



## Features

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

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
HES1DHE3AI	SMA (DO-214AC)	ES1D	2000



**SMA**  
(DO-214AC)



## Maxmim Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Test Conditions	ES1D
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	$T_J, T_{STG}$	°C		-55 ~ +150

## Electrcal Charcteristics (Ta=25 unless otherwise specified)

Item	Symbol	Unit	Test Condition	ES1
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	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$	5
	$I_{RRM2}$		$T_a=100^\circ C$	100
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	Between junction and ambient	85
	$R_{\theta J-L}$		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

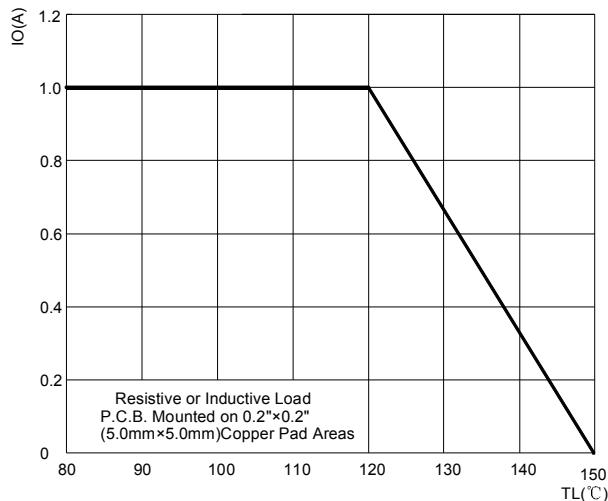


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

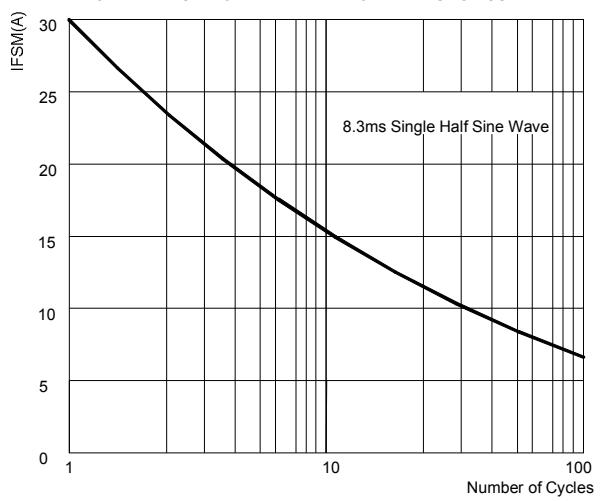


FIG.3: TYPICAL FORWARD CHARACTERISTICS

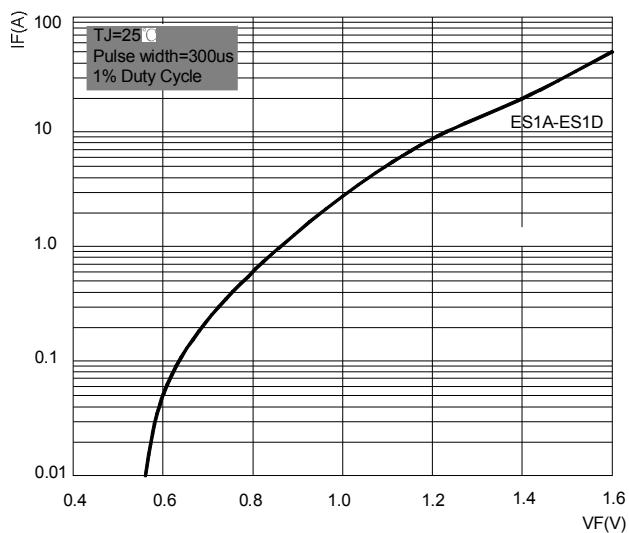


FIG.4: TYPICAL REVERSE CHARACTERISTICS

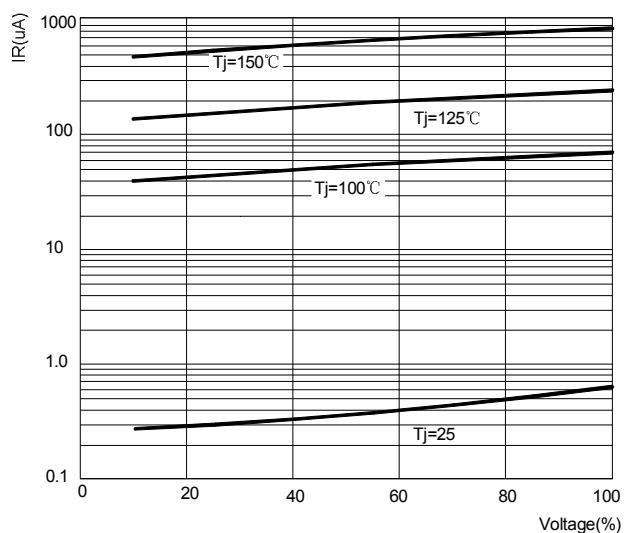
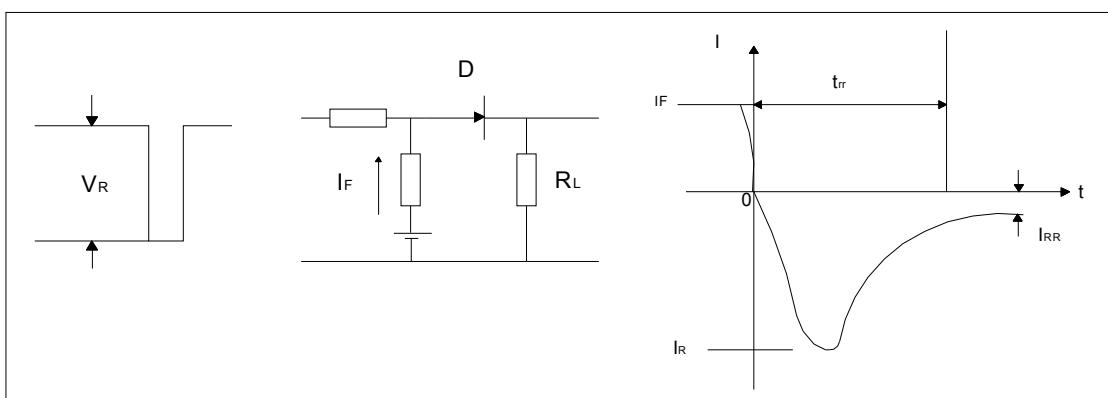
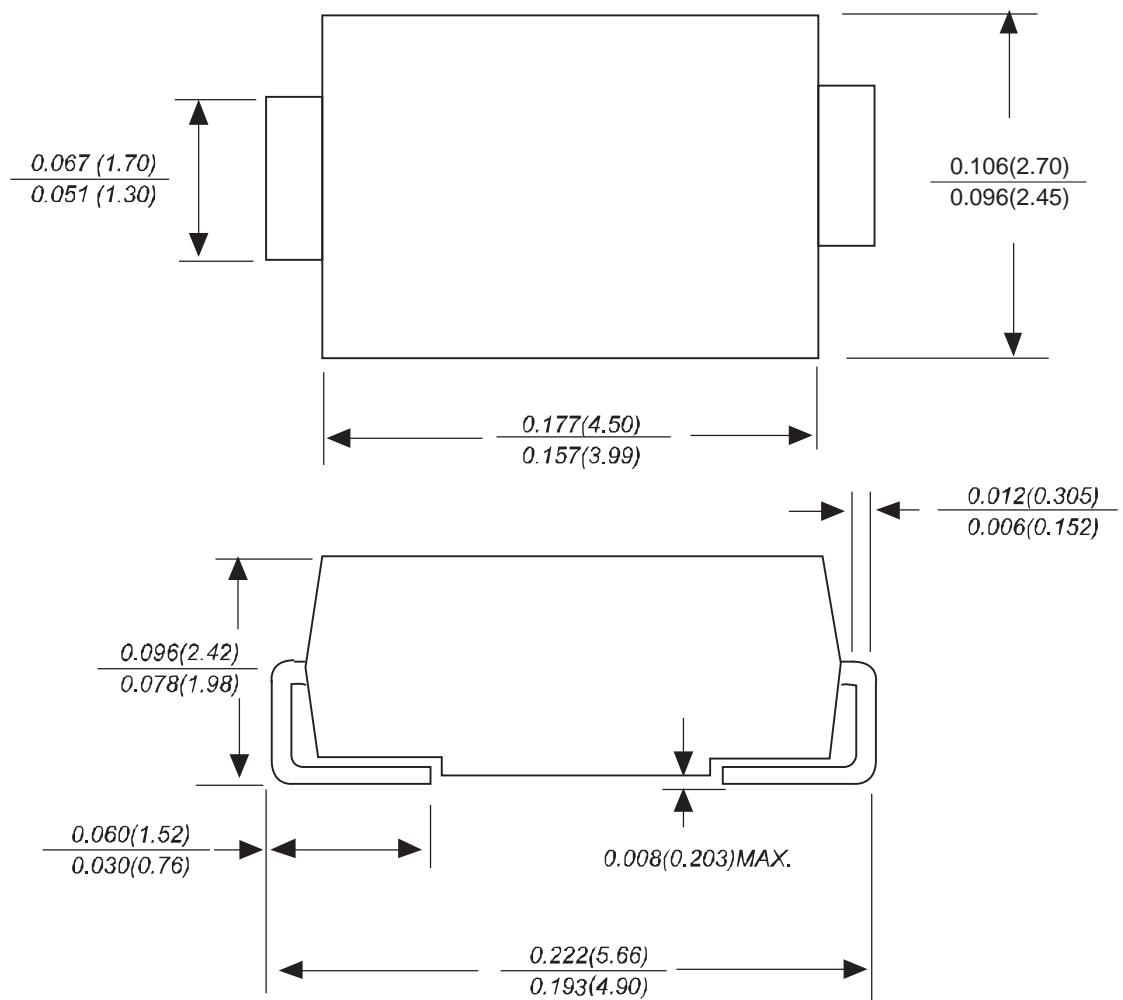


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





**SMA(DO-214AC) Package Outline Dimensions**



*Dimensions in inches and (millimeters)*



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