

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)
ES1A-ES1J	SMA	ES1★	2000

★:FromA-J



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Test Conditions	ES1							
				A	B	C	D	E	G	H	J
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	500	600
Maximum RMS Voltage	V_{RMS}	V		35	70	105	140	210	280	350	420
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}	°C		-55 ~ +150							

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Test Condition		ES1							
					A	B	C	D	E	G	H	J
Peak Forward Voltage	V _F	V	I _F =1.0A		0.95				1.25		1.70	
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		35							
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	Ta =25℃	5							
	Ta =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: FORWARD CURRENT DERATING CURVE

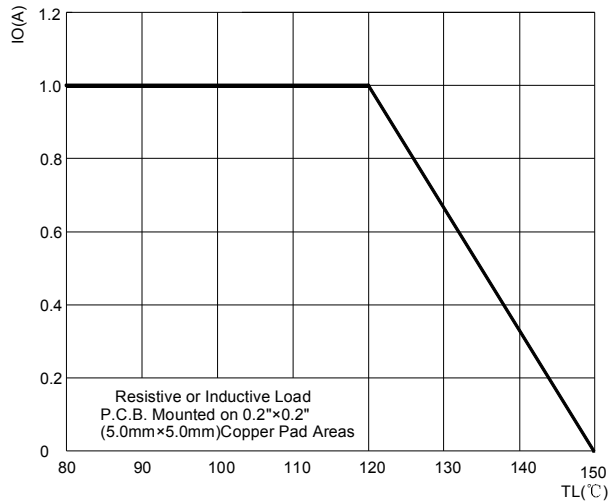


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

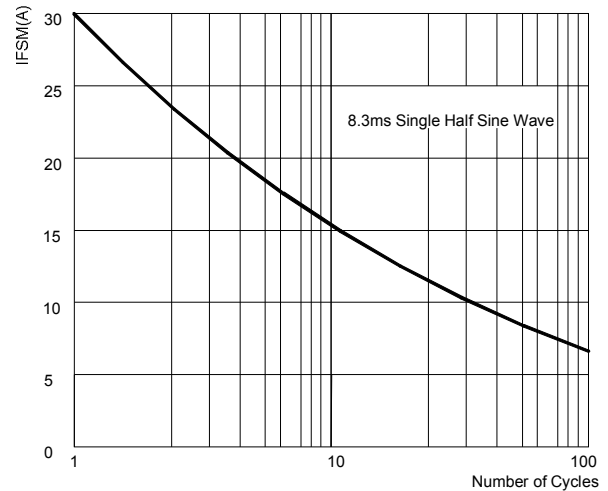


FIG.3: TYPICAL FORWARD CHARACTERISTICS

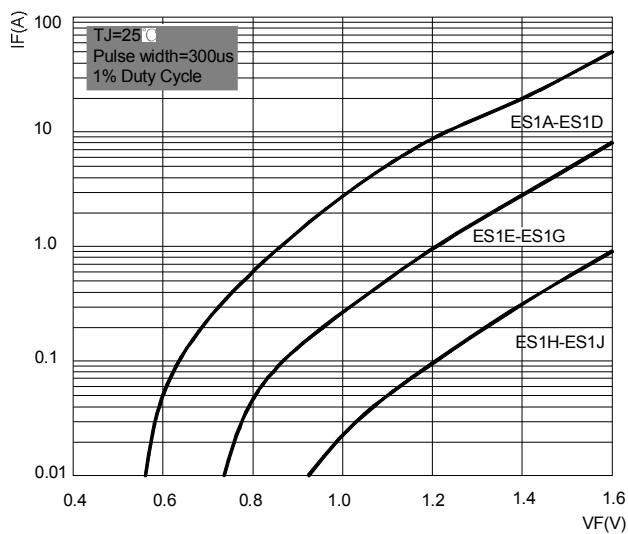


FIG.4: TYPICAL REVERSE CHARACTERISTICS

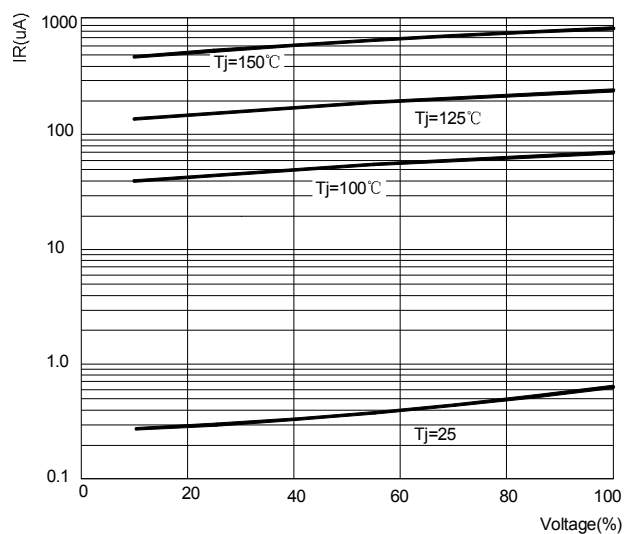
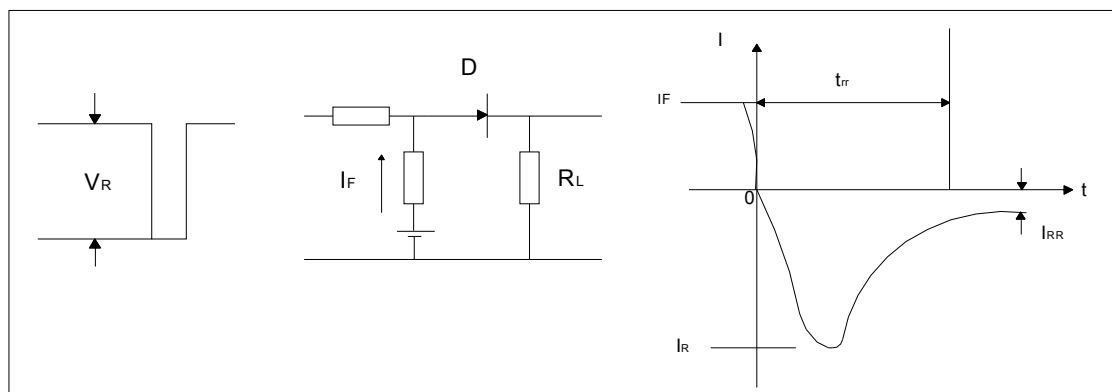
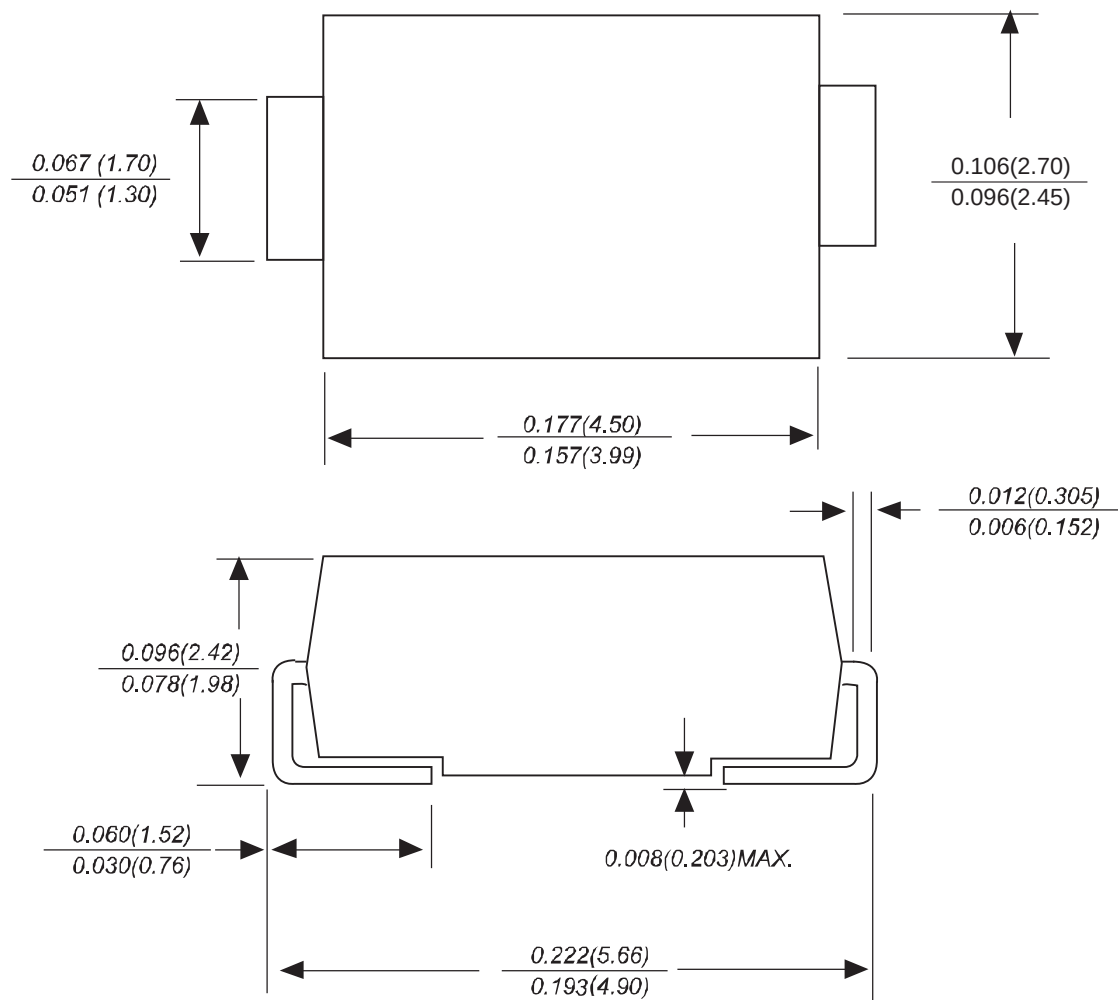


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



SMA Package Outline Dimensions



Dimensions in inches and (millimeters)