

**Micro Commercial Components** 

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# 6A05 **THRU** 6A10

## **Features**

- High Current Capability and Low Leakage
- Low Forward Voltage Drop Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
  Case Material: Molded Plastic. UL Flammability
- Classification Rating 94V-0 and MSL Rating 1

# **6 Amp Rectifier** 50 - 1000 Volts

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
6A05	6A05	50V	35V	50V
6A1	6A1	100V	70V	100V
6A2	6A2	200V	140V	200V
6A4	6A4	400V	280V	400V
6A6	6A6	600V	420V	600V
6A8	6A8	800V	560V	800V
6A10	6A10	1000V	700V	1000V

# R-6 Cathode

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	T <sub>A</sub> = 60°C		
Peak Forward Surge Current	I <sub>FSM</sub>	400A	8.3ms, half sine		
Maximum Instantaneous Forward Voltage	$V_{F}$	0.95V	$I_{FM} = 6.0A;$ $T_{J} = 25^{\circ}C(Note 2)$		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 100μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°C		
Typical Junction Capacitance	C₃	150pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V		

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7. 2.Pulse test: Pulse width 300 µsec, Duty cycle 1%

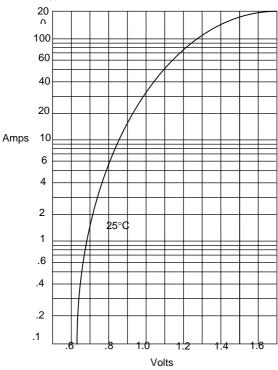
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.340	.360	8.60	9.10	
В	.340	.360	8.60	9.10	
С	.048	.052	1.20	1.30	
D	1.000		25.40		

# 6A05 thru 6A10

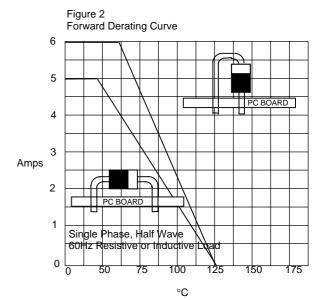


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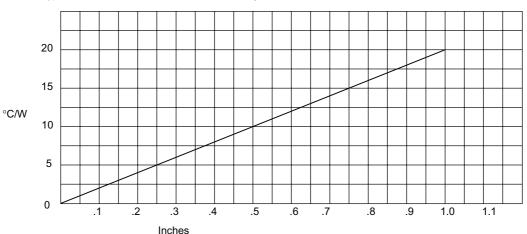


Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes versus Ambient Temperature -  $^{\circ}\text{C}$ 

Figure 3
Typical Thermal Resistance versus Lead Length



Thermal Resistance -°C/W *versus* Equal Lead Length To Heat Sink - Inches

### 6A05 thru 6A10



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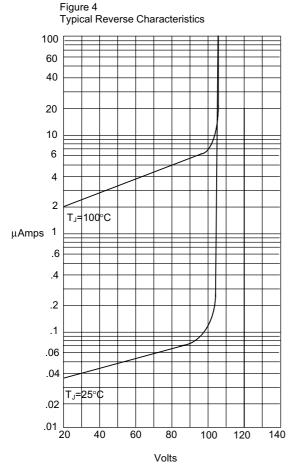


Figure 5 Maximum Non-Repetitive Forward Surge Current 600 500 400 300 Amps 200 100 0 20 40 60 80 100 Cycles

> Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts



# **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel 500pcs/Reel
(Part Number)-AP	Ammo Packing;450pcs/AmmoBox
(Part Number)-BP	Bulk;200pcs/Box

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