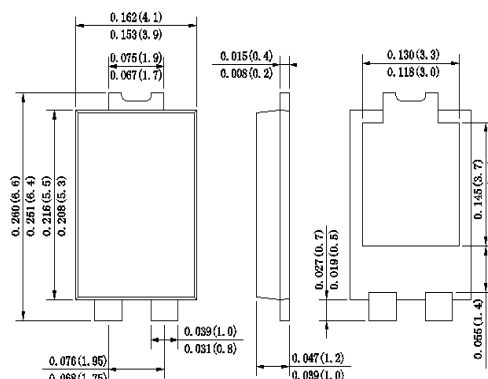
Case : Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.003 ounce, 0.092 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	SS1040	SS1045	SS1060	SS1080	SS10100	SS10150	SS10200	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	31.5	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	45	60	80	100	150	200	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}	175.0							A
Maximum instantaneous forward voltage at 10.0A	V _F	0.55		0.70	0.85		0.95		V
Maximum DC reverse current at rated DC blocking voltage T _A = 25°C T _A = 125°C	I _R	0.5 50			0.05 10				mA
Typical thermal resistance	R _{qJA}	60.0							°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

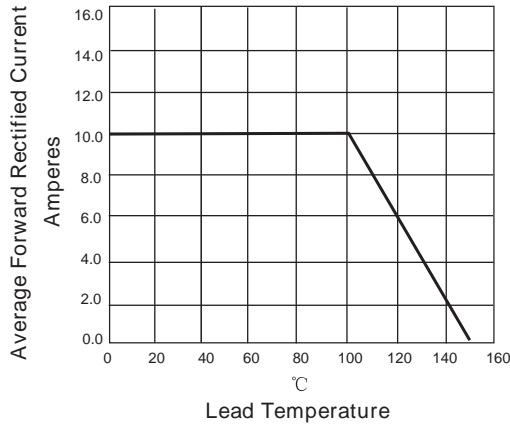


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

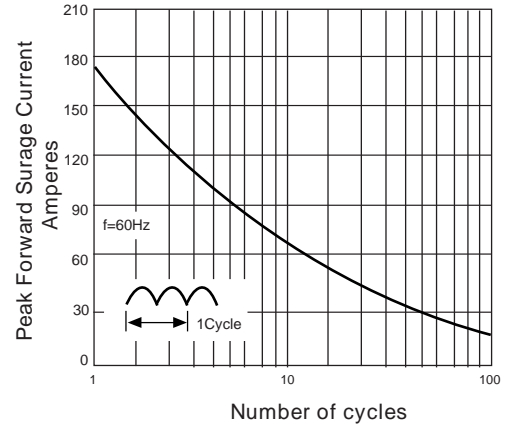


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

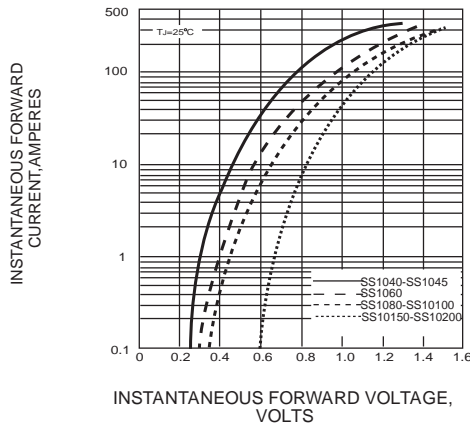
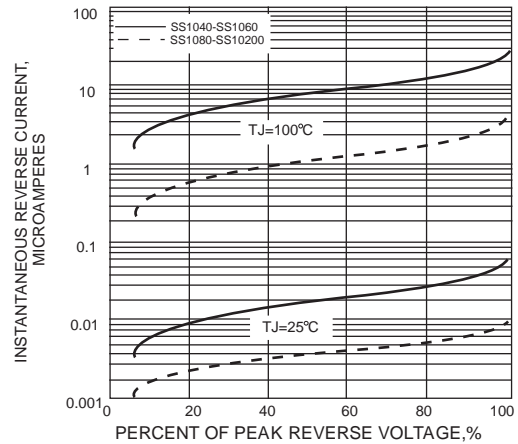
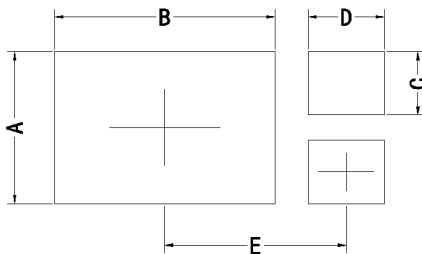


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Suggested 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