

FEATURES

- Average Forward Current: $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SMA

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
ES1M	SMA	ES1M	2000



MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Item	Symbol	Unit	Test Conditions	ES1M
Repetitive Peak Reverse Voltage	V_{RRM}	V		1000
Maximum RMS Voltage	V_{RMS}	V		700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=75^{\circ}C$	1.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	30
Operation Junction and Storage Temperature Range	T_J, T_{STG}	$^{\circ}C$		-55 ~ +150

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise specified)

Item	Symbol	Unit	Test Condition		ES1M
Peak Forward Voltage	V _F	V	I _F =1.0A		1.7
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		70
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5
	I _{RRM2}			T _a =100℃	100
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		85
	R _{θJ-L}		Between junction and terminal		35

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1-TYPICAL FORWARD CHARACTERISTICS

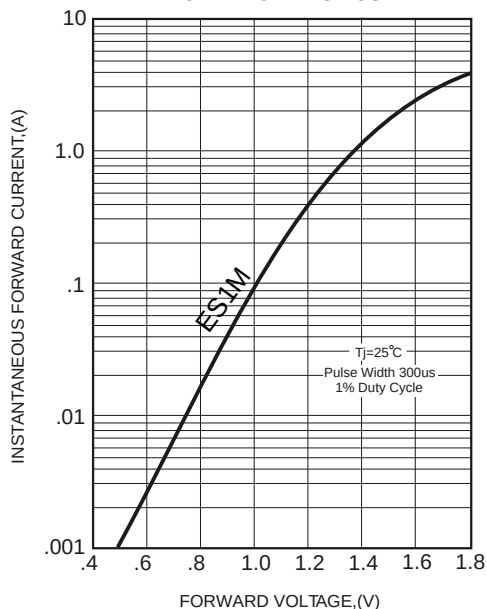


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

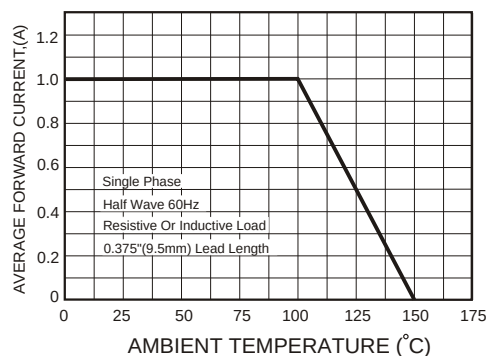
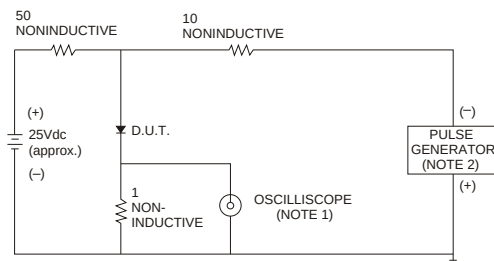


