

#### **Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 18°C/W Junction to Lead
- Maximum Thermal Resistance: 55°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR2A-L	FR2A	50V	35V	50V
FR2B-L	FR2B	100V	70V	100V
FR2D-L	FR2D	200V	140V	200V
FR2G-L	FR2G	400V	280V	400V
FR2J-L	FR2J	600V	420V	600V
FR2K-L	FR2K	800V	560V	800V
FR2M-L	FR2M	1000V	700V	1000V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

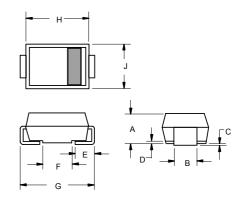
Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>L</sub> =100°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.30V	I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0µA	T <sub>J</sub> =25°C
Maximum Reverse Recovery Time FR2A-L~FR2G-L FR2J-L FR2K-L~FR2M-L	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	50pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

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

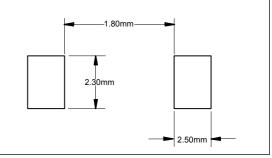
# 2.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

# DO-214AA (SMB) (LEAD FRAME)



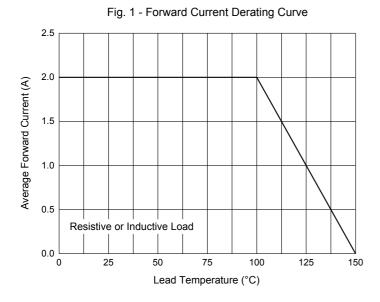
DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.079	0.103	2.00	2.62		
В	0.075	0.087	1.91	2.21		
С	0.002	0.008	0.05	0.20		
D	0.006	0.012	0.15	0.31		
E	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.200	0.220	5.08	5.59		
Н	0.160	0.191	4.06	4.85		
J	0.130	0.155	3.30	3.94		

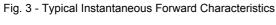
#### Suggested Solder Pad Layout





## **Curve Characteristics**





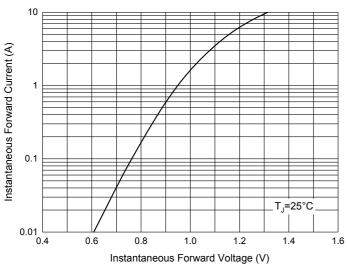


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

40

40

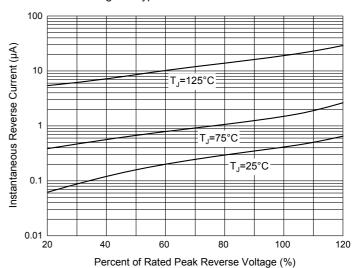
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Characteristics





# **Ordering Information**

Device	Packing	
FR2A-LTP~FR2M-LTP	Tape&Reel: 3Kpcs/Reel	

Note: Adding "-HF" Suffix For Halogen Free, eg. FR2A-LTP-HF~FR2M-LTP-HF

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp**. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp**. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp**, and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Rev.3-1-01012019 3/3 MCCSEMI.COM