



## Features

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop



SMB

## Ordering Information

Product ID	Pack	Brand	Qty(PCS)
RFN3LB6STBR1	SMB	HXY MOSFET	3000

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

Single phase half wave, 60Hz, 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 .375"(9.5mm) Lead Length at Ta=55°C	3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80	A
Maximum Instantaneous Forward Voltage at 3.0A	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0 50	uA uA
Maximum Reverse Recovery Time (Note 1)	35	nS
Typical Junction Capacitance (Note 2)	60	pF
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>Stg</sub>	-65 — +150	°C

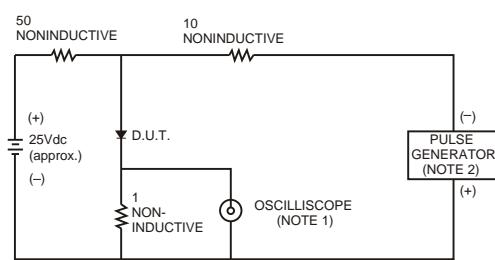
### NOTES:

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



## Typical Characteristics

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

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

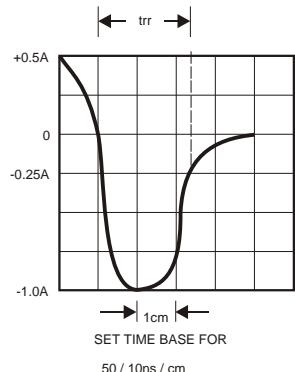


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

FIG.3-TYPICAL FORWARD CHARACTERISTICS

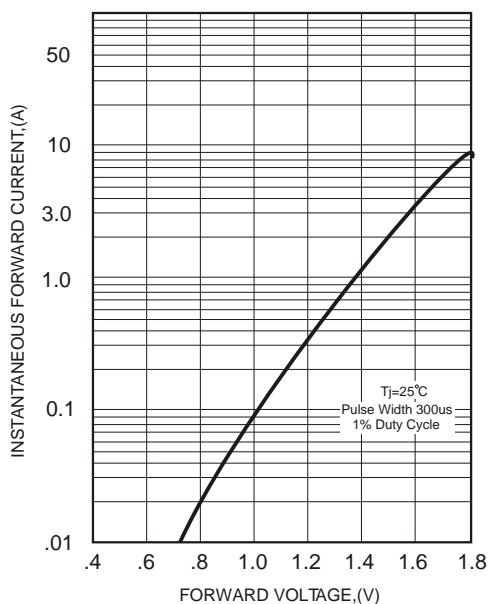


FIG.4-TYPICAL REVERSE CHARACTERISTICS

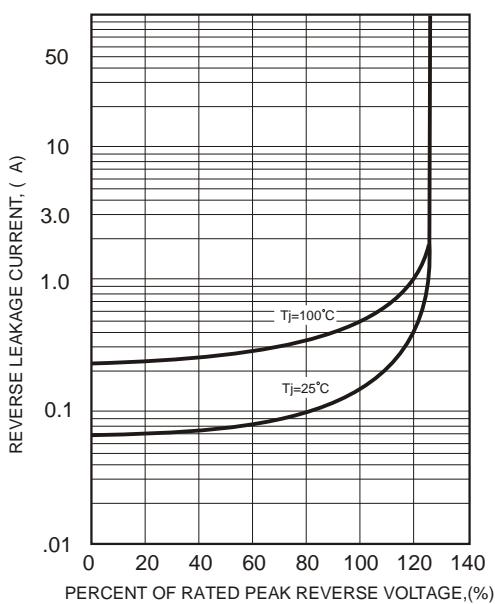


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

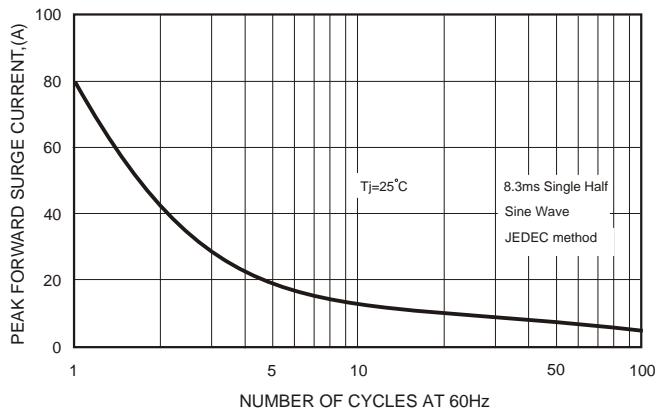
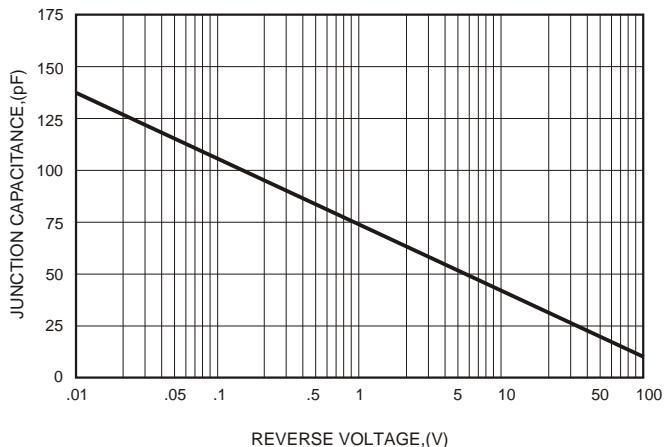


