

EFM101B THRU EFM106B

## SURFACE MOUNT GLASS PASSIVATED SUPER FAST SILICON RECTIFIER

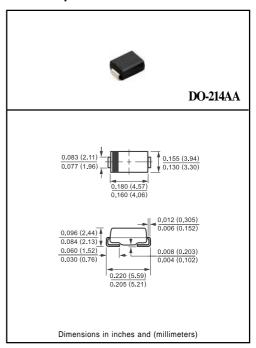
VOLTAGE RANGE 50 to 400 Volts CURRENT 1.0 Ampere

#### **FEATURES**

- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.09 gram

#### 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%.



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

RATINGS	SYMBOL	EFM101B	EFM102B	EFM103B	EFM104B	EFM105B	EFM106B	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	Volts
Maximum RMS Volts	VRMS	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	Volts
Maximum Average Forward Current at TA = 55°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	
Typical Junction Capacitance (Note 2)	Cı	15 10			0	pF		
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175					٥C	

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

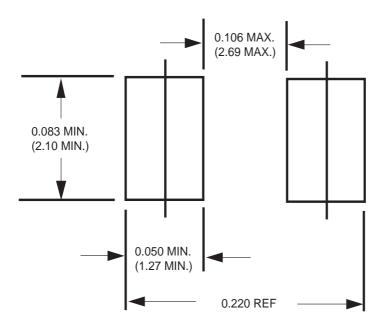
CHARACTERISTICS		SYMBOL	EFM101B EFM102B EFM103B EFM104B	EFM105B EFM106B	UNITS
Maximum Forward Voltage at 1.0A DC		VF	0.95	1.25	Volts
Maximum DC Reverse Current	@TA = 25°C	l <sub>R</sub>	5.0	uAmps	
at Rated DC Blocking Voltage	@Ta =100°C	IK.	100		
Maximum Reverse Recovery Time (Note 1)		trr	35		nSec

NOTES: 1. Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2004-12

# Mounting Pad Layout



Dimensions in inches and (millimeters)

