



Features

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Super fast recovery time for high speed switching



Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.21 grams

SMC



Ordering Information

Product ID	Pack	Brand	Qty(PCS)
NSF03B60	SMC	HXY MOSFET	3000

Maximum Ratings and Electrical Characteristics

Single phasef wave, 60 Hz, resistive or inductive load.

For capacitive load,derate current by 20%

Type Number	Limit	Units
Maximum Recurrent Peak Reverse Voltage	600	V
Maximum RMS Voltage	420	V
Maximum DC Blocking Voltage	600	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100	A
Maximum Instantaneous Forward Voltage at 3.0A	1.7	V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	10	μA
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	500	μA
Maximum Reverse Recovery Time (Note 1)	35	nS
Typical Junction Capacitance (Note 2)	45	pF
Operating and Storage Temperature Range T_J, T_{SG}	-65 — +150	$^\circ\text{C}$

Notes:

1. Reverse Recovery Time test condition: $IF=0.5\text{A}$, $IR=1.0\text{A}$, $IRR=0.25\text{A}$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1-TYPICAL FORWARD
CHARACTERISTICS

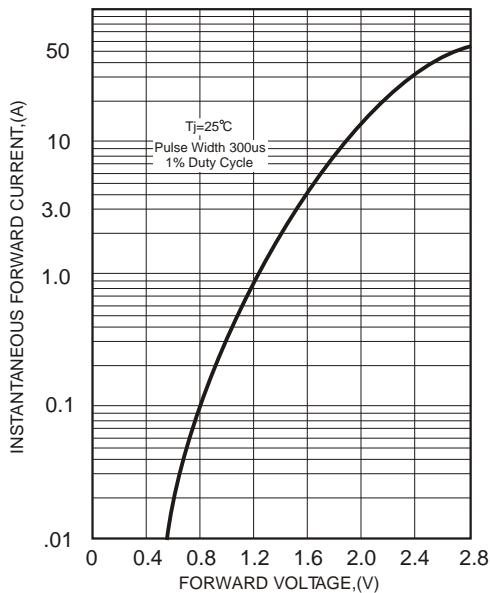
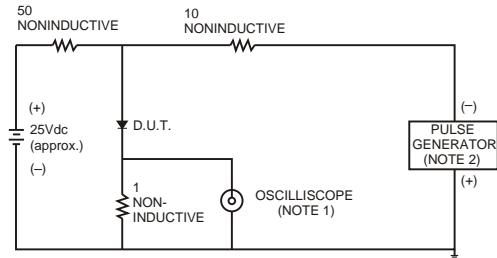


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE
RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

