



Micro Commercial Components
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Features

- Lead Free Finish/Rohs Compliant (Note 1) ("P" Suffix designates Compliant. See ordering information)
- Fast Switching Speed For High Efficiency
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Marking : Cathode band and type number

Maximum Ratings

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

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR8A	50V	35V	50V
FR8B	100V	70V	100V
FR8D	200V	140V	200V
FR8G	400V	280V	400V
FR8K	800V	560V	800V
FR8M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

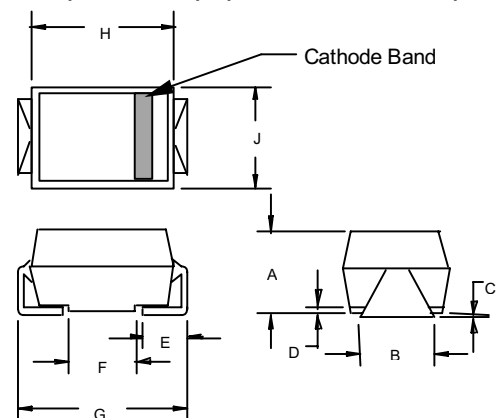
Average Forward Current	$I_{F(AV)}$	8 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	$I_{FM} = 8.0A;$ $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10µA 50µA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	150ns 500ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
			FR8A-FR8G FR8K-FR8M

*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%
 Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

**FR8A
 THRU
 FR8M**

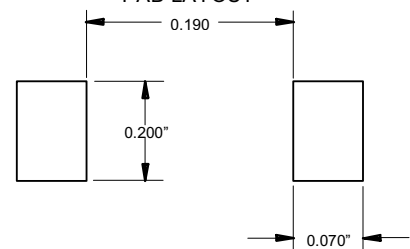
**8 Amp Fast
 Recovery Rectifier
 50 to 1000 Volts**

**DO-214AB
 (HSMC) (Round Lead)**



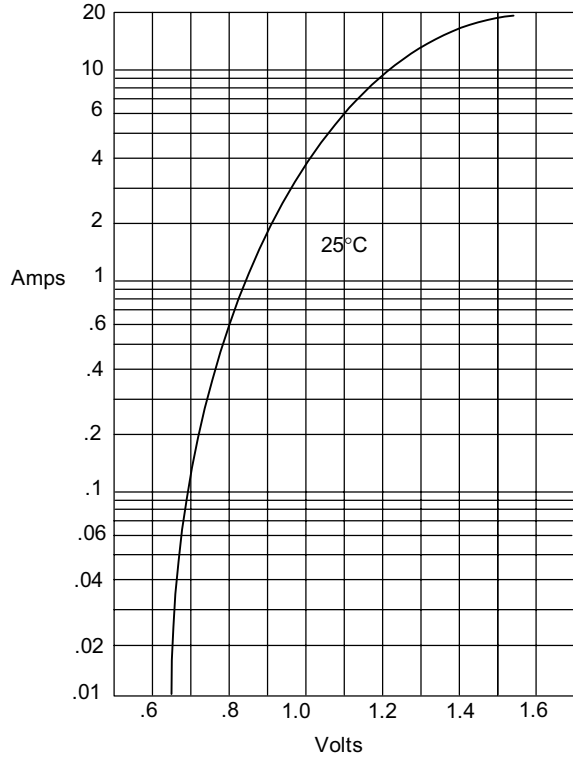
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.200	.214	5.08	5.43	
B	.177	.203	4.70	5.30	
C	.002	.005	.05	.13	
D	—	.02	—	.51	
E	.047	.056	1.20	1.42	
F	.168	.179	4.27	4.55	
G	.309	.322	7.85	8.18	
H	.239	.243	6.08	6.18	
J	.234	.240	5.95	6.10	

