

**FFM301 THRU FFM307****SURFACE MOUNT GLASS PASSIVATED  
FAST RECOVERY SILICON RECTIFIER****VOLTAGE RANGE 50 to 1000 Volts CURRENT 3.0 Amperes****FEATURES**

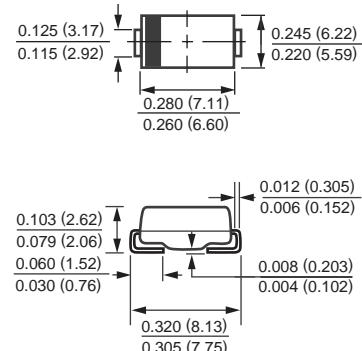
- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.24 gram

**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

**DO-214AB**

Dimensions in inches and (millimeters)

**MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)**

RATINGS	SYMBOL	FFM301	FFM302	FFM303	FFM304	FFM305	FFM306	FFM307	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 55°C	I <sub>O</sub>				3.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>				200				Amps
Maximum Thermal Resistance	(Note 2) R <sub>θJL</sub>				15				°C/W
	(Note 3) R <sub>θJA</sub>				50				°C/W
Typical Junction Capacitance (Note 1)	C <sub>J</sub>				60				pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-65 to + 175				°C

**ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	FFM301	FFM302	FFM303	FFM304	FFM305	FFM306	FFM307	UNITS
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>				1.3				Volts
Maximum Full Load Reverse Current, Full cycle Average at TA=55°C	I <sub>R</sub>				50				uAmps
Maximum DC Reverse Current at @ TA = 25°C					10				uAmps
Rated DC Blocking Voltage @ TA = 125°C					300				uAmps
Maximum Reverse Recovery Time (Note 4)	trr			150		250	500		nSec

NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC

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2. Thermal resistance junction to terminal 6.0mm<sup>2</sup> copper pads to each terminal.3. Thermal resistance junction to ambient, 6.0mm<sup>2</sup> copper pads to each terminal.

4. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A