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

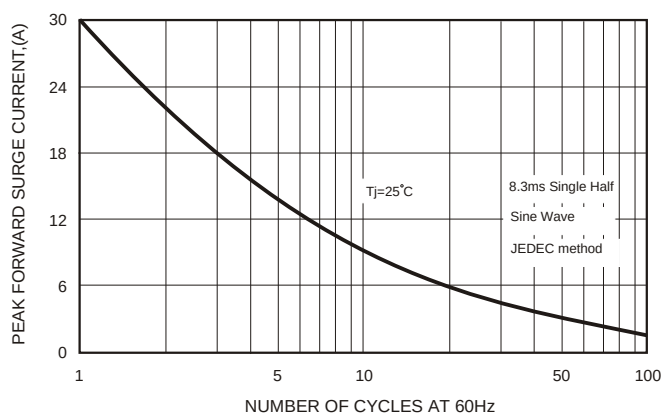
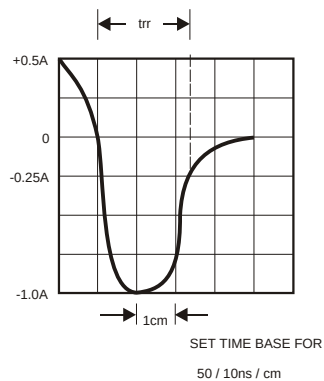
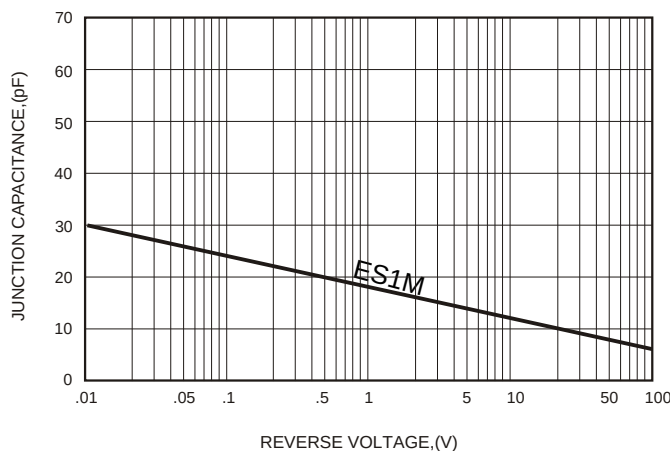
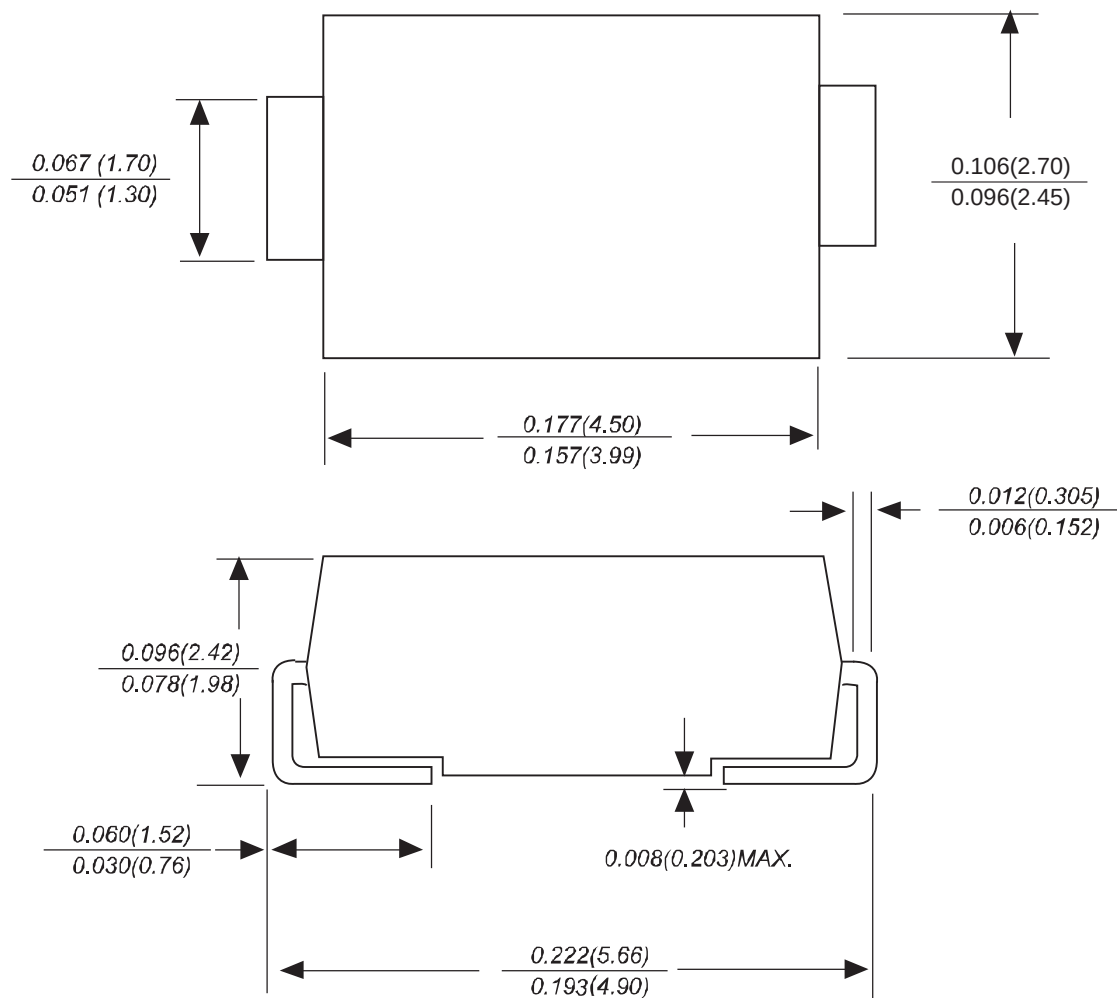


FIG.5-TYPICAL JUNCTION CAPACITANCE



SMA Package Outline Dimensions



Dimensions in inches and (millimeters)