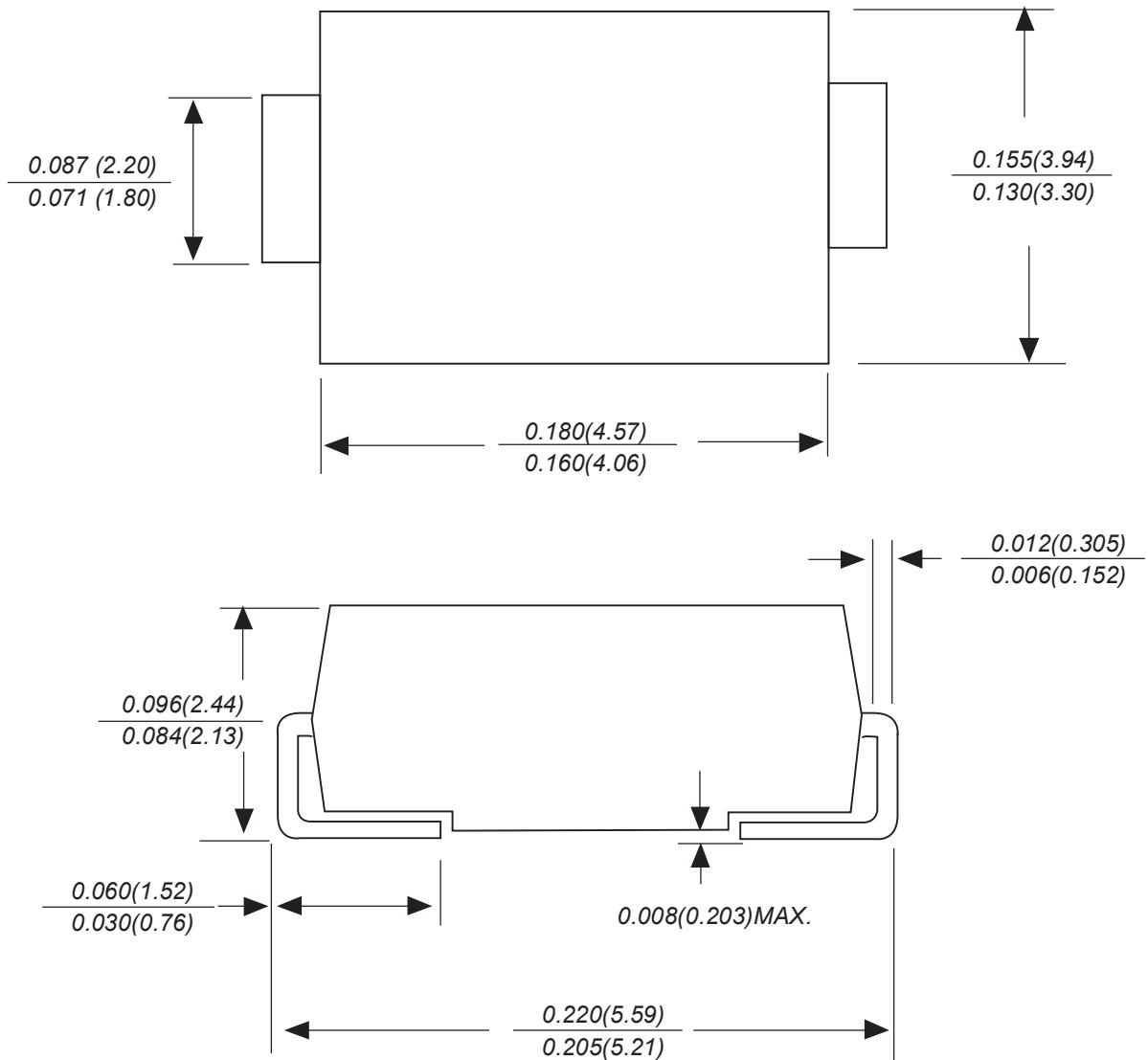
FIG.6-TYPICAL JUNCTION CAPACITANCE





## Package Outline Dimensions

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*Dimensions in inches and (millimeters)*



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