



Features

- Average Forward Current: $I_{F(AV)}=2A$
- Polarity: Color band denotes cathode



SMA



Ordering Information

Product ID	Pack	Brand	Qty(PCS)
STTH2R06A	SMA	HXY MOSFET	2000

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

Item	Symbol	Test Conditions	Limit	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		600	V
Maximum RMS Voltage	V_{RMS}		420	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, $T_a=110^\circ C$	2.0	A
Surge(Non-repetitive)Forward Current	I_{FSM}	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ C$	50	A
Operation Junction and Storage Temperature Range	T_J, T_{STG}		-55 ~ +150	°C

Electrical Characteristics(Ta=25°C unless otherwise specified)

Item	Symbol	Test Condition		Limit	Unit
Peak Forward Voltage	V_F	$I_F=2.0A$		1.7	V
Maximum reverse recovery time	t_{rr}	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$		35	ns
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	$T_a=25^\circ C$	5.0	μA
	I_{RRM2}		$T_a=100^\circ C$	100	
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient		75	$^\circ C/W$
	$R_{\theta J-L}$	Between junction and terminal		20	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

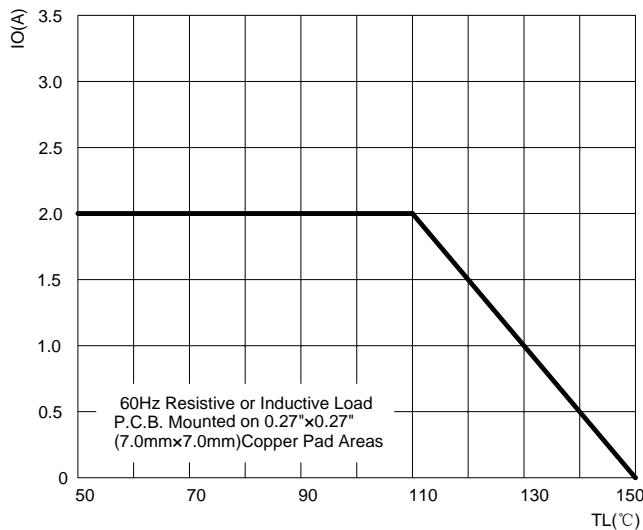


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

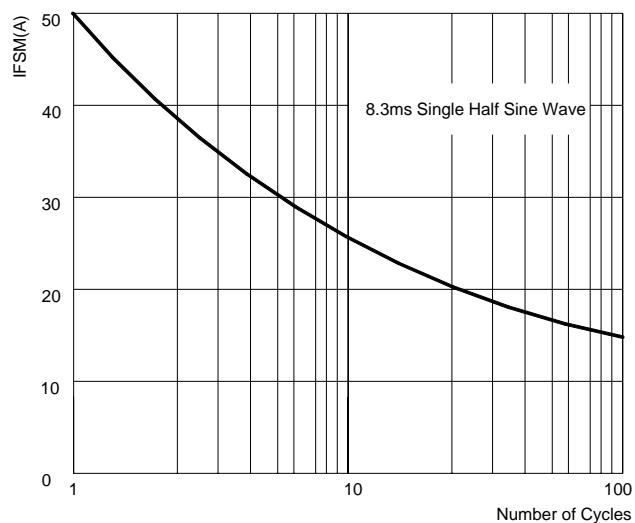


FIG.3: TYPICAL FORWARD CHARACTERISTICS

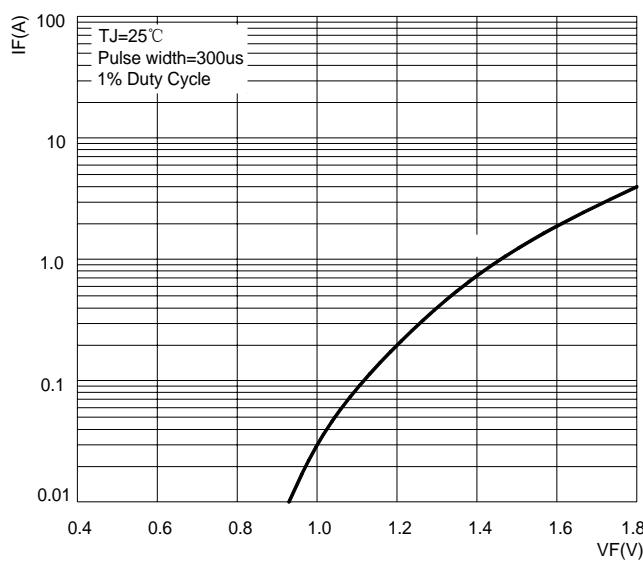


FIG.4: TYPICAL REVERSE CHARACTERISTICS

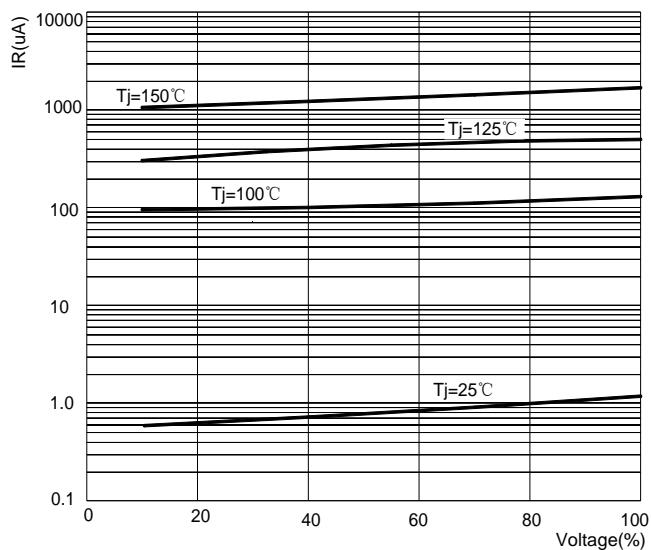
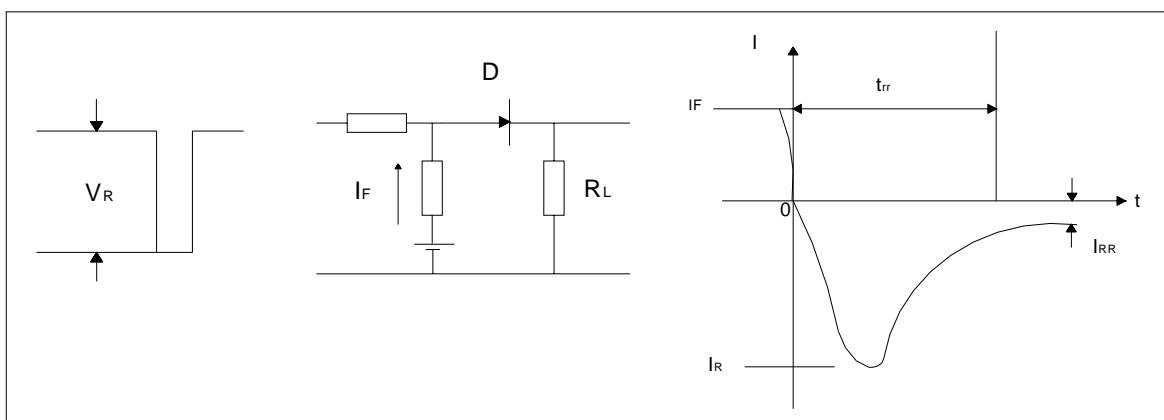


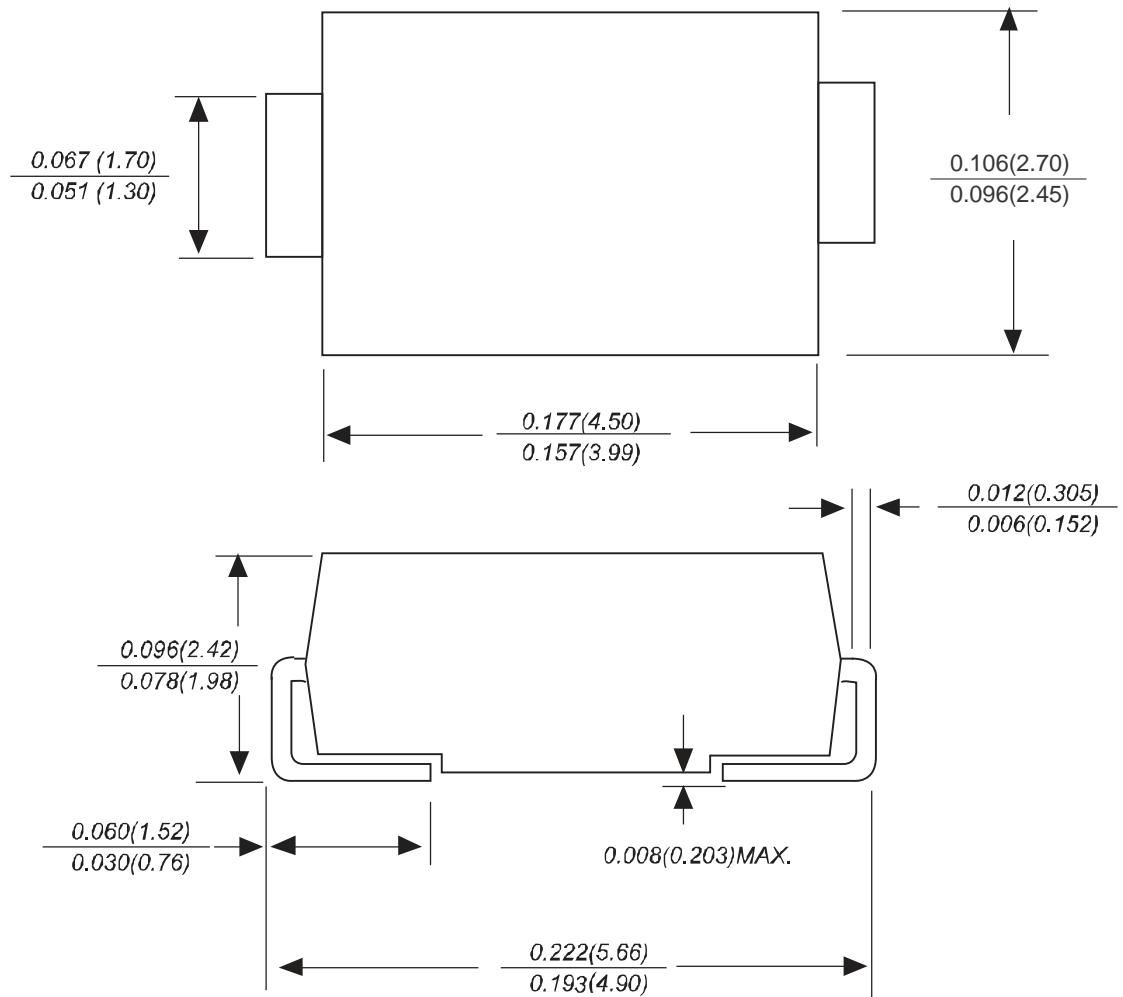
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





Package Outline Dimensions

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Dimensions in inches and (millimeters)



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