

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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6A05 **THRU** 6A10

# **Features**

- Halogen free available upon request by adding suffix "-HF"
- 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)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## 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

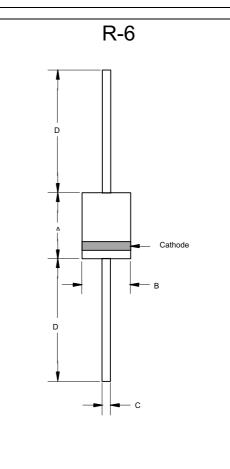
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
6A05	6A05	50V	35V	50V
6A1	6A1	100V	70V	100V
6A2	6A2	200V	140V	200V
6A4	6A4	400V	280V	400V
6A6	6A6	600V	420V	600V
6A8	6A8	800V	560V	800V
6A10	6A10	1000V	700V	1000V

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

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Average Forward Current	I <sub>F(AV)</sub>	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 <sub>F</sub>	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	С	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%

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

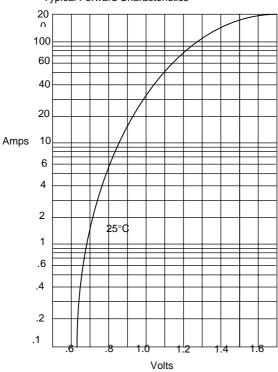


DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.340	.360	8.60	9.10	
В	.340	.360	8.60	9.10	
С	.048	.052	1.20	1.30	
D	1.000		25.40		

# 6A05 thru 6A10



Figure 1 Typical Forward Characteristics



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

Figure 2
Forward Derating Curve

6

5

4

Amps

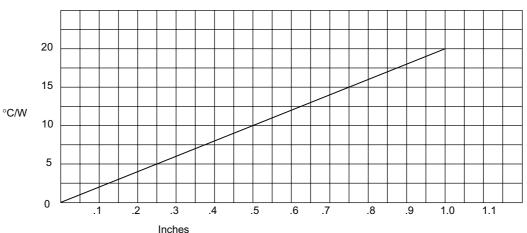
2

1

Single Phase, Half Wave
60Hz Resistive or Indudtive Load
0
0 50 75 100 125 150 175

 $^{\circ}\text{C}$  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

Figure 4

.01

40

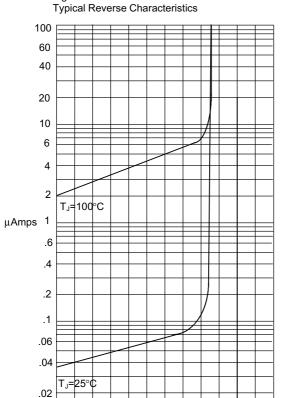
60

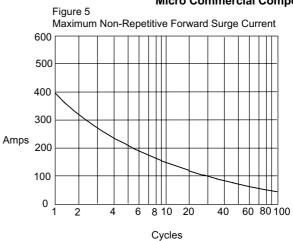
80

Volts



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

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

100

120

140



# **Ordering Information:**

Device	Packing	
Part Number-TP	Tape&Reel: 500pcs/Reel	
Part Number-AP	Ammo Packing: 450pcs/Ammo Box	
Part Number-BP	Bulk: 4.8Kpcs/Carton	

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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