



Micro Commercial Components



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6A05G THRU 6A10G

6 Amp Glass Passivated Junction Rectifier 50 to 1000 Volts

Features

- High Surge Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Marking : Cathode band and type number
- High Current Operation 6.0 Ampere @ $T_A=60^\circ\text{C}$
- Glass Passivated Junction In R-6 Package
- Low Leakage
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

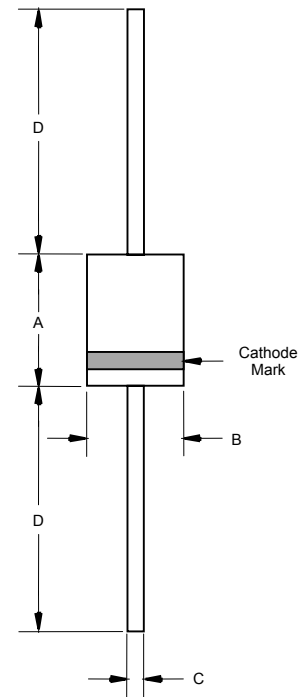
- Operating Temperature: -55°C to $+150^\circ\text{C}$
- Storage Temperature: -55°C to $+150^\circ\text{C}$

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
6A05G	50V	35V	50V
6A1G	100V	70V	100V
6A2G	200V	140V	200V
6A4G	400V	280V	400V
6A6G	600V	420V	600V
6A8G	800V	560V	800V
6A10G	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	$T_A = 60^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM} = 6.0\text{A};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	$10\mu\text{A}$	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	100pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

