

**Micro Commercial Components** 



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# FS2A-L THRU FS2M-L

### **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
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

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

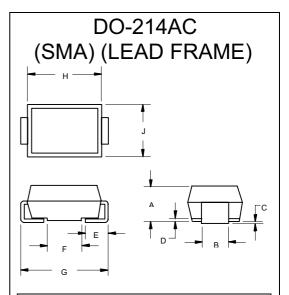
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FS2A-L	FS2A	50V	35V	50V
FS2B-L	FS2B	100V	70V	100V
FS2D-L	FS2D	200V	140V	200V
FS2G-L	FS2G	400V	280V	400V
FS2J-L	FS2J	600V	420V	600V
FS2K-L	FS2K	800V	560V	800V
FS2M-L	FS2M	1000V	700V	1000V

### **Hectrical Characteristics @25°CUhless Otherwise Specified**

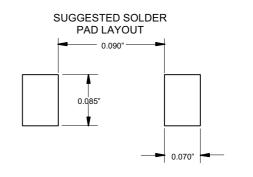
			•
Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>J</sub> =90°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms half sine
Maximum Instantaneous Forward Voltage	$V_{F}$	1.30V	I <sub>FM</sub> =2.0A T <sub>A</sub> =25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0uA	T <sub>J</sub> =25°C
Maximum Reverse Recovery Times FS2A-L~FS2G-L FS2J-L FS2K-L~FS2M-L	t <sub>rr</sub>	150ns 250ns 500ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
Typical Junction Capacitance	C <sub>j</sub>	50pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

# 2.0 Amp Fast Recovery Rectifier 50 to 1000 Volts



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.079	.096	2.00	2.44		
В	.050	.064	1.27	1.63		
С	.002	.008	.05	.20		
D		.02		.51		
E	.030	.060	.76	1.52		
F	.065	.091	1.65	2.32		
G	.189	.220	4.80	5.59		
Н	.157	.181	4.00	4.60		
J	.090	.115	2.25	2.92		

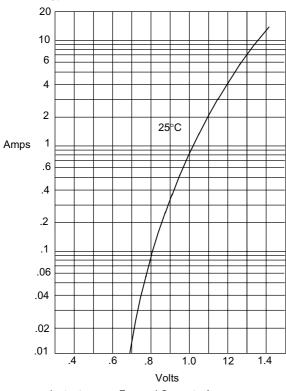




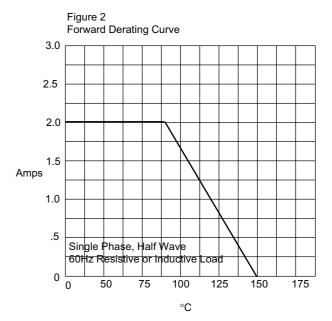
## FS2A-L thru FS2M-L

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Figure 1
Typical Forward Characteristics

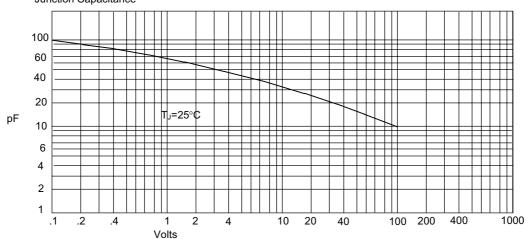


Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts



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

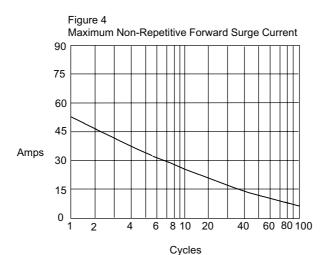
Figure 3
Junction Capacitance



Junction Capacitance - pF*versus* Reverse Voltage - Volts

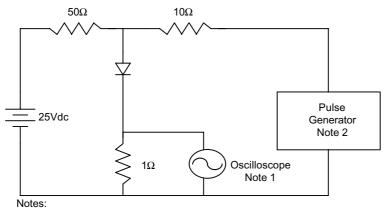


## FS2A-L thru FS2M-L



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 5
Reverse Recovery Time Characteristic And Test Circuit Diagram



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

+0.5A

t<sub>rr</sub>

+0.5A

-1.0

-1.0

1cm

Set Time Base for 20/100ns/cm



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### Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 5Kpcs/Reel	

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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