SS22F THRU SS220F

Plastic-Encapsulate Diodes

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters,
  free wheeling, and polarity protection applications

SMAF top view

Schematic diagram

Pb-Free RoHS Halogen-Free

Maximum Ratings(T_a=25℃ unless otherwise noted)

Symbol	Parameter	SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	20	40	60	80	100	120	150	200	V
V_{RMS}	Maximum RMS voltage	14	28	42	56	70	84	105	140	V
V_{DC}	Maximum DC Blocking Voltage	20	40	60	80	100	120	150	200	V
$I_{F(AV)}$	Maximum Average Forward Rectified Current at Tc = 125 °C	2								A
I_{FSM}	Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	50								A
V_F	Maximum Instantaneous Forward Voltage at 1A	0.55		0.7		0.85		0.95		V
I_R	Maximum DC Reverse Current Ta = 25 °C	0.5			0.3					uA
	at Rated DC Blocking Voltage Ta =125 °C	5			3					
C_j	Typical Junction Capacitance(1)	160		80						pF
$R_{\Theta JA}$	Typical Thermal Resistance(2)	80								°C/W
T_j,T_{stg}	Operating and Storage Temperature Range	-55~+150								°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS22F	SMAF	SS22	2,000	10,000	100,000	7"reel
SS24F		SS24				
SS26F		SS26				
SS28F		SS28				
SS210F		SS210				
SS212F		SS212				
SS215F		SS215				
SS220F		SS220				

