

FM4001C THRU FM4007C

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

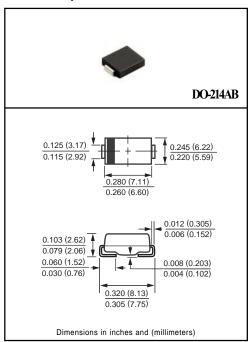
- * Glass passivated device
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.24 gram

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



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

RATINGS	SYMBOL	FM4001C	FM4002C	FM4003C	FM4004C	FM4005C	FM4006C	FM4007C	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	lo	1.0					Amps		
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30					Amps		
Maximum Thermal Resistance	(Note 2) RθJL	60							°C/W
	(Note 3) RθJA	100						°C/W	
Typical Junction Capacitance (Note 1)	CJ	15				pF			
Operating and Storage Temperature Range	ТJ, Tsтg	-55 to + 150				٥C			

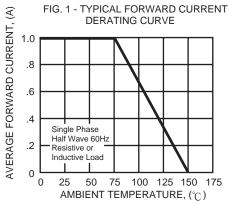
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

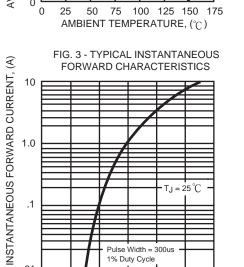
CHARACTERISTICS		SYMBOL	FM4001C FM4002C FM4003C FM4004C FM4005C FM4006C FM4007C	UNITS				
Maximum Forward Voltage at 1.0A DC		VF	1.1	Volts				
Maximum Full Load Reverse Current, Full cycle Average at TA=75°C		In.	30					
Maximum DC Average Reverse Current at	@TA = 25°C	IR IR	5.0					
Rated DC Blocking Voltage	@TA = 125°C		100	uAmps				

- NOTES: 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
 - 2. Thermal resistance junction to terminal 6.0mm² coppeer pads to each terminal.
 - 3. Thermal resistance junction to ambient, 6.0mm² coppeer pads to each terminal.

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RATING AND CHARACTERISTIC CURVES (FM4001C THRU FM4007C)



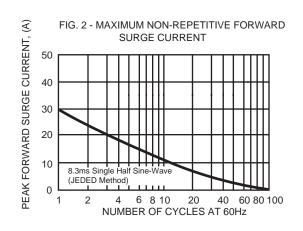


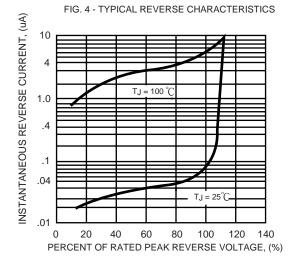
1% Duty Cycle

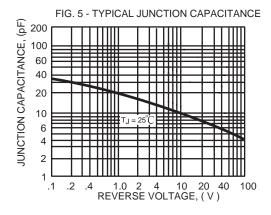
1.0

INSTANTANEOUS FORWARD VOLTAGE, (V)

.8



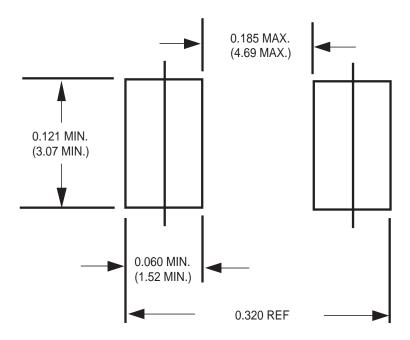






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Mounting Pad Layout



Dimensions in inches and (millimeters)

