



Features

- Average Forward Current: $I_{F(AV)} = 2A$
- Polarity: Color band denotes cathode



SMAF

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
ES1AF-ES1JF	SMAF	ES2xF	10000

x: From A-M



Maxmim Ratings (Ta=25 unless otherwise noted)

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

Type Number	ES2AF	ES2BF	ES2CF	ES2DF	ES2EF	ES2GF	ES2JF	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V
Maximum RMS Voltage	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=55°C	2.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Instantaneous Forward Voltage at 2.0A	0.95				1.25	1.70		V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=100°C	500							μA
Maximum Reverse Recovery Time (Note 1)	35							nS
Typical Junction Capacitance (Note 2)	60							pF
Operating and Storage Temperature Range Tj, Tstg	-65 — +150							°C

NOTES:

1. Reverse Recovery Time test condition: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Typical Characteristics

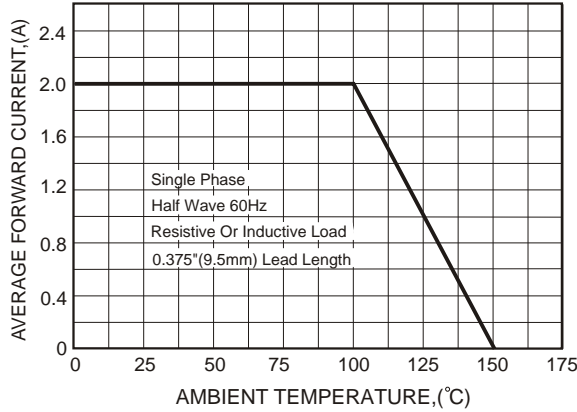


FIG.1-Typical Forward Current Derating curve

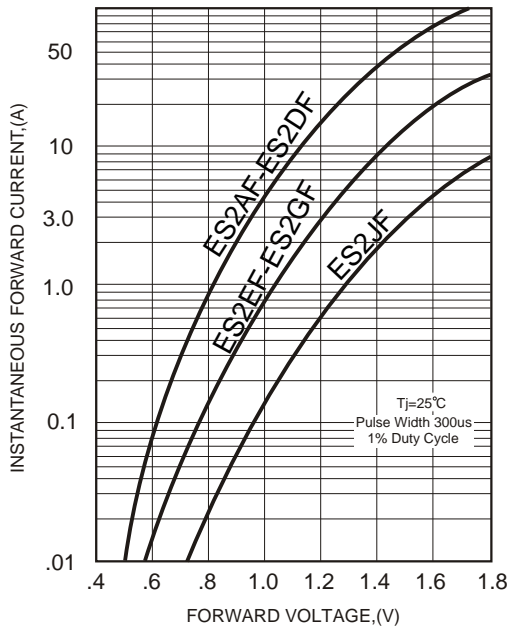


FIG.2-Typical Forward Characteristics

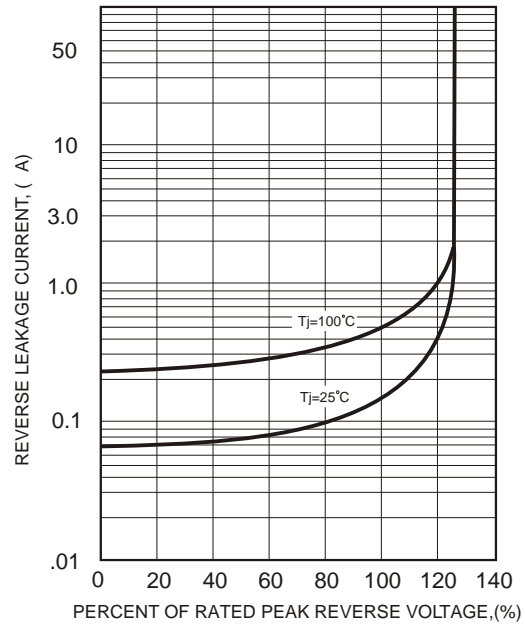


FIG.3-Typical Reverse Characteristics

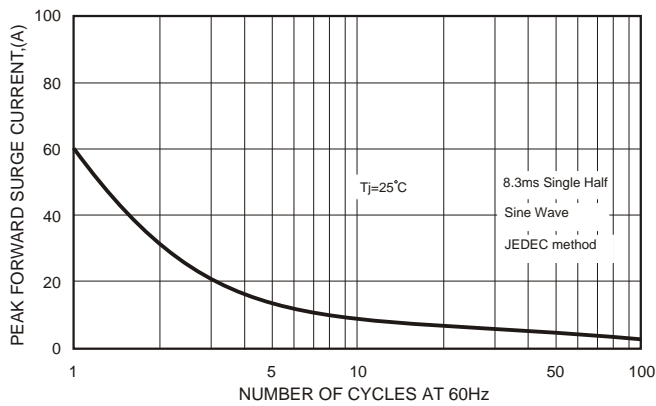


FIG.4-Maximum Non-Repetitive forward Surge Current

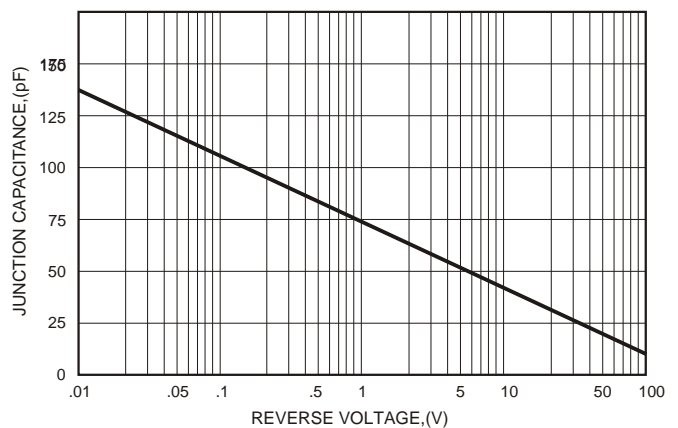
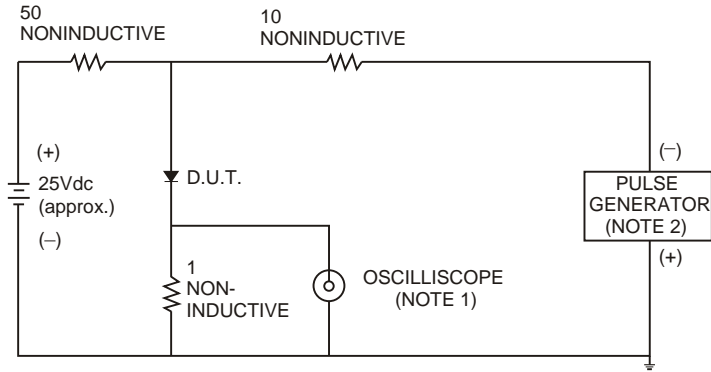


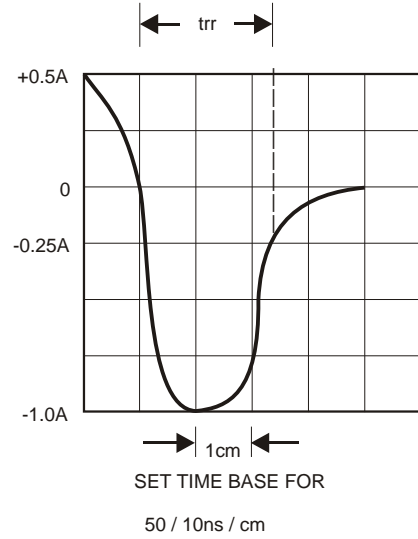
FIG.5-Typical Junction Capacitance



Test Circuit Diagram And Recovery Time Characteristic

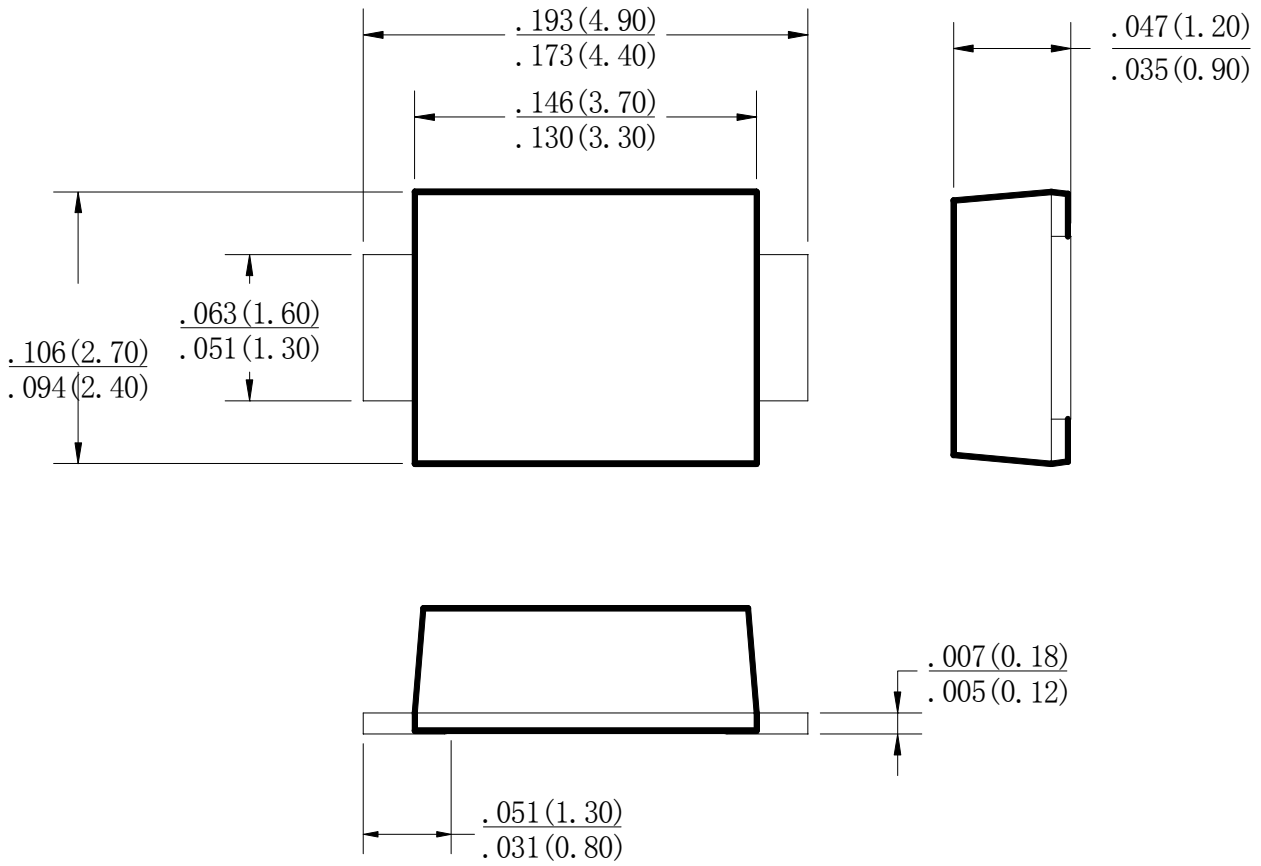


- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.





SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)



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