



RoHS
COMPLIANCE

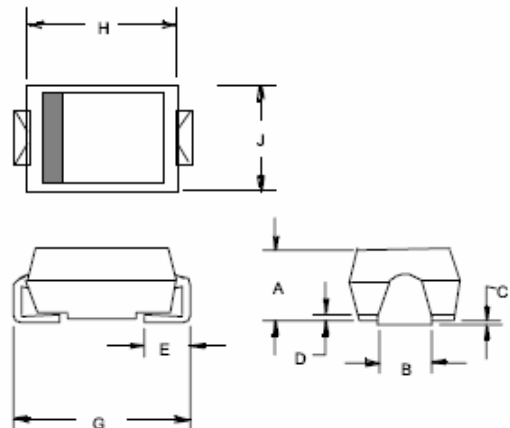


Features

- ✧ For surface mounted application
- ✧ Easy pick and place
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds at terminals
- ✧ Plastic material used carriers Underwriters
Laboratory Classification 94V-0
- ✧ Green compound with suffix "G" on packing code &
prefix "G" on datecode.

Mechanical Data

- ✧ Cases: SMAE Molded plastic
- ✧ Terminals: Lead free Finish
- ✧ Polarity: Indicated by cathode band.
- ✧ Weight: 0.072 grams



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.01	2.44	
B	.050	.075	1.27	1.90	
C	.002	.008	.05	.20	
D	--	.02	--	.51	
E	.030	.060	.76	1.52	
G	.189	.208	4.80	5.30	
H	.157	.180	4.00	4.57	
J	.090	.115	2.29	2.92	

Marking Diagram



SS1XE = Specific Device Code
G = Green Compound
Y = Year
M = Work Month

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SS 12E	SS 13E	SS 14E	SS 15E	SS 16E	SS 19E	SS 110E	SS 115E	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current @ T_L (See Fig. 1)	$I_{(AV)}$	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30								A
Maximum Instantaneous Forward Voltage (Note 1) $I_F = 1.0A @ T_a = 25^\circ C$	V_F	0.60		0.70		0.85			V	
Maximum DC Reverse Current @ $T_a = 25^\circ C$ @ $T_a = 100^\circ C$	I_R	0.5				20				mA
Typical Junction Capacitance(Note 3)	C_j	110					30			pF
Typical Thermal Resistance (Note 2)	$R_{\theta_{JA}}$ $R_{\theta_{JL}}$	84				28				$^\circ C/W$
Operating Temperature Range	T_J	-55 to +125								$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ C$

Notes: 1. Pulse Test with PW=300u sec, 1% Duty Cycle.

2. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

3. Measured at f=1.0MHz, VR= 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS12E - SS115E)

FIG.1 Maximum Forward Current Derating Curve

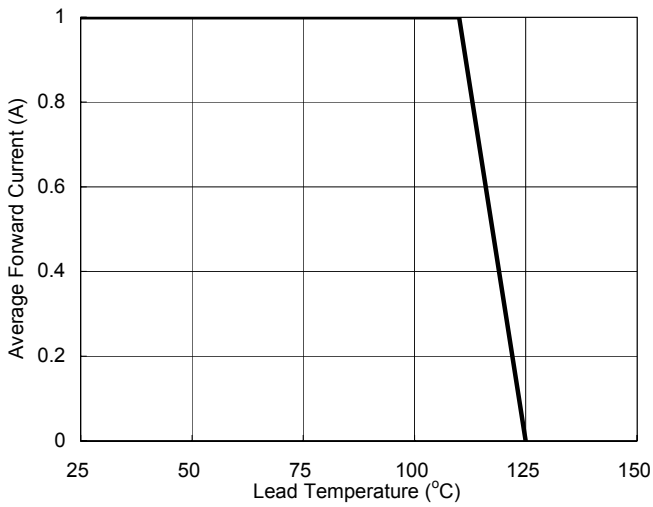


FIG 2 Maximum Forward Surge Current

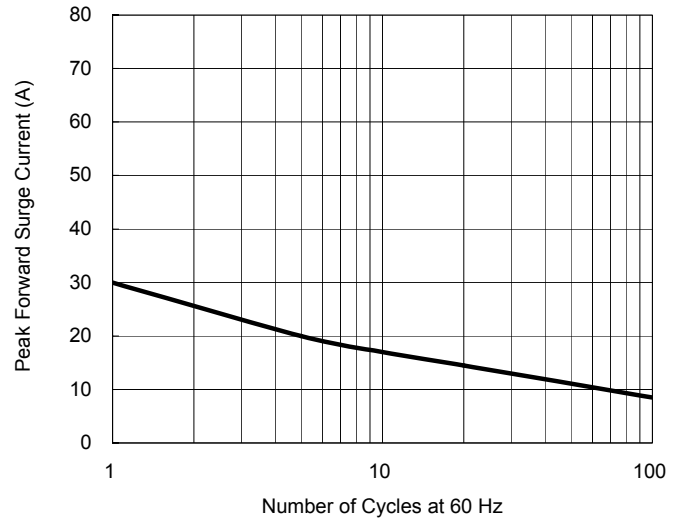


FIG 3 TYPICAL FORWARD CHARACTERISTICS

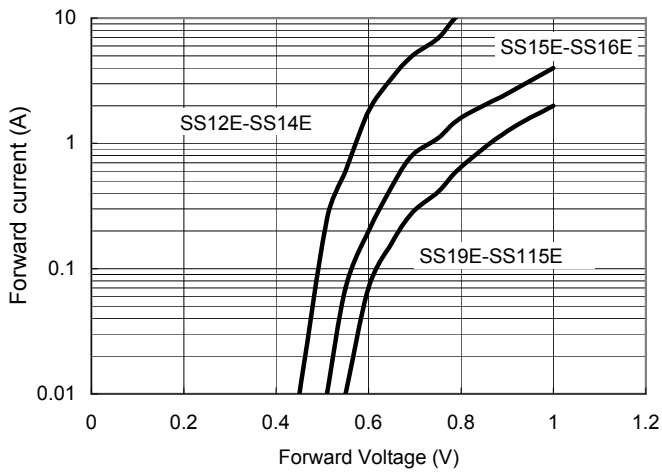


FIG 4 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

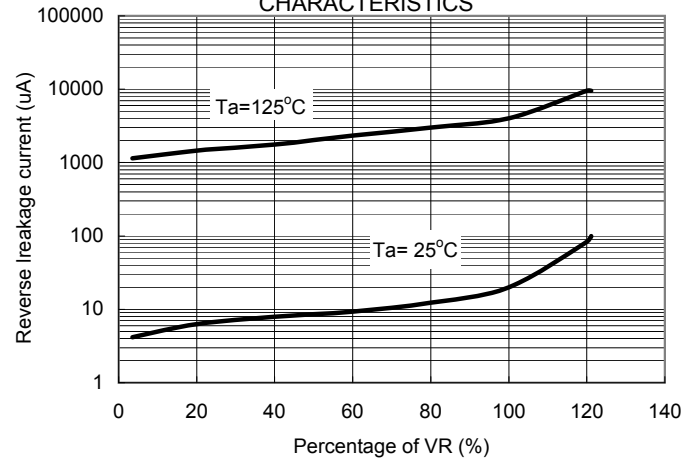


FIG 5 Typical Junction Capacitance

