

### **Features**

- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix DesignatesÁ Compliant. See Ordering Information)
- Fast Switching Speed For High Efficiency
- Glass Passivated Junction
- Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Ambient

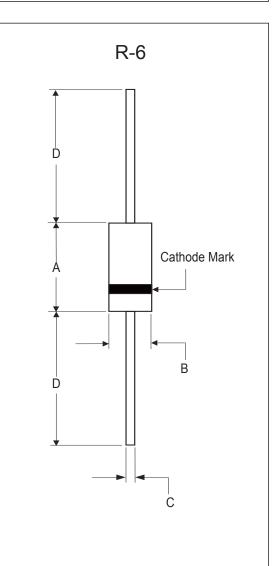
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR601GP	FR601GP	50V	35V	50V
FR602GP	FR602GP	100V	70V	100V
FR603GP	FR603GP	200V	140V	200V
FR604GP	FR604GP	400V	280V	400V
FR605GP	FR605GP	600V	420V	600V
FR606GP	FR606GP	800V	560V	800V
FR607GP	FR607GP	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	6.0A	T <sub>A</sub> =55 °C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.30V	I <sub>FM</sub> =6.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10.0μA 150μA	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C
Maximum Reverse Recovery Time FR601GP~FR604GP FR605GP FR606GP~FR607GP	t <sub>rr</sub>	150ns 250ns 500ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance	CJ	150pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

# 6 Amp Fast Recovery Rectifier 50 to 1000 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.340	0.360	8.60	9.10		
В	0.340	0.360	8.60	9.10		
С	0.048	0.052	1.20	1.32		
D	1.000		25.40			



# **Curve Characteristics**

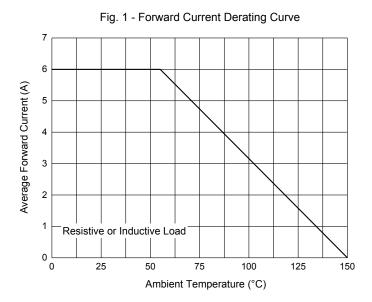


Fig. 3 - Typical Instantaneous Forward Characteristics

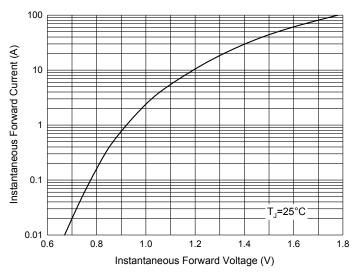
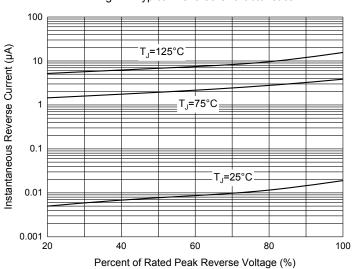


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current 250 225 Peak Forward Surge Current (A) 200 175 150 125 100 75 50 25 <sup>-</sup>8.3 ms Single Half Sine-Wave 0 10 100 Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Characteristics





# **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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