



Features

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Fast switching speed



SMAF



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
ES1xF	SMAF	ES1xF	3000

x: From to A-J

Maximum Ratings (Ta=25°C unless otherwise noted)

Type Number	ES1AF	ES1BF	ES1CF	ES1DF	ES1EF	ES1GF	ES1JF	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 at Ta=25°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	0.95		1.25		1.7		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C			5.0				μA
	Ta=100°C			500				μA
Maximum Reverse Recovery Time (Note 1)	35			nS				
Typical Junction Capacitance (Note 2)	15			pF				
Typical Thermal Resistance R JA (Note 3)	80			°C/W				
Operating and Storage Temperature Range Tj, Tstg	-65 — +150			°C				

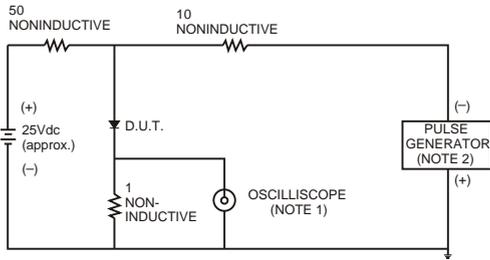
NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance from Junction to Ambient.



Typical Characteristics

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

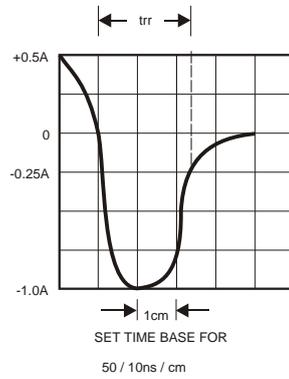


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

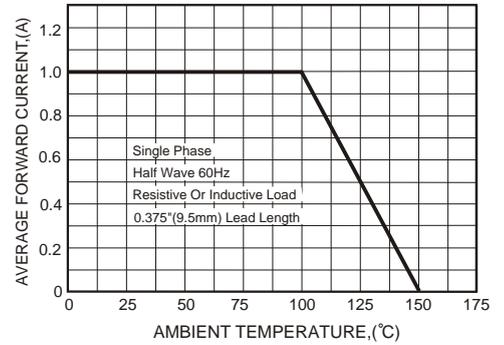


FIG.3-TYPICAL FORWARD CHARACTERISTICS

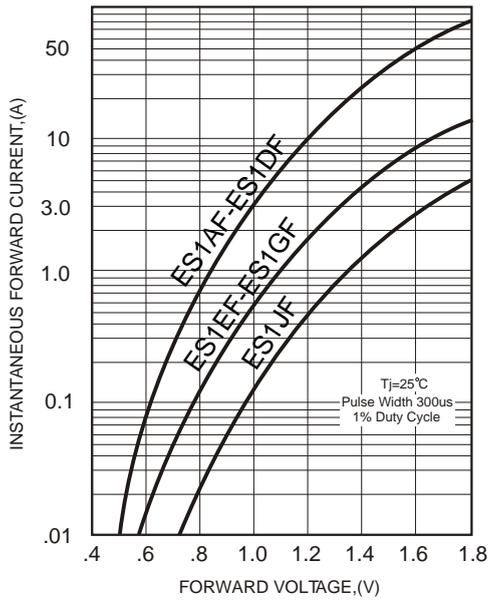


FIG.4-TYPICAL REVERSE CHARACTERISTICS

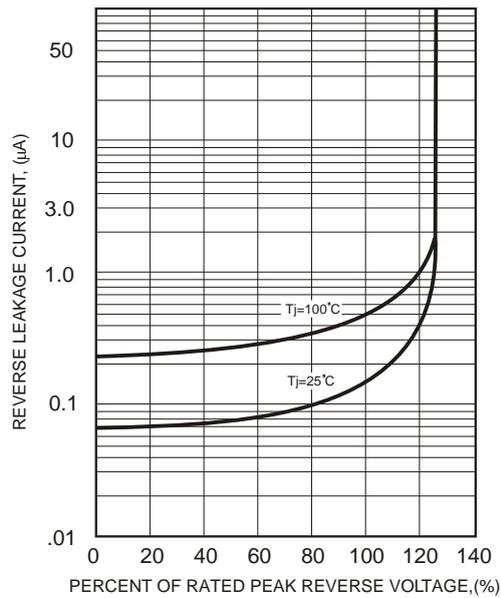


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

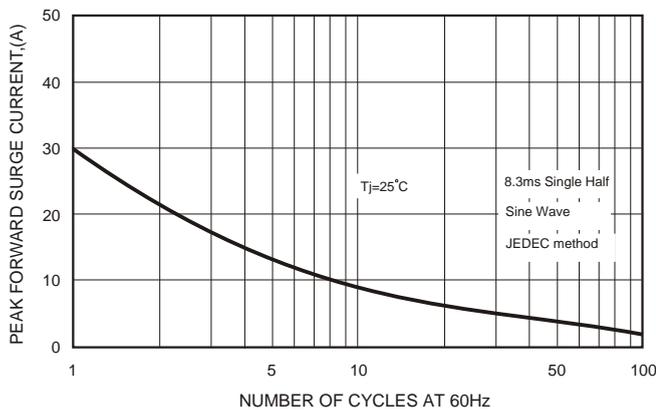
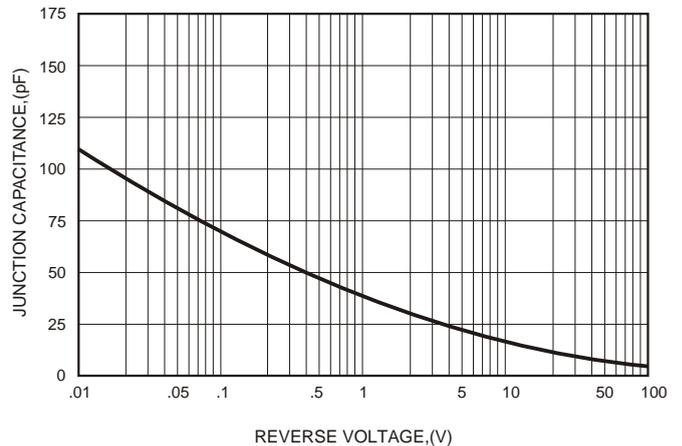
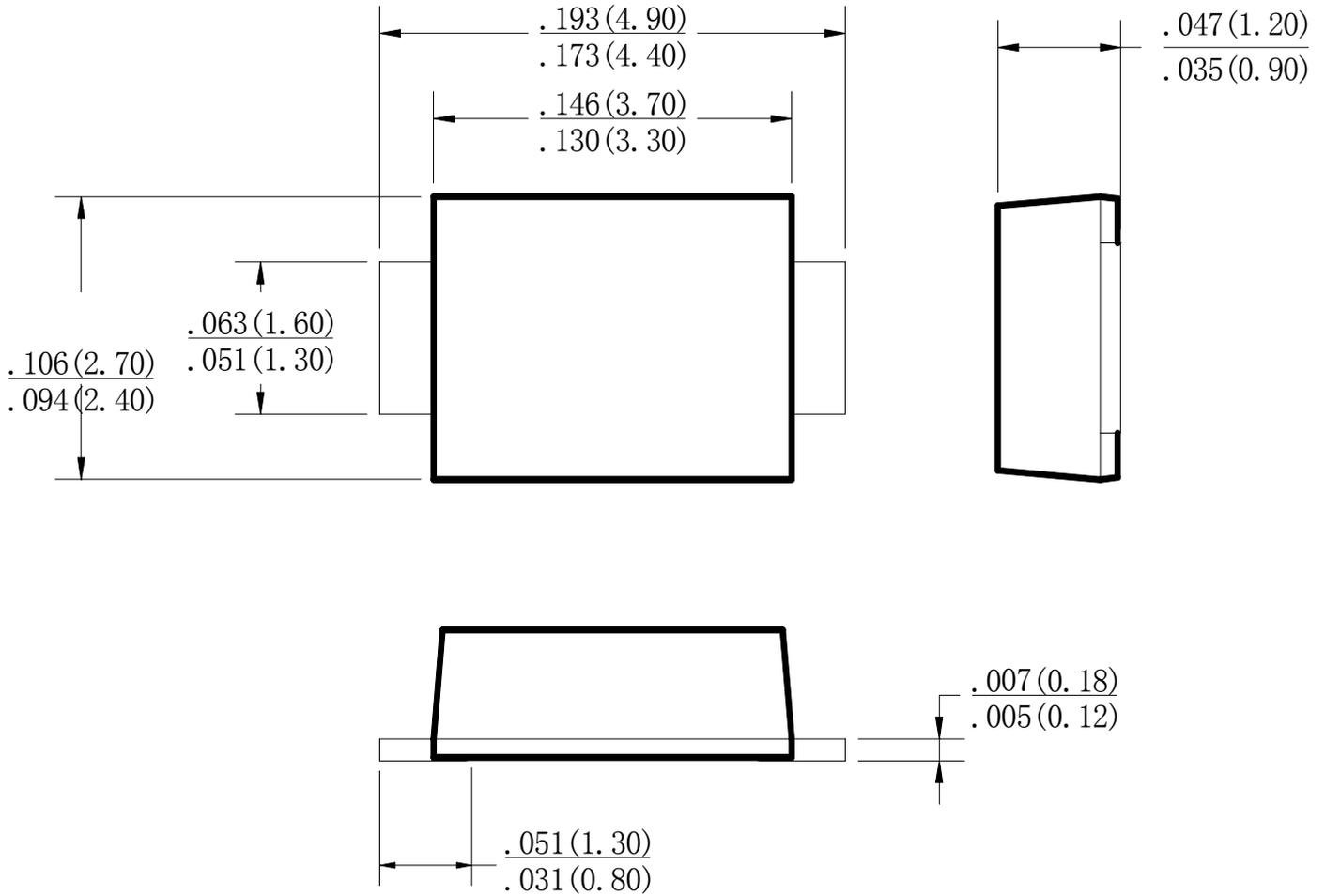


FIG.6-TYPICAL JUNCTION CAPACITANCE





Package Outline Dimensions
SMAF



Dimensions in inches and (millimeters)



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