Typical Operating Characteristics

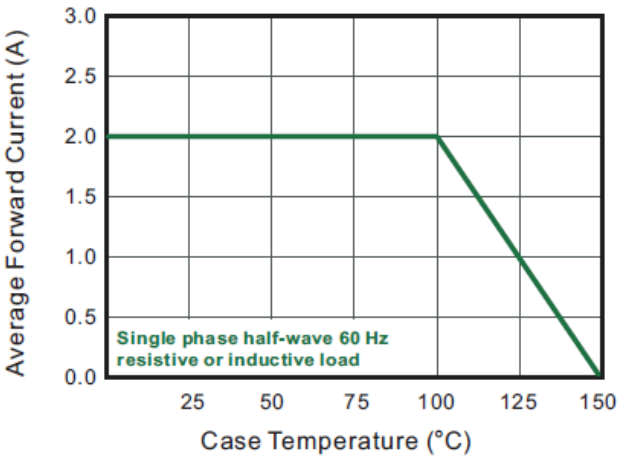


Fig.1 Forward Current Derating Curve

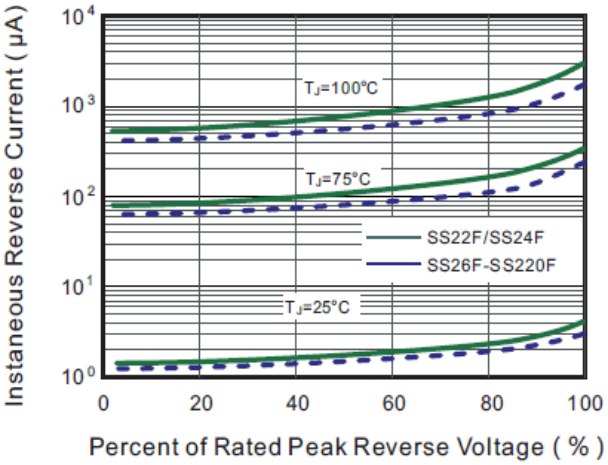


Fig.2 Typical Instaneous Reverse Characteristics

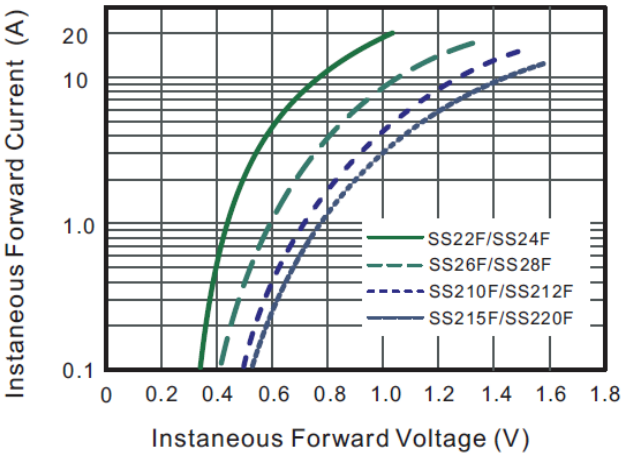


Fig.3 Typical Forward Characteristi

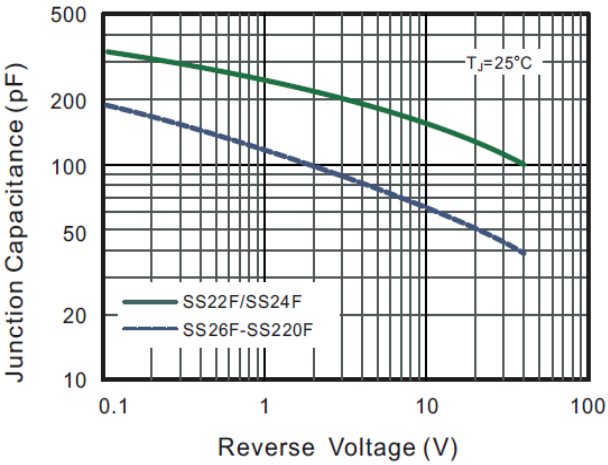


Fig.4 Typical Junction Capacitance

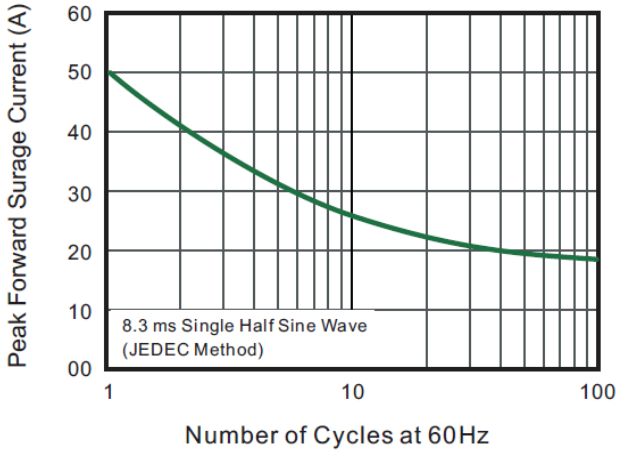


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

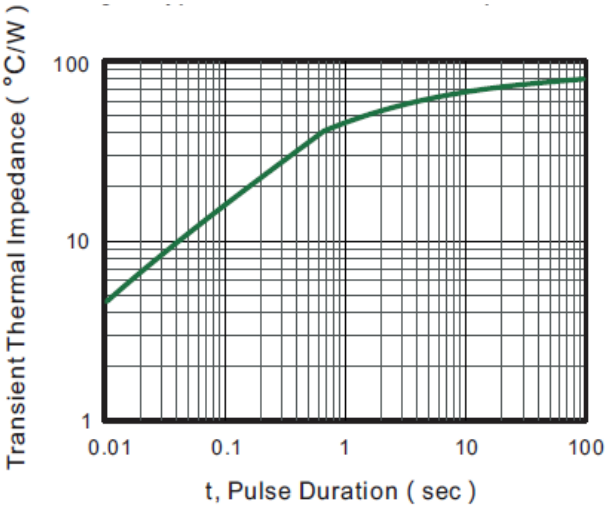
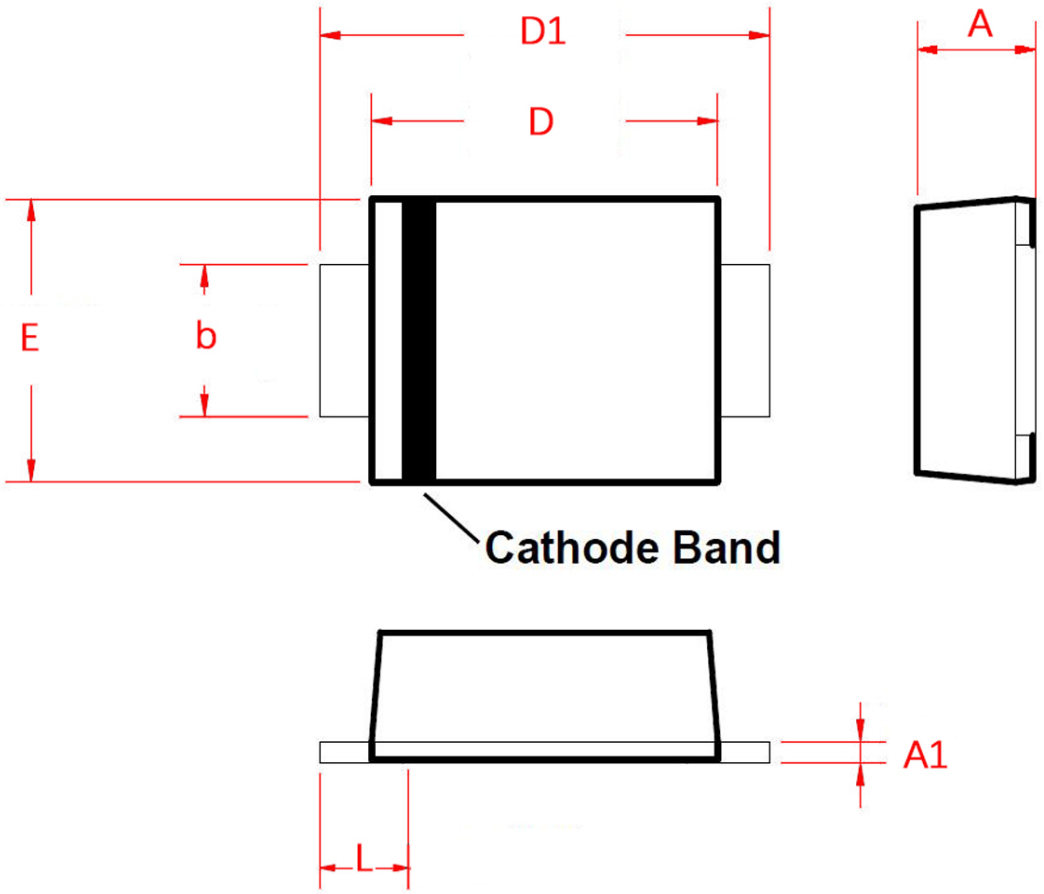


Fig.6- Typical Transient Thermal Impedance

SMAF Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.200	0.035	0.047
A1	0.120	0.180	0.005	0.007
b	1.300	1.600	0.051	0.063
D	3.300	3.700	0.130	0.146
D1	4.400	4.900	0.173	0.193
E	2.400	2.700	0.094	0.106
L	0.800	1.300	0.031	0.051