

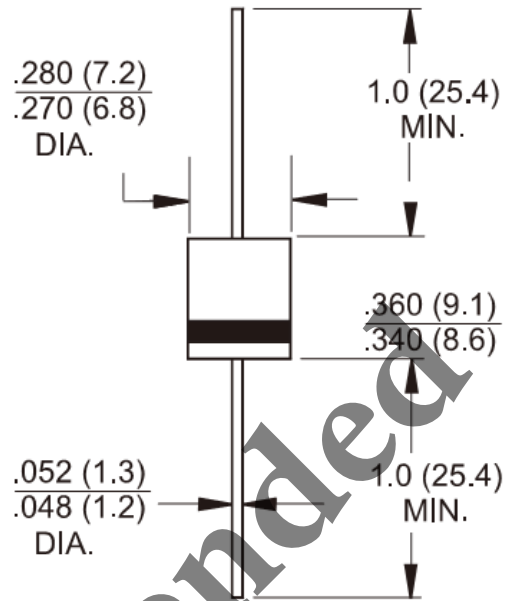


**Features**

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

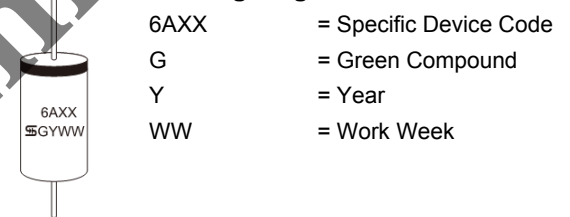
**Mechanical Data**

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C/10s  
.375", (9.5mm) lead lengths at 5 lbs, (2.3kg) tension
- ✧ Weight: 1.65 grams



**Dimensions in inches and (millimeters)**

**Marking Diagram**



**Maximum Ratings and Electrical Characteristics**

Rating at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	Symbol	6A 05	6A 10	6A 20	6A 40	6A 60	6A 80	6A 100	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @TA=60°C	$I_{F(AV)}$	6							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250							A
Maximum Instantaneous Forward Voltage (Note 1) @ 6 A	$V_F$	0.95							V
Maximum DC Reverse Current at @ TA=25 °C Rated DC Blocking Voltage @ TA=125°C	$I_R$	10 400							uA uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @TA=75°C	$I_{R(AV)}$	50							uA
Typical Junction Capacitance (Note 2)	$C_j$	90							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	35							°C/W
Operating Temperature Range	$T_J$	- 65 to + 150							°C
Storage Temperature Range	$T_{STG}$	- 65 to + 150							°C

Note1: Pulse Test with PW=300 usec, 1% Duty Cycle  
Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.  
Note3: Mount on Cu-Pad Size 16mm × 16mm on P.C.B.

## RATINGS AND CHARACTERISTIC CURVES (6A05 THRU 6A100)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

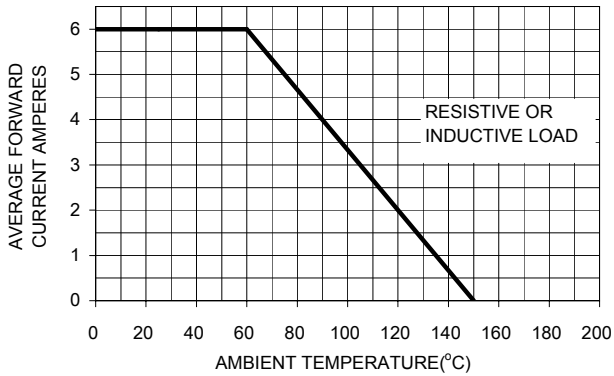


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

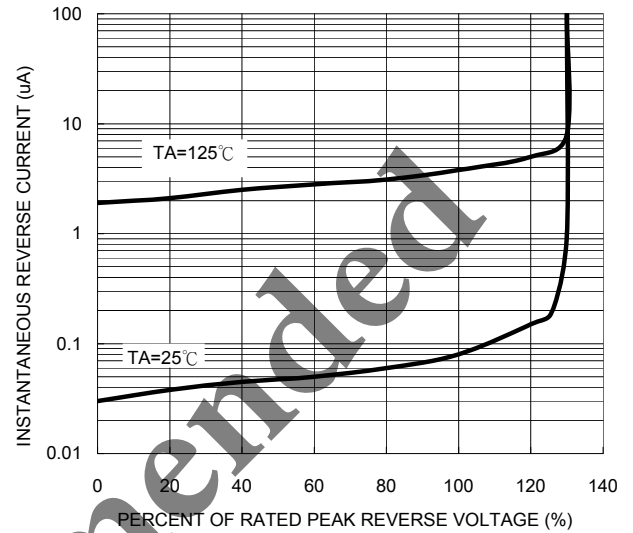


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

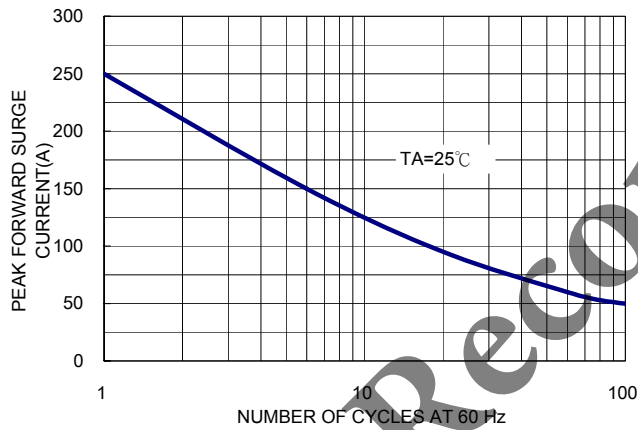


Fig. 5- TYPICAL FORWARD CHARACTERISTICS

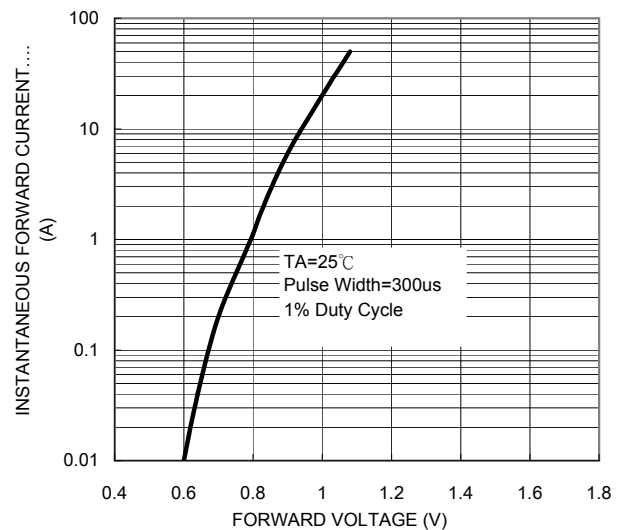


FIG. 4- TYPICAL JUNCTION CAPACITANCE

