



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 and Low Leakage
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking : Cathode band and type number
- High Current Operation 6.0 Ampere @  $T_A=75^\circ\text{C}$
- Glass Passivated Junction In R-6 Package
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

### Maximum Ratings

- Operating Temperature:  $-55^\circ\text{C}$  to  $+150^\circ\text{C}$
- Storage Temperature:  $-55^\circ\text{C}$  to  $+175^\circ\text{C}$

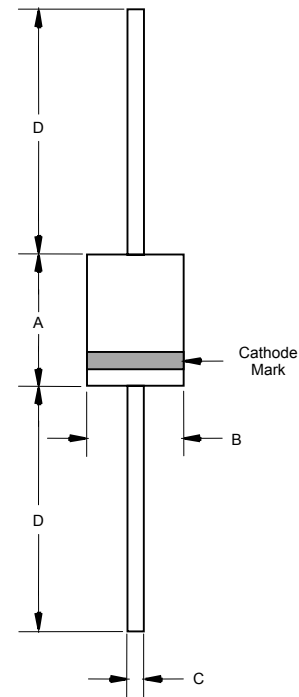
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
6A05G	50V	35V	50V
6A1G	100V	70V	100V
6A2G	200V	140V	200V
6A4G	400V	280V	400V
6A6G	600V	420V	600V
6A8G	800V	560V	800V
6A10G	1000V	700V	1000V

### Electrical Characteristics @ $25^\circ\text{C}$ Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 6.0A;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	$10\mu\text{A}$	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	150pF	Measured at 1.0MHz, $V_R=4.0V$
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	$20.0^\circ\text{C}/W$ $4.0^\circ\text{C}/W$	

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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 tru 6A10G

