



Features

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

Package Marking and Ordering Information



SMA
(DO-214AC)



Product ID	Pack	Marking	Qty(PCS)
ES1D-E3/5AT	SMA (DO-214AC)	ES1D	2000

Maximum Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Test Conditions	ES1D-E3/5AT
Repetitive Peak Reverse Voltage	V_{RRM}	V		200
Maximum RMS Voltage	V_{RMS}	V		140
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 (Ta=25 unless otherwise specified)

Item	Symbol	Unit	Test Condition		ES1D-E3/5AT
Peak Forward Voltage	V _F	V	I _F =1.0A		0.95
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°C	5
	I _{RRM2}			Ta =100°C	100
Thermal Resistance(Typical)	R _{θJ-A}	°C/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

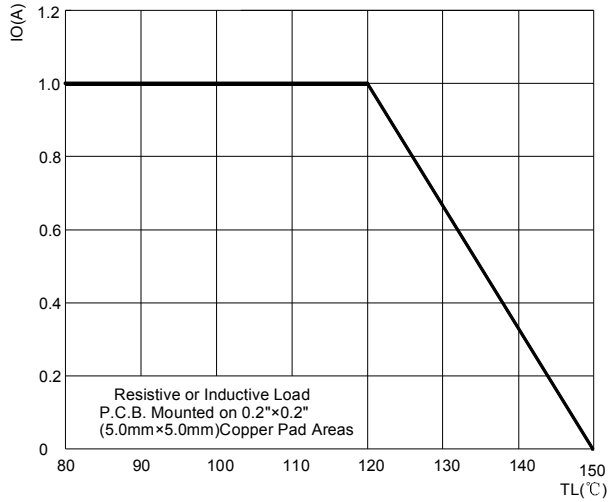


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

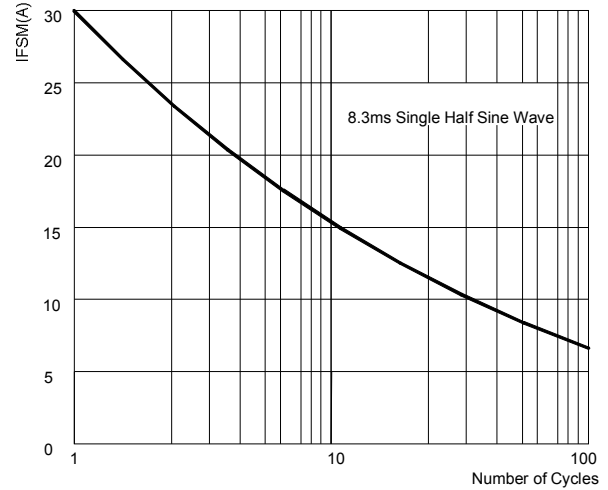


FIG.3: TYPICAL FORWARD CHARACTERISTICS

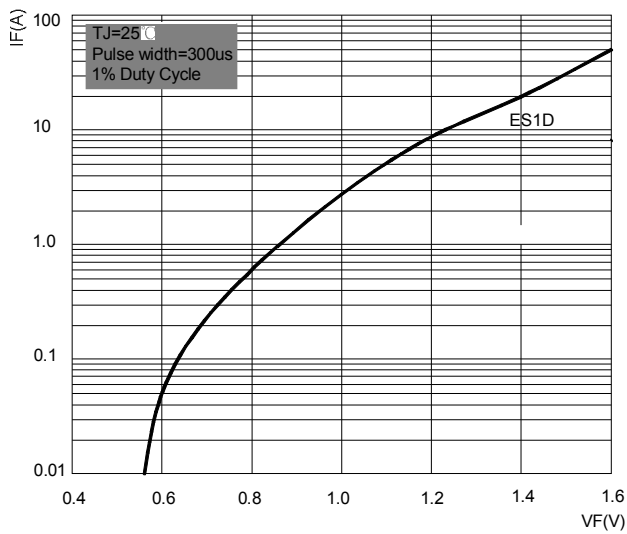


FIG.4: TYPICAL REVERSE CHARACTERISTICS

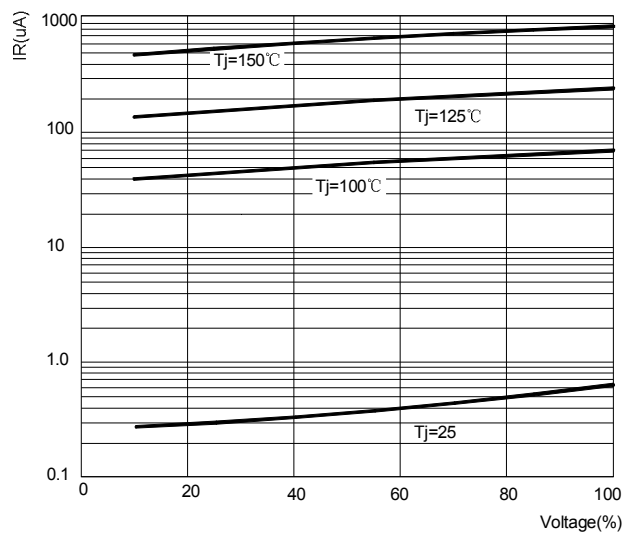
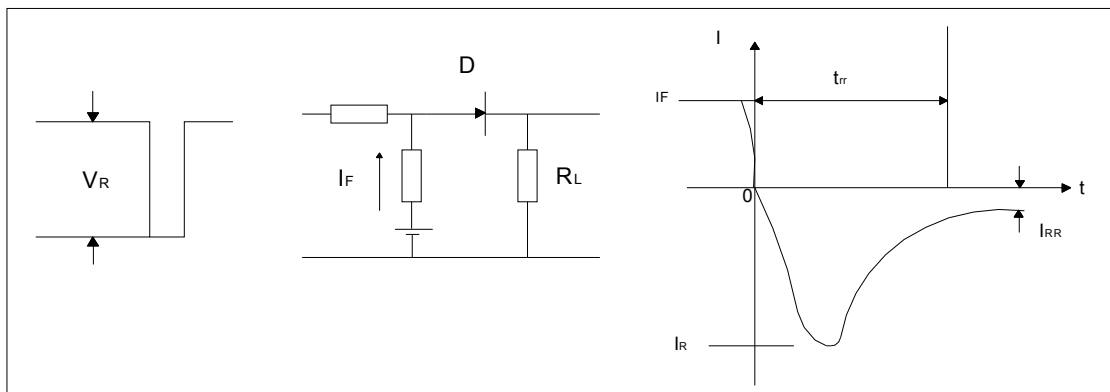
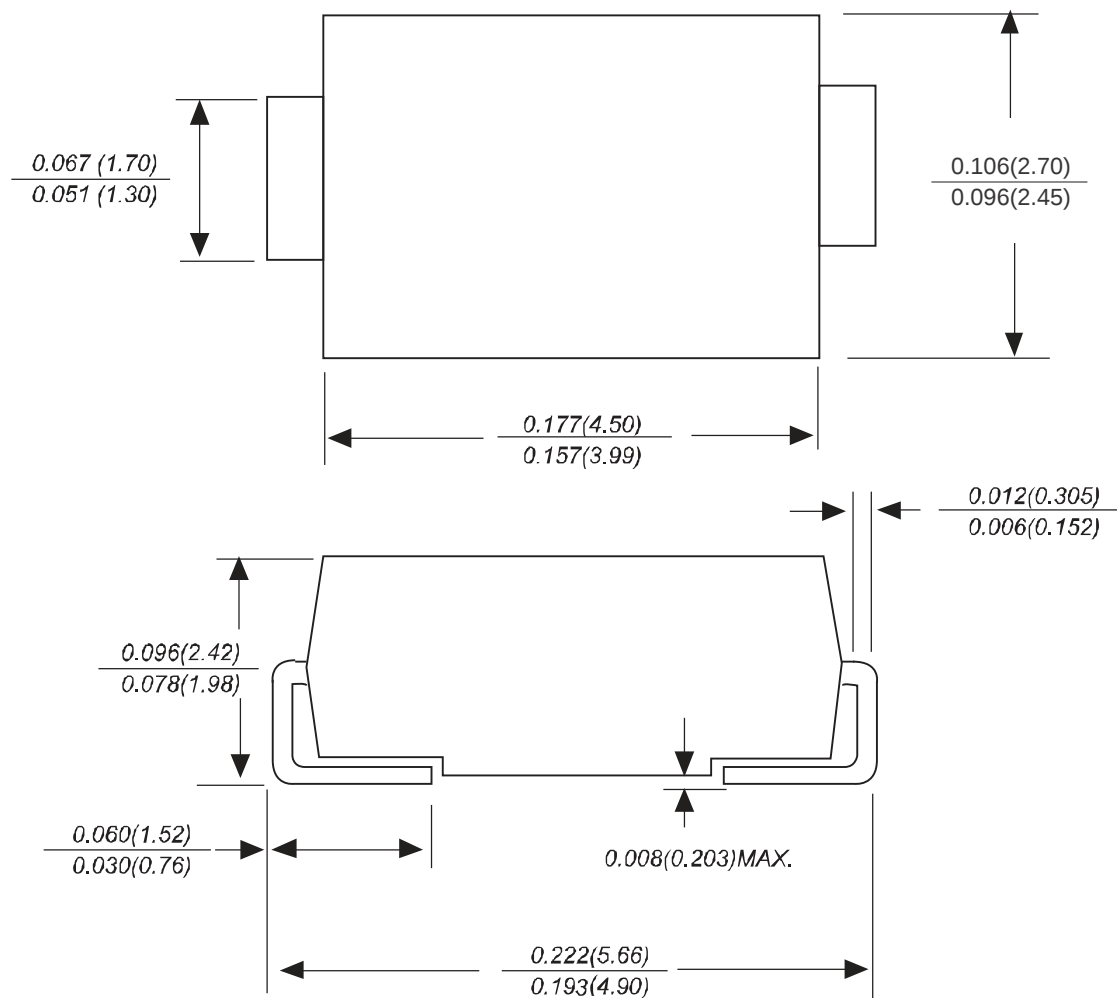


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





SMA(DO-214AC) Package Outline Dimensions



Dimensions in inches and (millimeters)



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