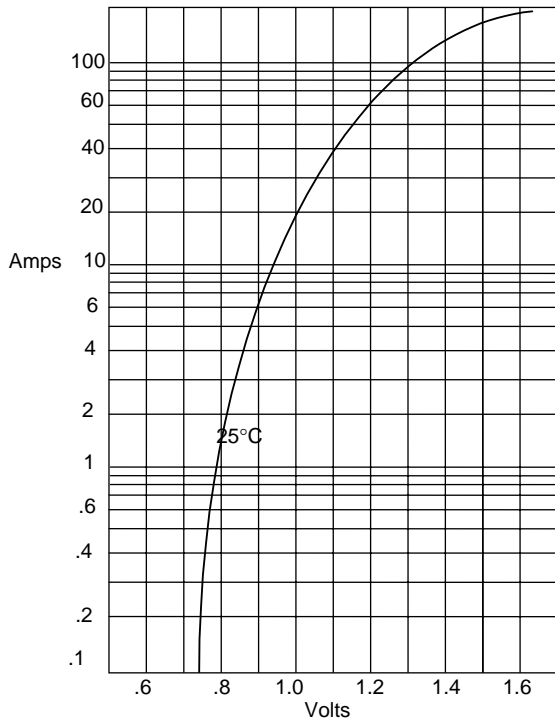
R-6



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

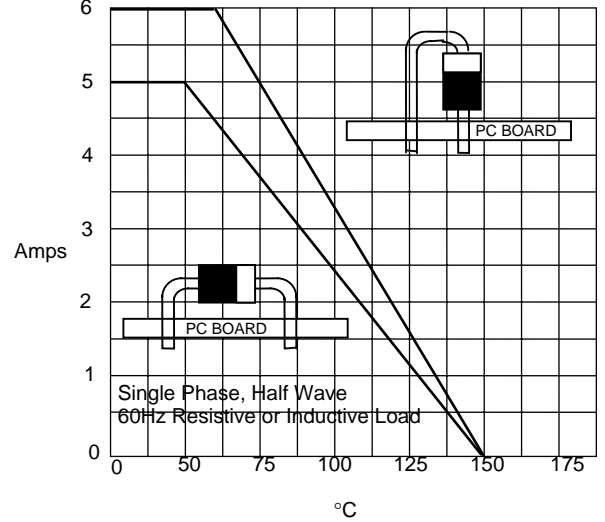
6A05G thru 6A10G

Figure 1
Typical Forward Characteristics



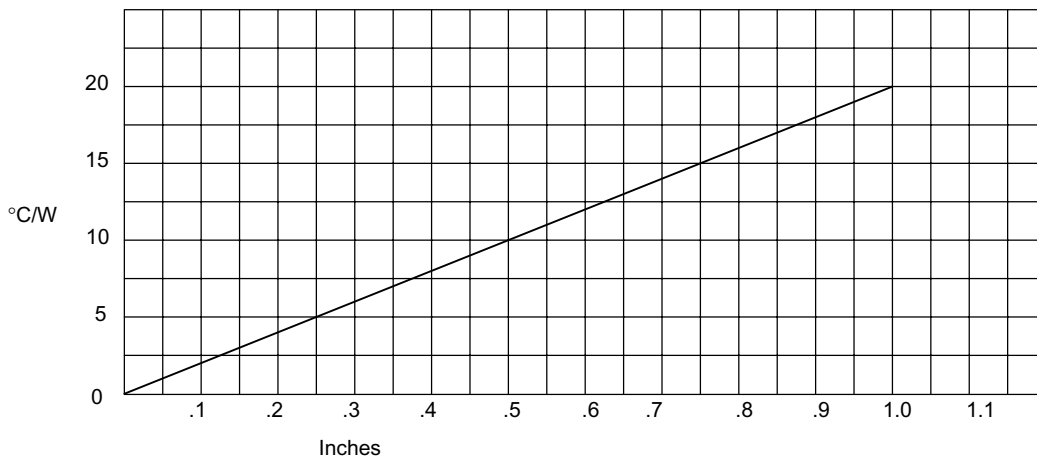
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



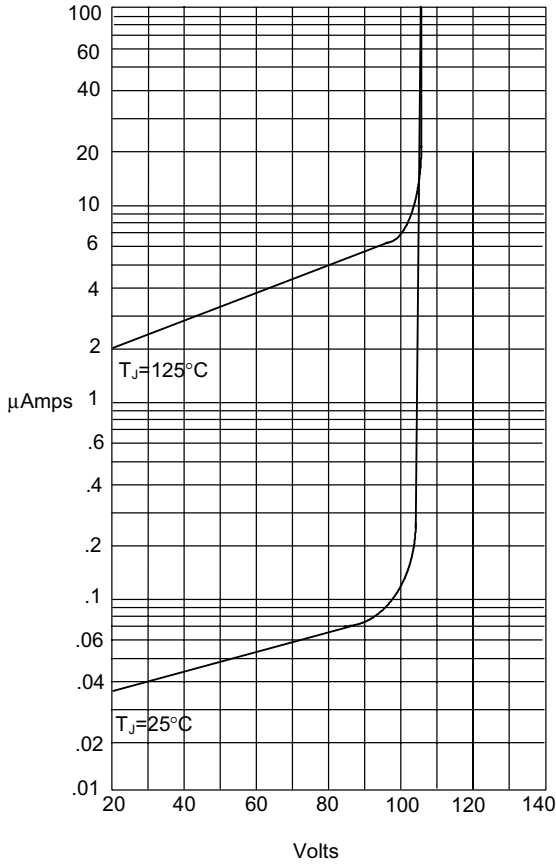
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Typical Thermal Resistance versus Lead Length



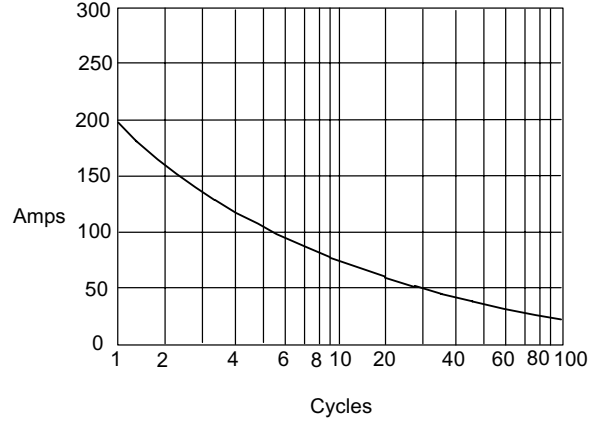
Thermal Resistance - °C/W *versus*
Equal Lead Length To Heat Sink - Inches

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles



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Ordering Information

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

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

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