

ROHS

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 FR601 THRU FR607

# **Features**

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop
- High Current Capability
- Fast Switching Speed For High Efficiency

# **Maximum Ratings**

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

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
FR601	FR601	50V	35V	50V
FR602	FR602	100V	70V	100V
FR603	FR603	200V	140V	200V
FR604	FR604	400V	280V	400V
FR605	FR605	600V	420V	600V
FR606	FR606	800V	560V	800V
FR607	FR607	1000V	700V	1000V

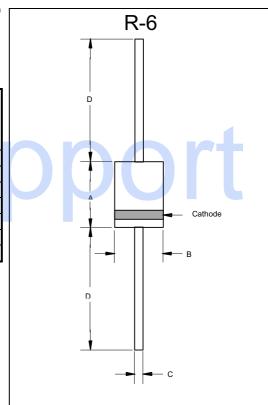
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	$I_{F(AV)}$	6 A	T <sub>A</sub> = 55°C
Current		0004	0.0 1.16 :
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		150μΑ	T <sub>A</sub> = 55°C
Voltage			- A
Maximum Reverse			
Recovery Time			
FR601-604	$T_{rr}$	150ns	$I_F = 0.5A, I_R = 1.0A,$
FR605		250ns	I <sub>rr</sub> =0.25A
FR606-607		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 Fast Recovery Rectifier 50 to 1000 Volts



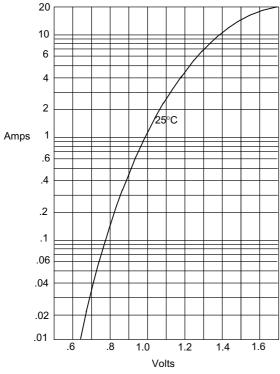
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.340	.360	8.60	9.10			
В	.340	.360	8.60	9.10			
С	.048	.052	1.20	1.30			
D	1.000		25.40				

## FR601 thru FR607

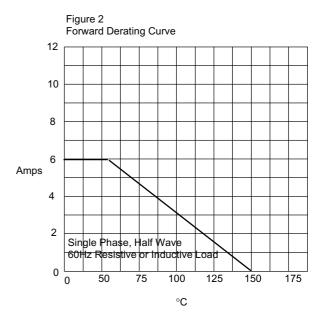
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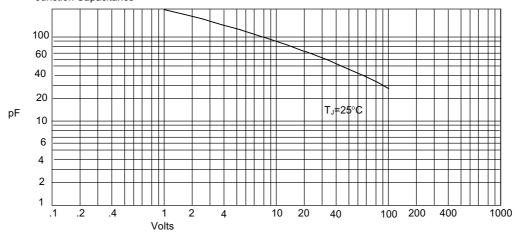


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



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



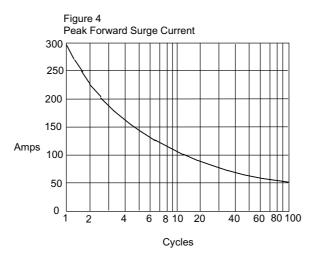


Junction Capacitance - pF*versus* Reverse Voltage - Volts

## FR601 thru FR607

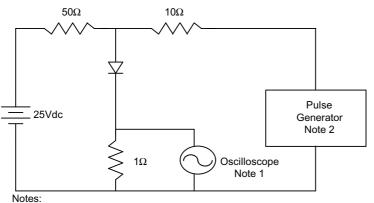
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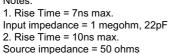
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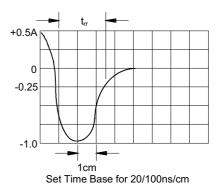
Peak Forward Surge Current - Amperes*versus* Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram





3. Resistors are non-inductive





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### 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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