Micro Commercial Components
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FR2A-L THRU FR2M-L

2.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Higher Temp Soldering: 260°C for 10 Seconds At Terminals
- Available on Tape and Reel

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

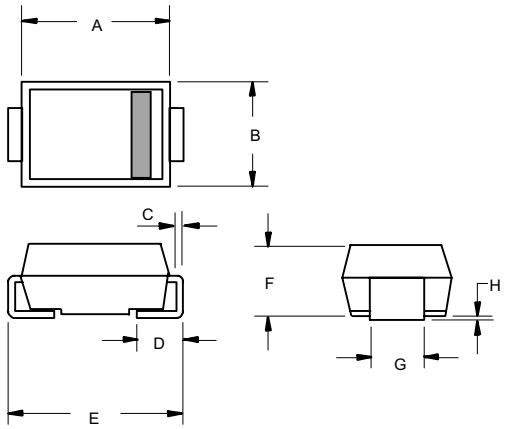
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR2A-L	FR2A	50V	35V	50V
FR2B-L	FR2B	100V	70V	100V
FR2D-L	FR2D	200V	140V	200V
FR2G-L	FR2G	400V	280V	400V
FR2J-L	FR2J	600V	420V	600V
FR2K-L	FR2K	800V	560V	800V
FR2M-L	FR2M	1000V	700V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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	T_J=90°C
Peak Forward Surge Current	I_{FSM}	50A	8.3ms half sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	I_{FM}=2.0A T_A=25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA	T_J=25°C
Maximum Reverse Recovery Times FR2A-L~FR2G-L FR2J-L FR2K-L~FR2M-L	t_{rr}	150ns 250ns 500ns	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
Typical Junction Capacitance	C_j	50pF	Measured at 1.0MHz, V_R=4.0V

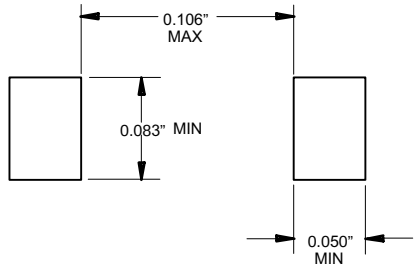
Note:1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
*Pulse test: Pulse width 300 usec, duty cycle 2%.

DO-214AA
(SMB) (LEAD FRAME)



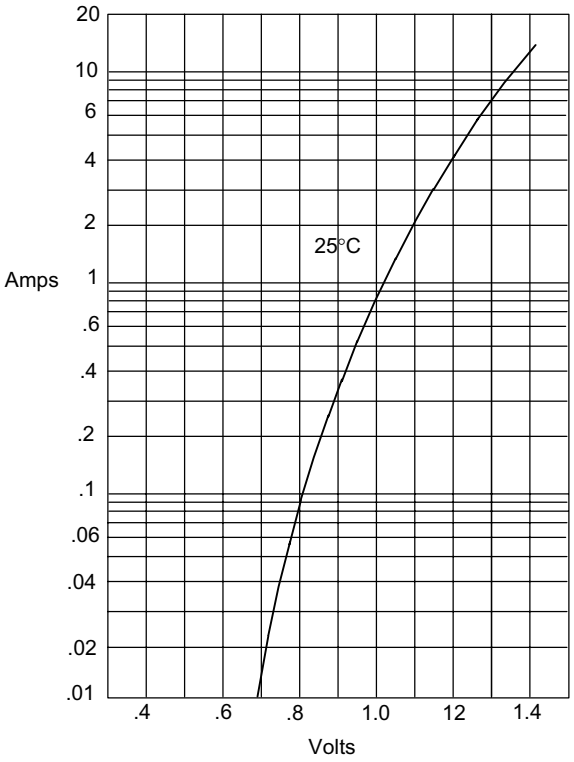
DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	.160	.180	4.06	4.57	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.205	.220	5.21	5.59	
F	.079	.103	2.01	2.62	
G	.077	.087	1.96	2.21	
H	.002	.008	0.05	0.20	

