

## **6A05S THRU 6A100S**

### **GENERAL PURPOSE SILICON RECTIFIER**

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Ampere

#### **FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capabilityHigh temperature soldering guaranteed: 250°C/10 seconds,0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

#### **MECHANICAL DATA**

Case: JEDEC DO-201AD molded plastic body

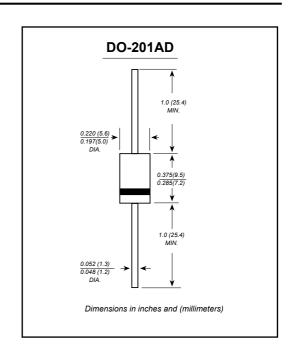
Terminals: Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any Weight: 0.04 ounce, 1.10 grams





#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	SYMBOLS	6A05S	6A10S	6A20S	6A40S	6A60S	6A80S	6A100S	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	l(AV)	6.0							А
0.375"(9.5mm) lead length at Ta=60°C	I(AV)								
Peak forward surge current									
8.3ms single half sine-wave superimposed on	Ігѕм	IFSM 250						Α	
rated load (JEDEC Method)									
Maximum instantaneous forward voltage at 6.0A	VF	1.0						V	
Maximum DC reverse current T <sub>A</sub> =25°C		10.0 400							μA
at rated DC blocking voltage Ta=100℃	l <sub>R</sub>								
Typical junction capacitance (NOTE 1)	Cı	100						pF	
Typical thermal resistance (NOTE 2)	RθJA	10.0						°C/W	
Operating junction and storage temperature range	ТЈ,Тѕтс	-65 to +150						°C	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length, P.C.B. mounted



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## **RATINGS AND CHARACTERISTIC CURVES**



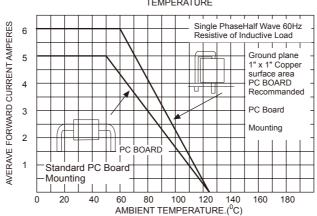
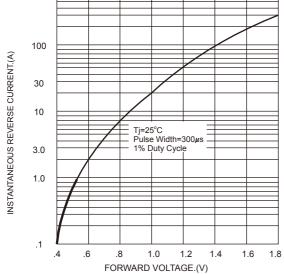
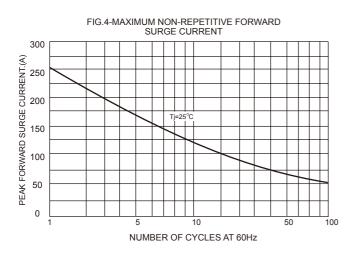


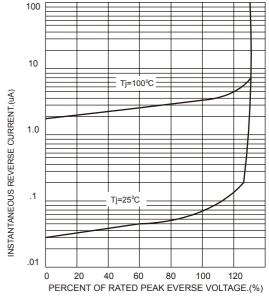


FIG.2-TYPICAL FORWARD CHARACTERISTICS





### FIG.3-TYPICAL REVERSE CHARACTERISTICS



#### FIG.5-TYPICAL JUNCTION CAPACITANCE