**SUGGESTED SOLDER
 PAD LAYOUT**



FR8A thru FR8M

Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve

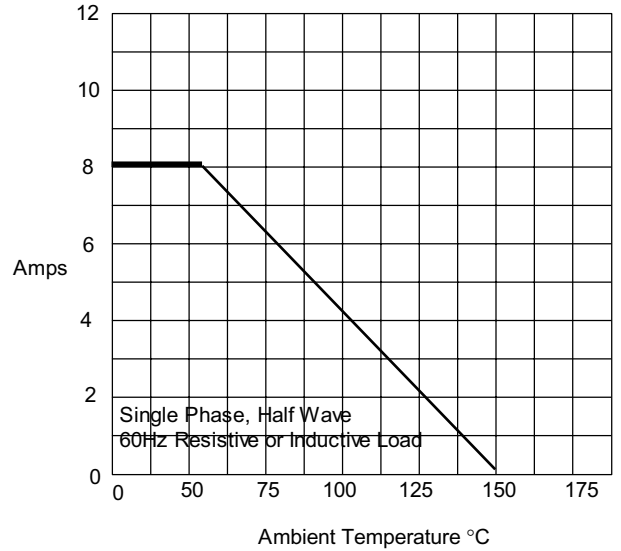
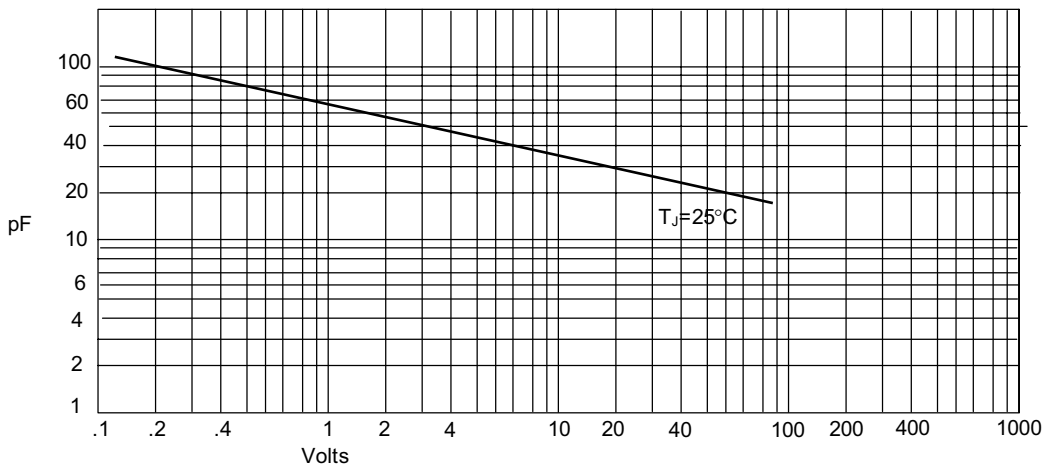


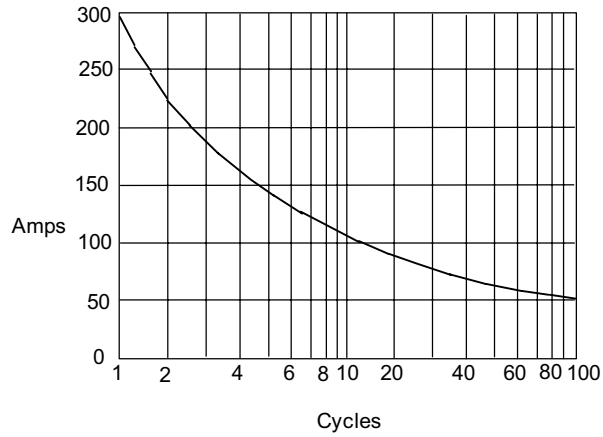
Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

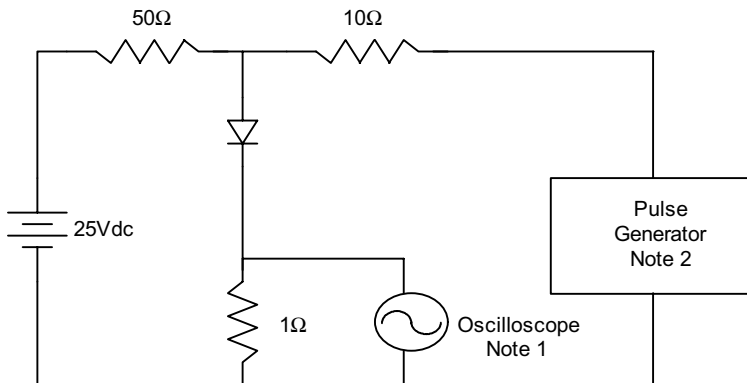
FR8A thru FR8M

Figure 4
Peak Forward Surge Current

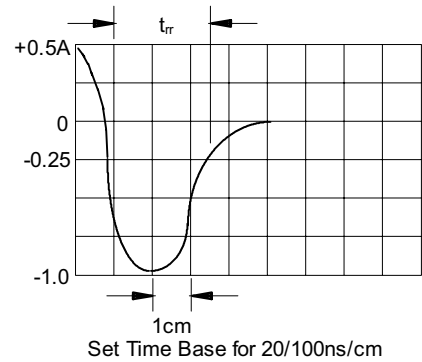


Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram



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





TM

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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;1.5Kpcs/Reel

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