



Features

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

SMAF

Mechanical Data

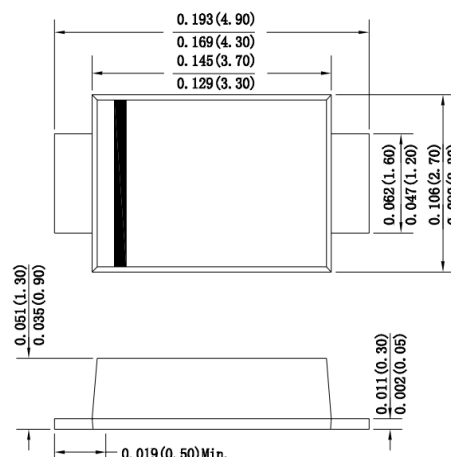
Case : Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0014 ounce, 0.038 grams



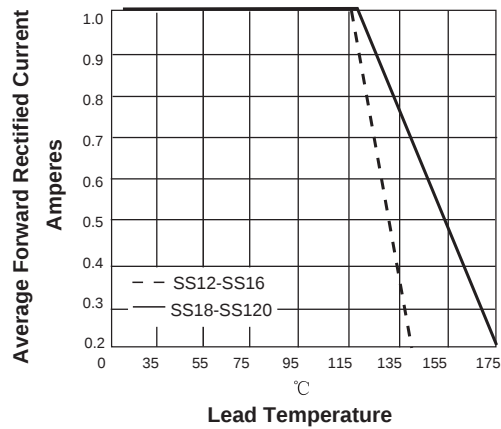
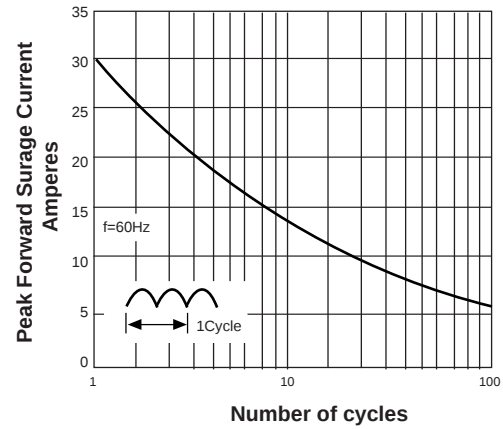
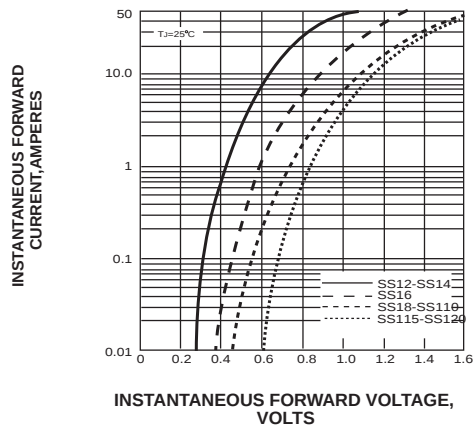
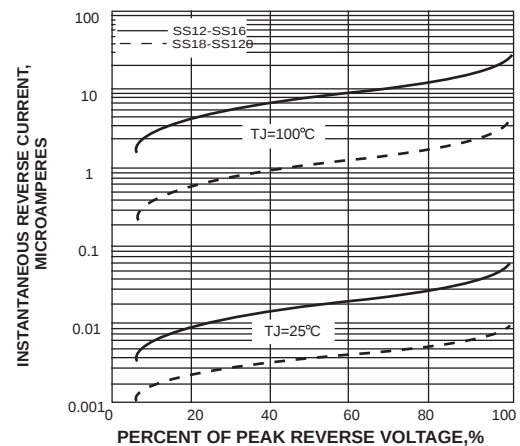
Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

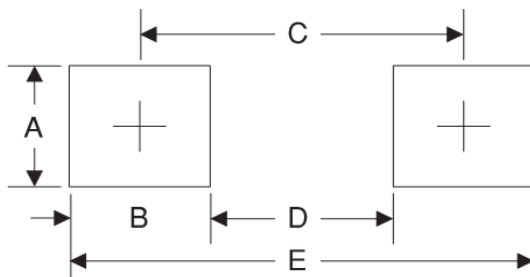
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS12	SS14	SS16	SS18	SS110	SS115	SS120	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T _L =100°C	I _(AV)	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V _F	0.55		0.70	0.85		0.95		V
Maximum DC reverse current at rated DC blocking voltage	I _R	0.5 50			0.05 10				mA
Typical thermal resistance	R _{qJA}	80.0							°C/W
Operating junction temperature range	T _J	-55 to +125			-55 to +175				°C
Storage temperature range	T _{STG}	-55 to +175							°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	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215