



# 2A01 THRU 2A07

## 2.0 AMPS. Silicon Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
2.0Amperes

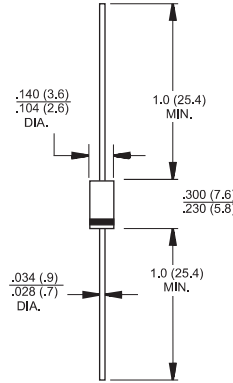
### Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

### Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.40 gram

### DO-15



Dimensions in inches and (millimeters)

### 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%

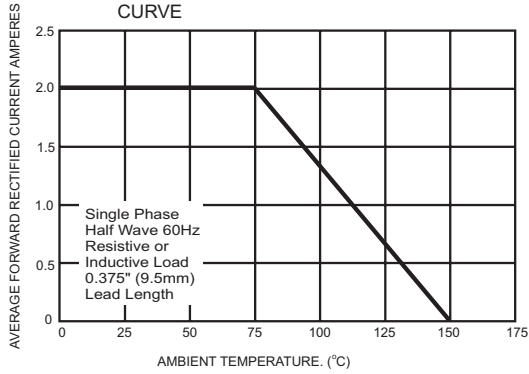
Type Number	Symbol	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 75^\circ C$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	60							A
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=100^\circ C$	$I_R$	5.0 50							$\mu A$ $\mu A$
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ $T_A=75^\circ C$	HTIR	30							$\mu A$
Typical Junction Capacitance ( Note 1 )	$C_j$	20							pF
Typical Thermal Resistance ( Note 2 )	$R_{\theta JA}$	60							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-65 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +150							$^{\circ}C$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

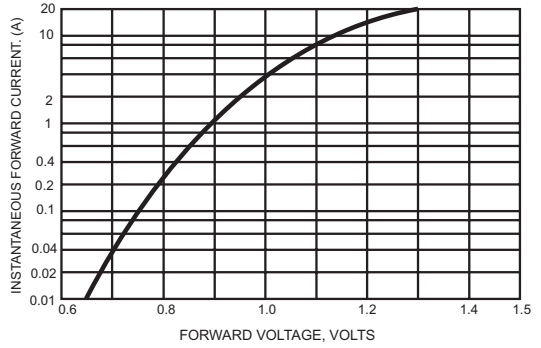
2. Mount on Cu-Pad Size 10mm x 10mm on P.C.B.

## RATINGS AND CHARACTERISTIC CURVES (2A01 THRU 2A07)

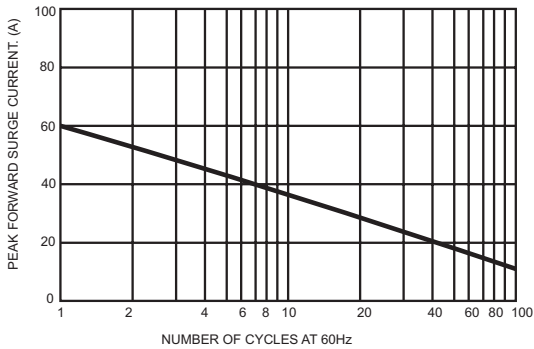
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



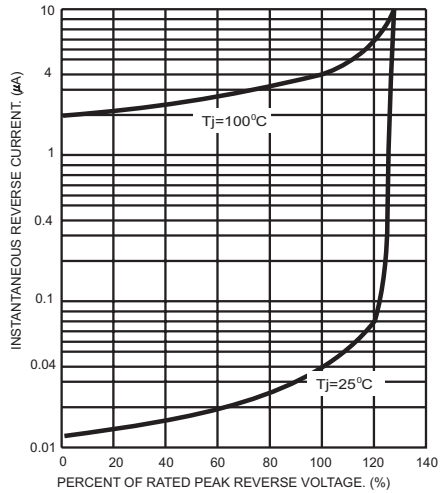
**FIG.2- TYPICAL FORWARD CHARACTERISTICS**



**FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS**



**FIG.5- TYPICAL JUNCTION CAPACITANCE**

