

**Micro Commercial Components** 

Maximum Ratings

**Features** 

6A10G

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## 6A05G **THRU** 6A10G

## 6 Amp Glass **Passivated**

50 to 1000 Volts

# **Junction Rectifier**

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

High Surge Current Capability and Low Leakage

Marking: Cathode band and type number High Current Operation 6.0 Ampere @ T<sub>A</sub>=75°C

Glass Passivated Junction In R-6 Package

RoHS Compliant. See ordering information)

Operating Temperature: -55°C to +150°C Storage Temperature: -55°C to +175°C

Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates

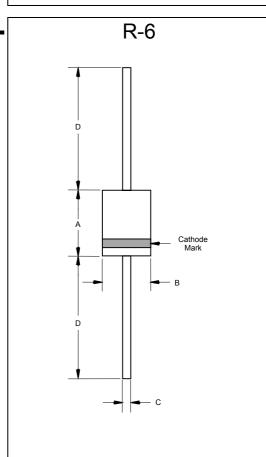
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

700V

1000V

Average Forward	$I_{F(AV)}$	6.0A	T <sub>A</sub> =75°C
Current			
Peak Forward Surge	$I_{FSM}$	400A	8.3ms, half sine
Current			
Maximum			
Instantaneous	$V_{F}$	1.0V	$I_{FM} = 6.0A;$
Forward Voltage			
Maximum DC			
Reverse Current At	$I_R$	10μΑ	T <sub>J</sub> = 25°℃
Rated DC Blocking			
Voltage			
Typical Junction	CJ	150pF	Measured at
Capacitance		•	1.0MHz, V <sub>R</sub> =4.0V
Typical Thermal	$R_{\theta JA}$	20.0°C/W	
Resistance	$R_{ heta JL}$	4.0°C/W	

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



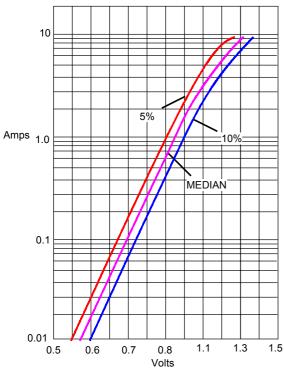
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.340	.360	8.60	9.10		
В	.340	.360	8.60	9.10		
С	.048	.052	1.20	1.30		
D	1.000		25.40			

1000V



#### 6A05G tru 6A10G

Figure 1 Typical Forward Characteristics



Maximum Forward Voltage -Volts
Maximum Forward Current – Amperes Versus

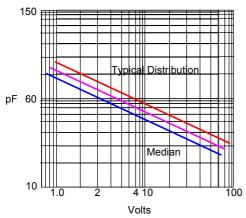
10
8
Amps
4
2
0
0
50
75
100
125
150
175

Figure 2

Forward Derating Curve

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

Figure 3.
Capacitance Characteristics

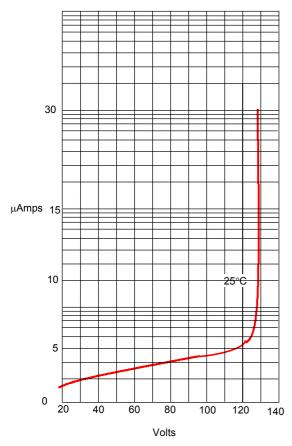


 $\label{eq:continuous} \begin{aligned} & \text{Reverse Junction Pottential - Volts} \\ & \text{Junction Capacitance - pF} \end{aligned}$ 

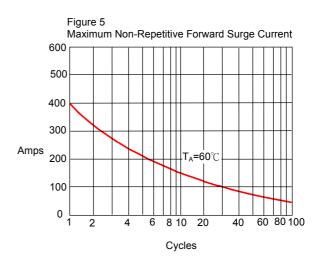


#### 6A05G thru 6A10G

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



### **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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