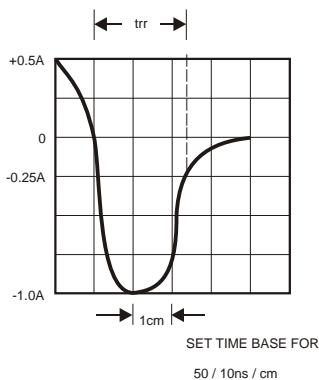


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

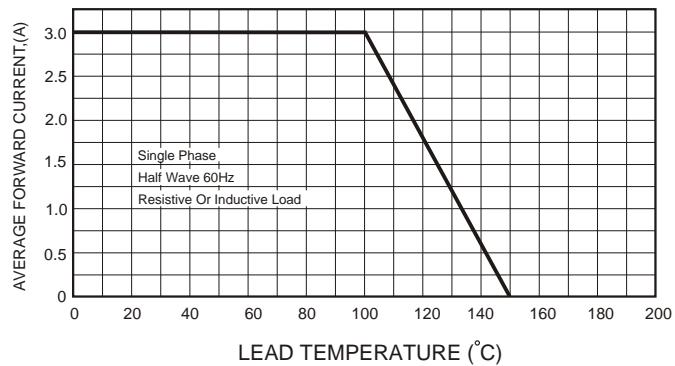


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

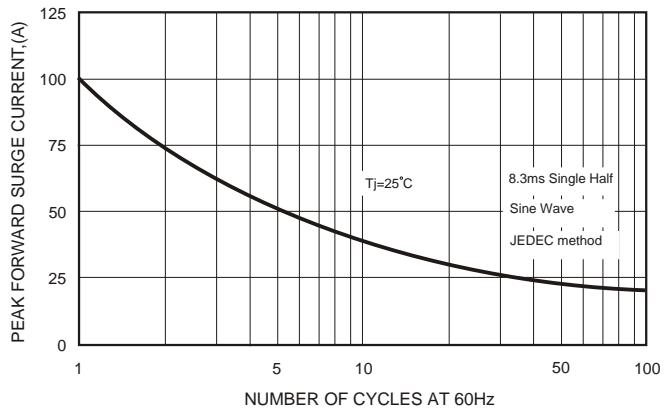
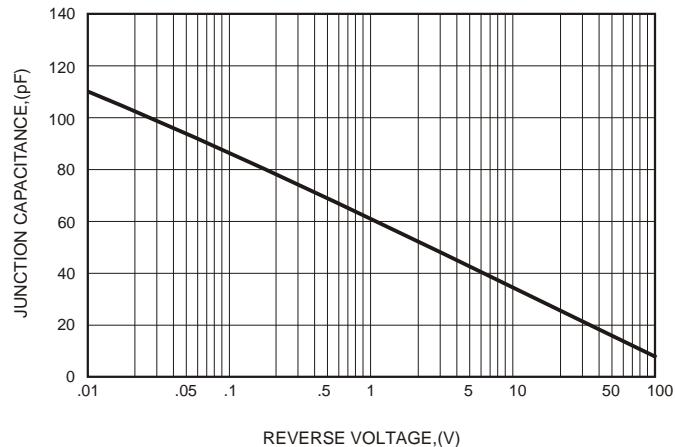
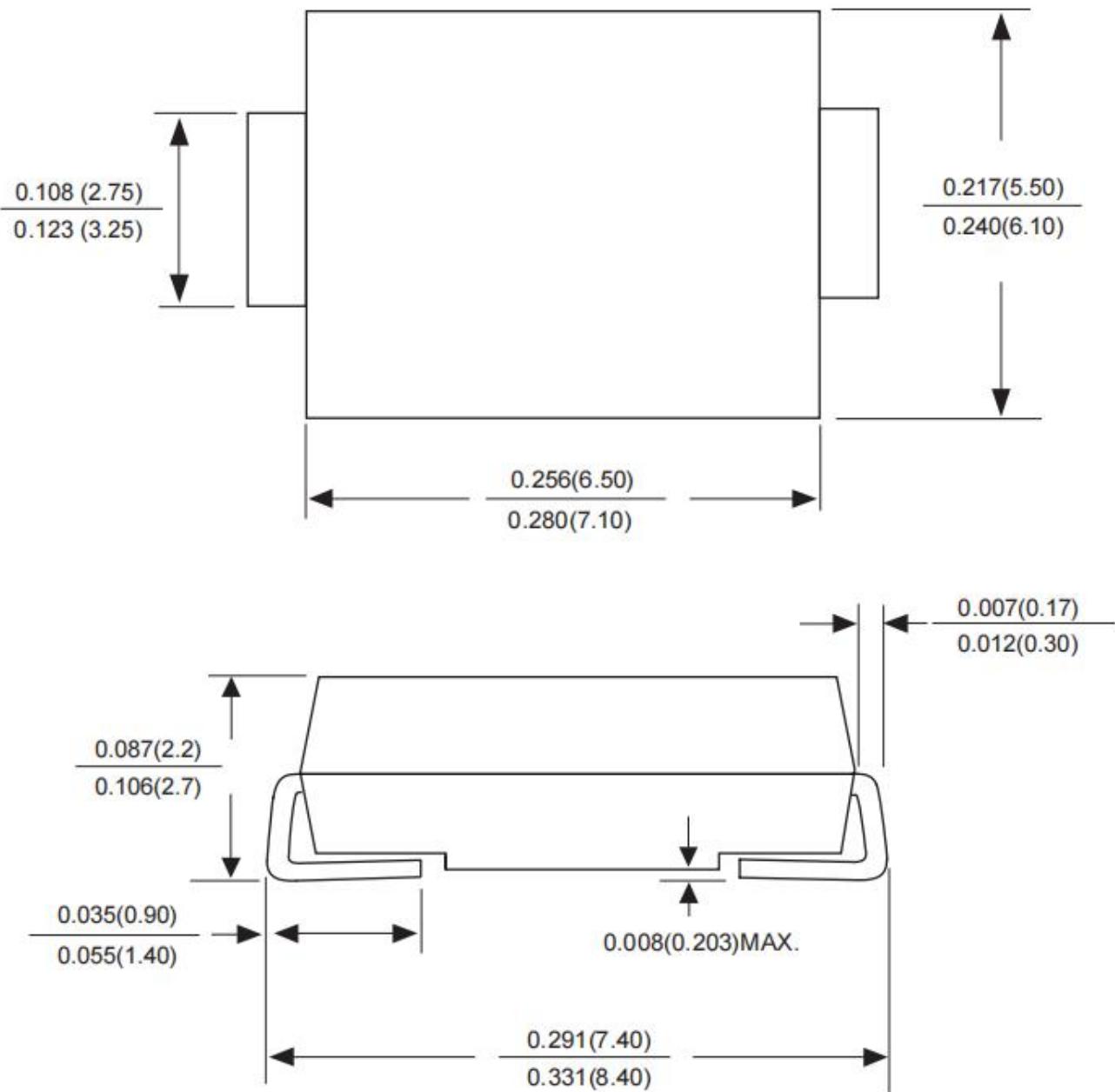


FIG.5-TYPICAL JUNCTION CAPACITANCE





SMC Package Outline Dimensions



Dimensions in inches and (millimeters)



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