

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Fast Reverse Recovery Time
- Glass Passivated Chip Junction
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 1)("P" Suffix Designates RoHS Compliant. See Ordering Information)

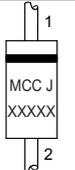
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value							Unit
		FR 201GP	FR 202GP	FR 203GP	FR 204GP	FR 205GP	FR 206GP	FR 207GP	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current @ $T_A=55^\circ\text{C}$	$I_{F(AV)}$	2							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	60							A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		120							
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	14.9							A^2s

Marking Code

Part Number	Marking Code
FR201GP	FR201GP
FR202GP	FR202GP
FR203GP	FR203GP
FR204GP	FR204GP
FR205GP	FR205GP
FR206GP	FR206GP
FR207GP	FR207GP

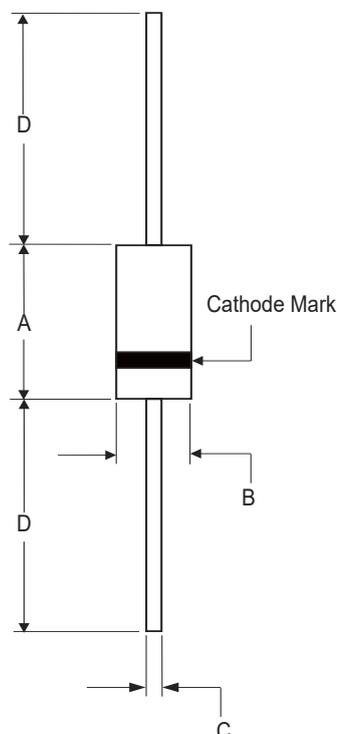
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	 <p>XXXXX: Marking Code</p>	
2	Anode		

Note: 1. High temperature solder exemption applied, see EU directive annex 7a.

2 Amp Fast Recovery Rectifier 50 to 1000 Volts

DO-15



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.028	0.035	0.70	0.90	
D	1.000	-----	25.40	-----	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient			50		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=2A; T_J=25^\circ C$			1.30	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			5 100	μA
Reverse Recovery Time FR201GP~FR204GP FR205GP FR206GP~FR207GP	t_{rr}	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A; T_J=25^\circ C$			150 250 500	ns
Junction Capacitance FR201GP~FR204GP FR205GP~FR207GP	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		18 11		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