SUGGESTED SOLDER PAD LAYOUT



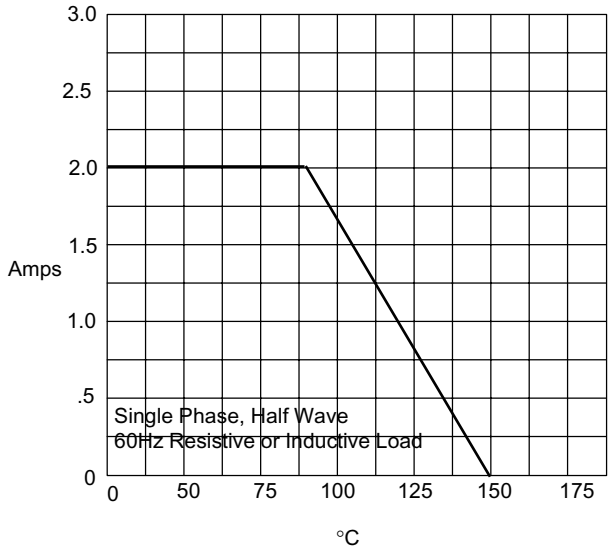
FR2A-L thru FR2M-L

Figure 1
Typical Forward Characteristics



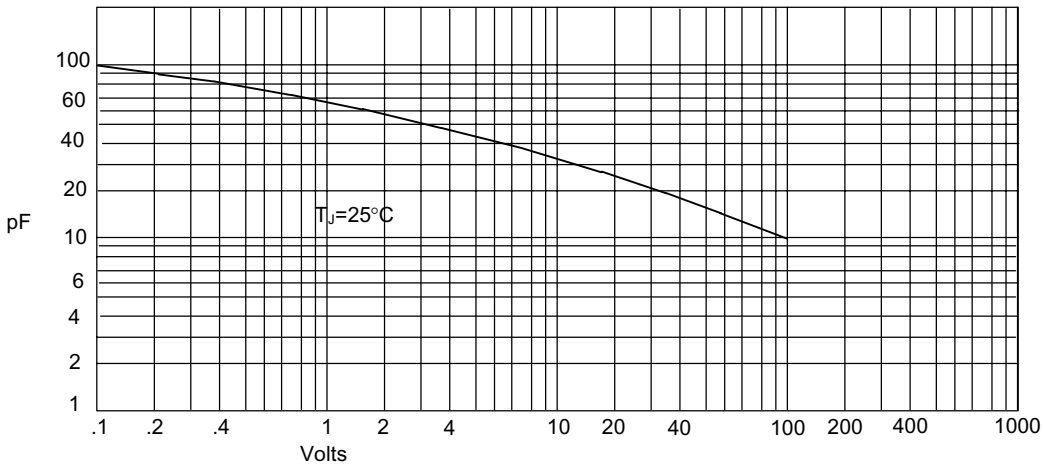
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



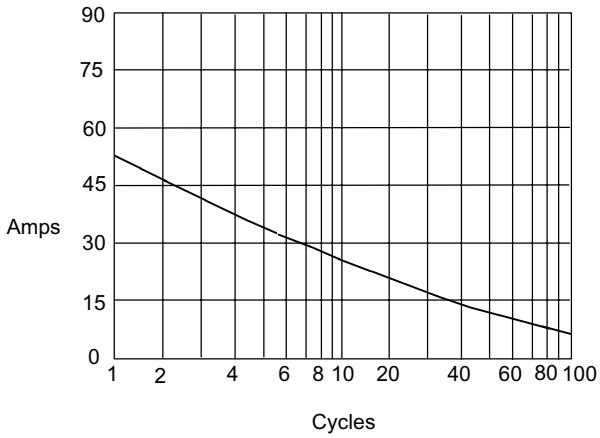
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature -°C

Figure 3
Junction Capacitance



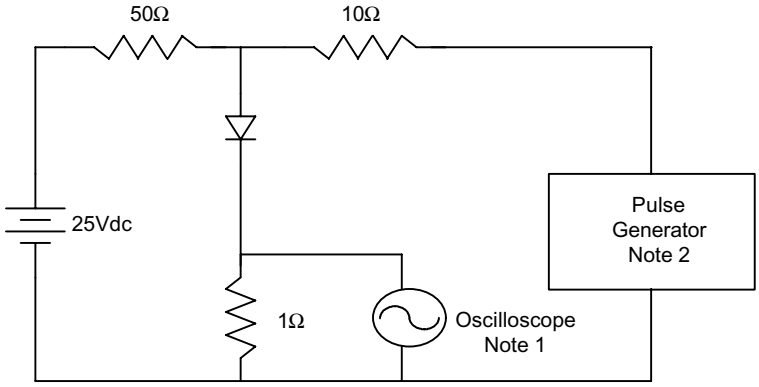
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

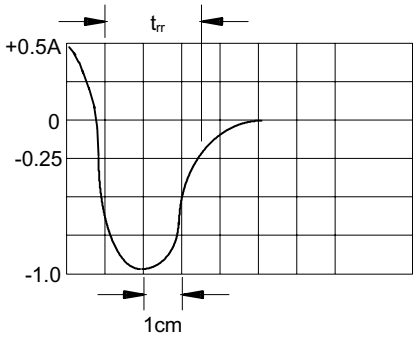
Figure 4
Maximum Non-Repetitive Forward Surge Current



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

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram





Set Time Base for 20/100ns/cm

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

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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