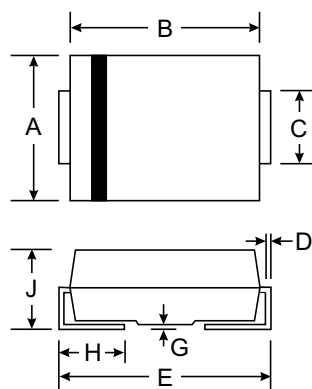


Features

- High current capability
- High surge current capability
- High reliability
- High efficiency
- Low power loss
- Low forward voltage drop
- Low cost
- Pb / RoHS Free

Mechanical Data

- Case : SMA Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.060 gram (Approximately)



SMA		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Current See Fig.1	I _{F(AV)}	1.0								A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	40								A
Maximum Forward Voltage at I _F = 1.0 A	V _F	0.50			0.75		0.80			V
Maximum Reverse Current at Ta = 25 °C	I _R	0.5								mA
Rated DC Blocking Voltage ⁽¹⁾ Ta = 100 °C	I _{R(H)}	10			5.0					mA
Typical Thermal Resistance ⁽²⁾	R _{θJL}	35								°C/W
Operating Junction Temperature Range	T _J	- 65 to + 125			- 65 to + 150					°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C

Notes:

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.

(2) Mounted on P.C. Board with 5.0 mm² (0.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES (SS12 - SS110)

FIG.1 - FORWARD CURRENT DERATING CURVE

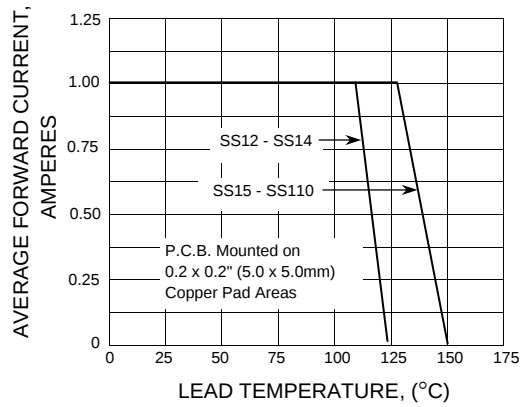


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

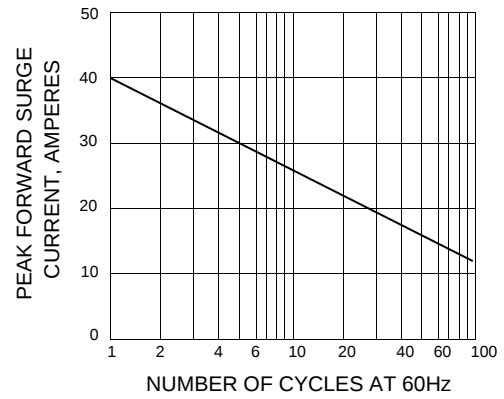


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

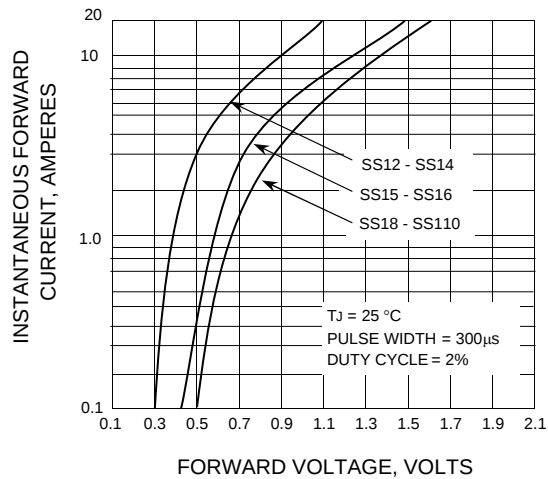


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