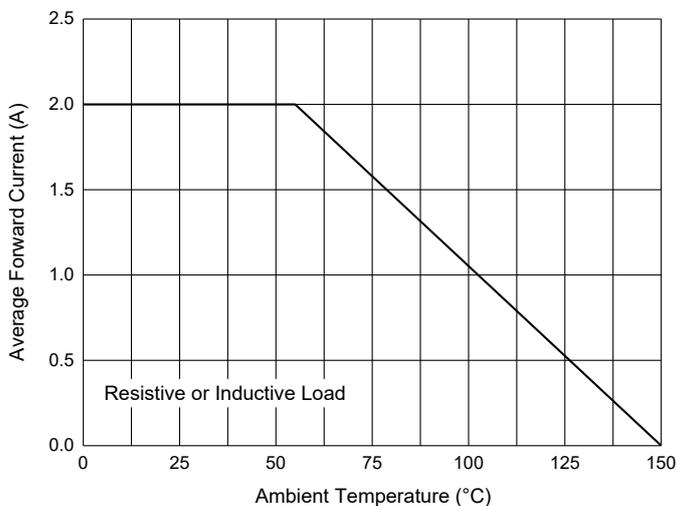


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

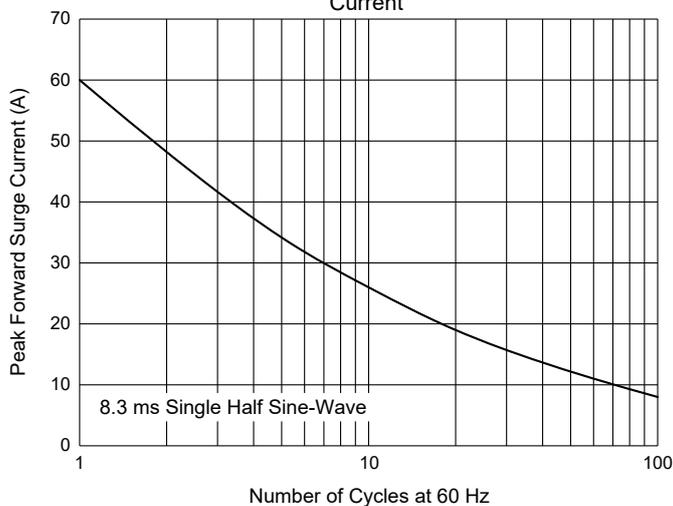


Fig. 3 - Typical Forward Characteristics

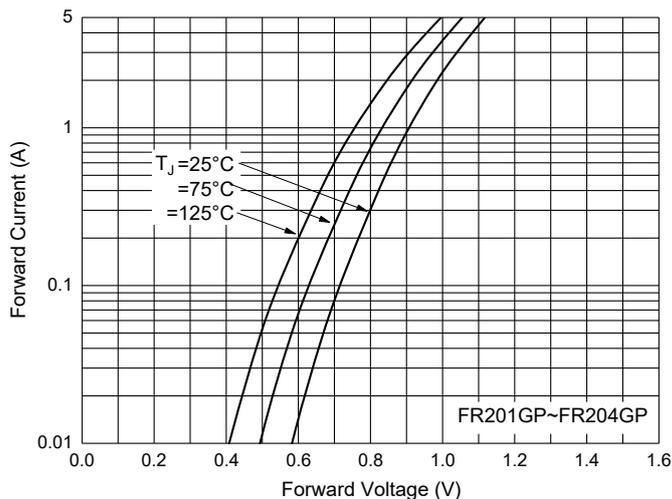


Fig. 4 - Typical Forward Characteristics

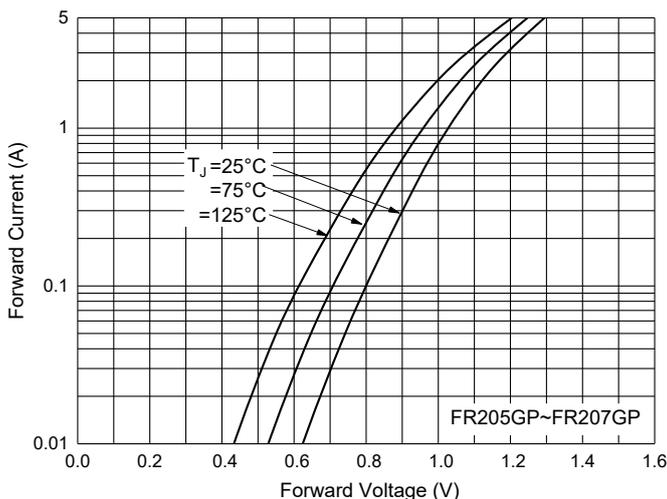


Fig. 5 - Typical Reverse Leakage Characteristics

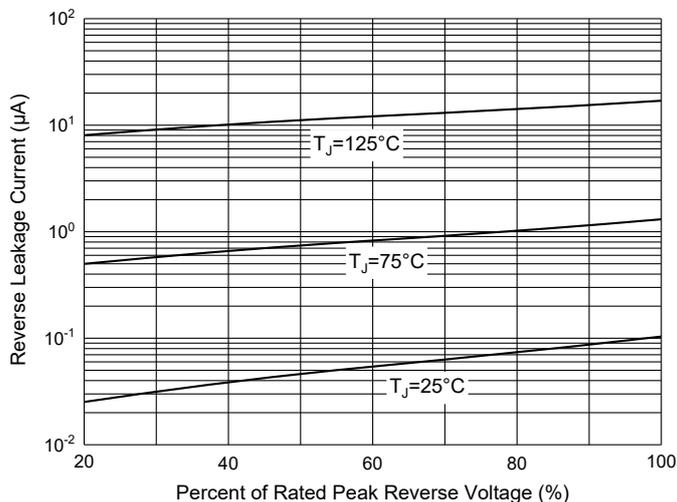
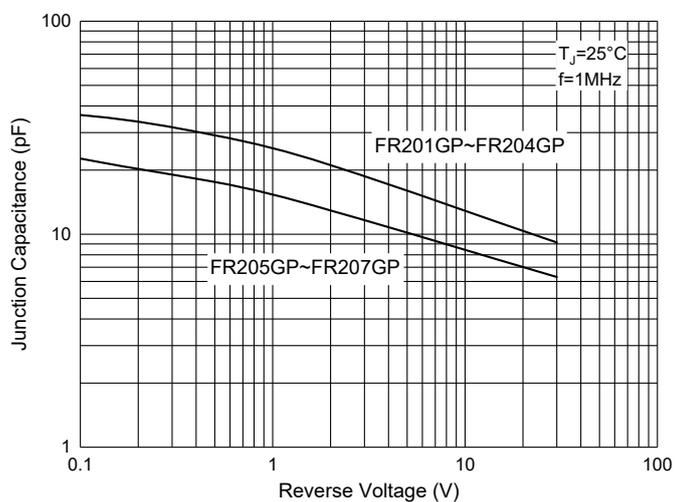


Fig. 6 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:4Kpcs/Reel
Part Number-AP	Ammo Packing: 3Kpcs/Ammo Box
Part Number-BP	Bulk:500pcs/Box,25Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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