

# **2A01** THRU **2A07**

## 2.0 AMPS. Silicon Rectifiers



Voltage Range 50 to 1000 Volts Current 2.0Amperes

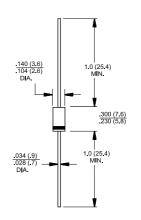
DO-15

#### **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: 250°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ♦ Weight: 0.40 gram



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	2A01	2A02	2A03	2A04	2A05	2A06	2A07	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length $@T_A = 75^{\circ}C$	2.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	60							Α
Maximum Instantaneous Forward Voltage @ 2.0A	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	5.0							uA
at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	50							uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @T <sub>A</sub> =75°C	30							uA
Typical Junction Capacitance (Note 1)	30							pF
Typical Thermal Resistance RθJA (Note 2)	50							°C/W
Operating Temperature Range T <sub>J</sub>	-65 to +125							°C
Storage Temperature Range T <sub>STG</sub>	-65 to +150							°C

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

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.



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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

2.5

Single Phase Half Wave 60Hz Resistive or Inductive Load 0.375" (9.5mm) Lead Length

0 25 50 75 100 125 150 175

AMBIENT TEMPERATURE. (°C)

FIG.2- TYPICAL FORWARD CHARACTERISTICS

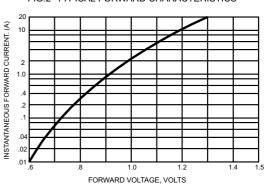


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE

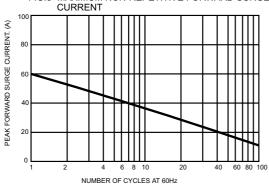


FIG.4- TYPICAL REVERSE CHARACTERISTICS

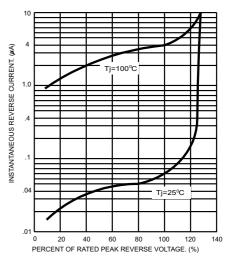


FIG.5- TYPICAL JUNCTION CAPACITANCE