Figure 1  
Typical Forward Characteristics

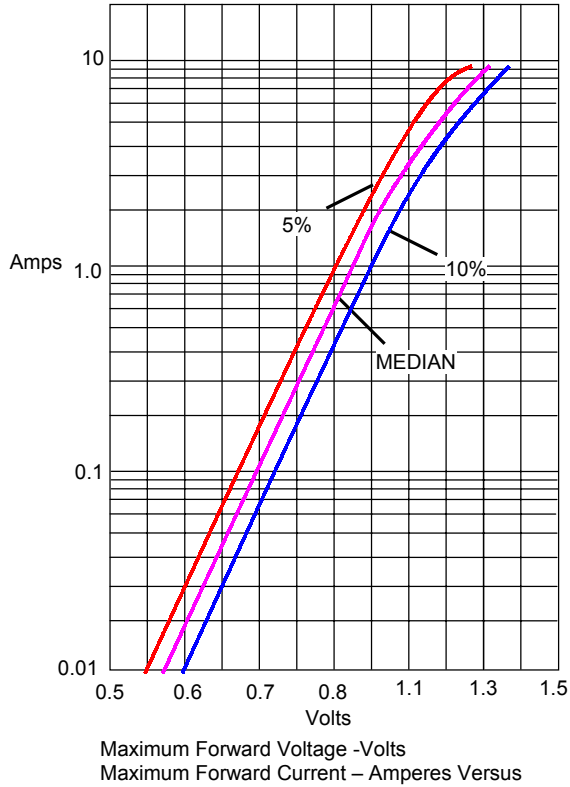


Figure 2  
Forward Derating Curve

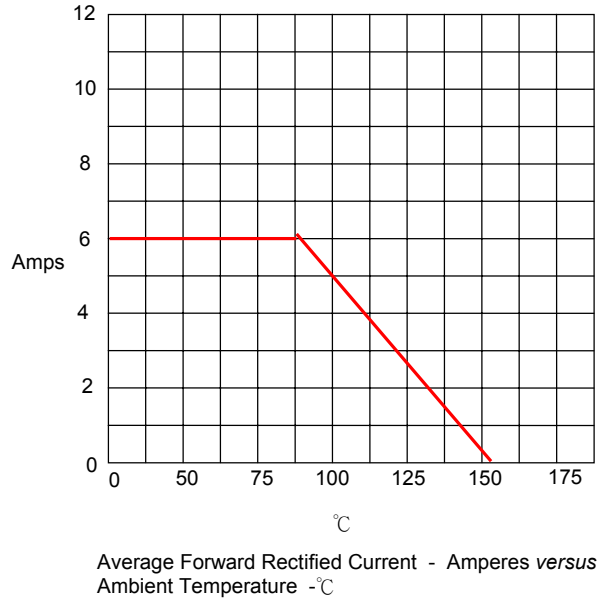
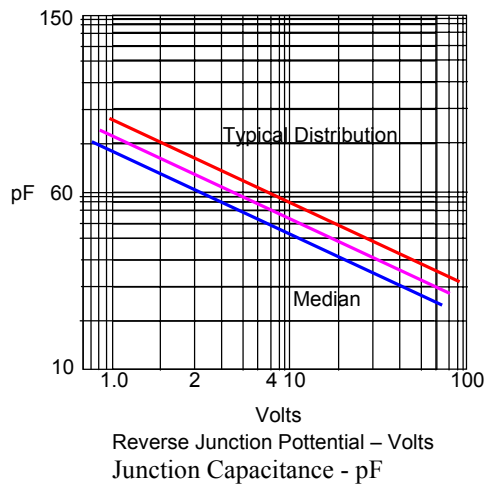
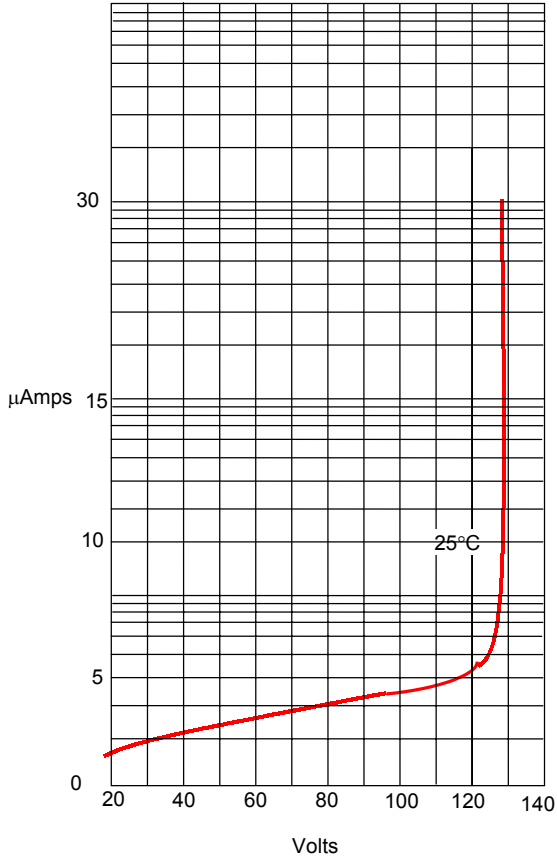


Figure 3.  
Capacitance Characteristics

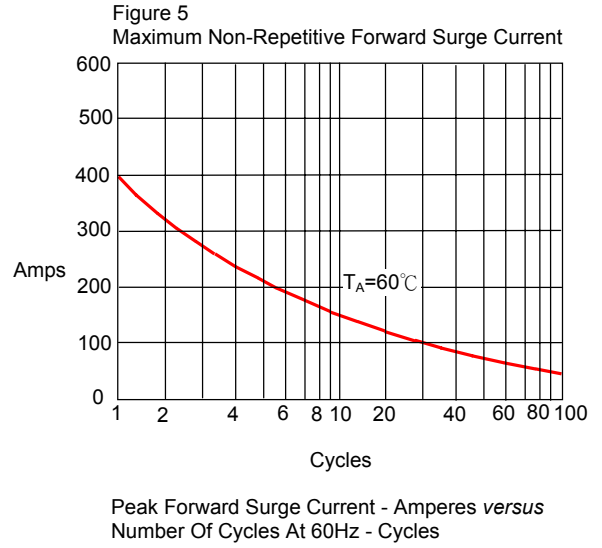


## 6A05G thru 6A10G

Figure 4  
Typical Reverse Characteristics



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



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

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