

**Micro Commercial Components** 

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#### Features

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Easy Pick And Place
- High Temp Soldering: 260 °C for 10 Seconds At Terminals
- Superfast Recovery Times For High Efficiency

#### **Maximum Ratings**

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum				
Catalog	Marking	Recurrent RMS		DC				
Number		Peak Reverse Voltage		Blocking				
		Voltage		Voltage				
FR2AL	FR2A	50V	35V	50V				
FR2BL	FR2B	100V	70V	100V				
FR2DL	FR2D	200V	140V	200V				
FR2GL	FR2G	400V	280V	400V				
FR2JL	FR2J	600V	420V	600V				
FR2KL	FR2K	800V	560V	800V				
FR2ML	FR2M	1000V	700V	1000V				

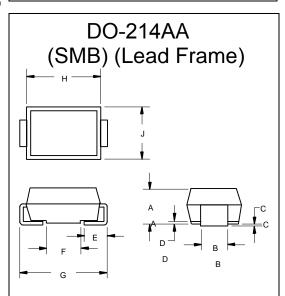
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	I <sub>F(AV)</sub>	2.0A	$T_A = 90^{\circ}C$			
current						
Peak Forward Surge	I <sub>FSM</sub>	50A	8.3ms, half sine			
Current						
Maximum			I <sub>FM</sub> = 2.0A;			
Instantaneous	VF	1.30V	T <sub>.1</sub> = 25°C*			
Forward Voltage			.,			
Maximum DC						
Reverse Current At	I <sub>R</sub>	5μΑ	T <sub>J</sub> = 25°C			
Rated DC Blocking		200µA	T <sub>.1</sub> = 125°C			
Voltage		2000	1, 120 0			
Maximum Reverse						
Recovery Time						
FR2AL-GL	Trr	150ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A,			
FR2JL		250ns	Irr=0.25A			
FR2KL-ML		500ns				
Typical Junction	CJ	40pF	Measured at			
Capacitance		•	1.0MHz, V <sub>R</sub> =4.0V			
Pulse test: Pulse width 300 usec. Duty cycle 1%						

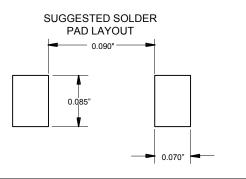
\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 1%

## FR2AL THRU FR2ML

#### 2 Amp Fast Recovery Silicon Rectifier 50 to 1000 Volts



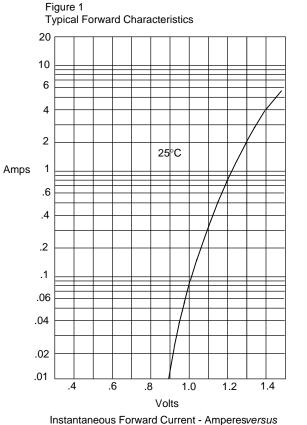
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.075	.095	1.91	2.41			
В	.077	.083	1.96	2.10			
С	.002	.008	.05	.20			
D		.02		.51			
Е	.030	.060	.76	1.52			
G	.200	.220	5.08	5.59			
Н	.160	.187	4.06	4.75			
J	.130	.155	3.30	3.94			



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#### **Revision: 5**

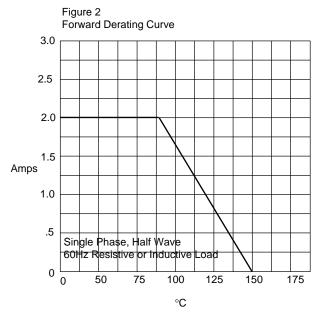
### FR2AL thru FR2ML



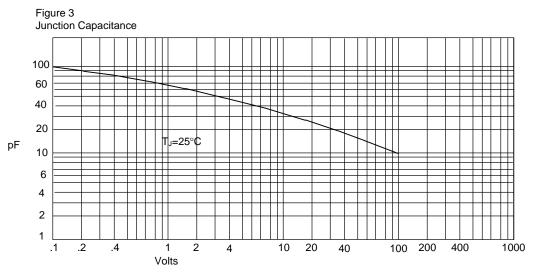
Instantaneous Forward Voltage - Volts



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



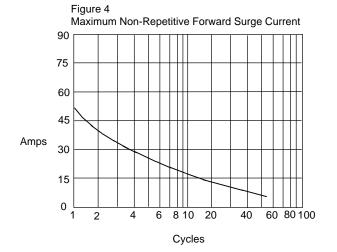
Junction Capacitance - pF*versus* Reverse Voltage - Volts

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### FR2AL thru FR2ML

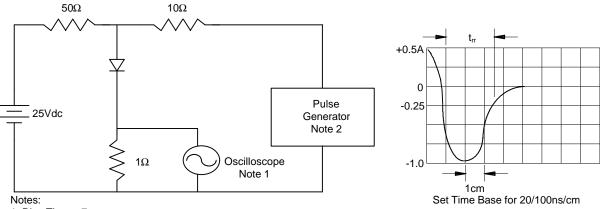


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Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

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

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2006/05/19



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