

**Micro Commercial Components** 

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# FR601GP THRU FR607GP

# Features\_

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Glass Passivated Junction
- Low Forward Voltage Drop
- High Current Capability
- Fast Switching Speed For High Efficiency
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

# **Maximum Ratings**

- Operating Temperature: -55°C to +150°C
  Storage Temperature: -55°C to +150°C
- MCC Device Maximum Maximum Maximum Catalog Marking **RMS** Reccurrent DC Number Voltage Blocking Peak Reverse Voltage Voltage FR601GP 35V 50V FR601GP 50V FR602GP 70V FR602GP 100V 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

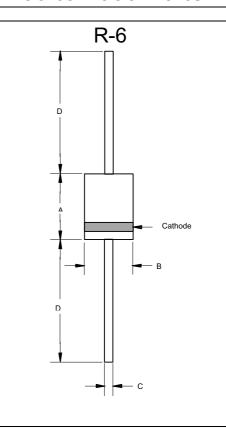
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	6 A	T <sub>A</sub> = 55°C
Peak Forward Surge	I <sub>FSM</sub>	300A	8.3ms, half sine
Current			
Maximum			$I_{FM} = 6.0A;$
Instantaneous	$V_{F}$	1.3V	T <sub>A</sub> = 25°C
Forward Voltage			
Maximum DC			
Reverse Current At	$I_R$	10μΑ	T <sub>A</sub> = 25°C
Rated DC Blocking		150μA	T <sub>A</sub> = 55°C
Voltage		•	
Maximum Reverse			
Recovery Time			
FR601GP-604GP	$T_{rr}$	150ns	$I_F$ =0.5A, $I_R$ =1.0A,
FR605GP		250ns	I <sub>rr</sub> =0.25A
FR606GP-607GP		500ns	
Typical Junction	CJ	150pF	Measured at
Capacitance			1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

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

# 6 Amp Glass Passivated Fast Recovery Rectifier 50 to 1000 Volts

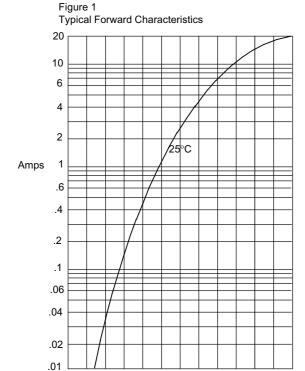


DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.340	.360	8.60	9.10		
В	.340	.360	8.60	9.10		
С	.048	.052	1.20	1.30		
D	1.000		25.40			
	1.000		23.40		l	

## FR601GP thru FR607GP

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Volts
Instantaneous Forward Current - Amperes/ersus
Instantaneous Forward Voltage - Volts

1.2

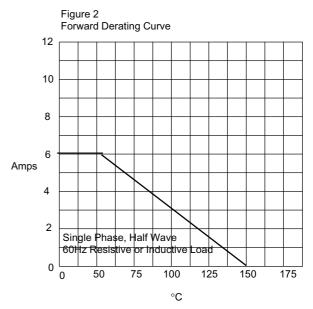
1.4

1.6

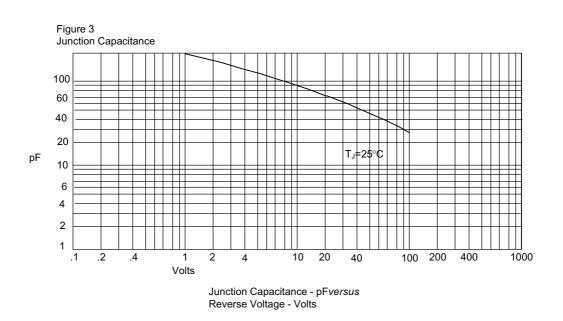
1.0

.6

.8

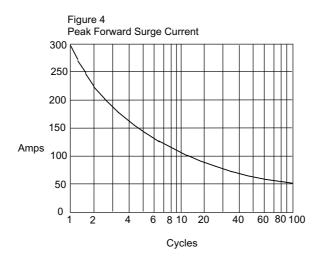


Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C



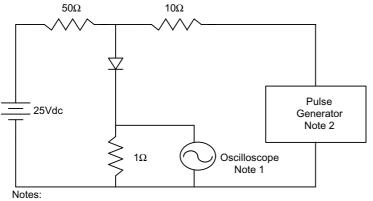
## FR601GP thru FR607GP

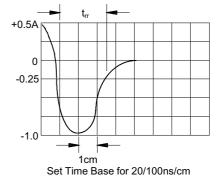




Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram





1. Rise Time = 7ns max. Input impedance = 1 megohm, 22pF 2. Rise Time = 10ns max. Source impedance = 50 ohms 3. Resistors are non-inductive



## **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel500pcs/Reel
(Part Number)-AP	Ammo Packing;450pcs/AmmoBox
(Part Number)-BP	Bulk;200pcs/Box

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