

**FML120B THRU** FML140B

## SUPER LOW Vf SCHOTTKY BARRIER RECTIFIER

### **VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere**

### **FEATURES**

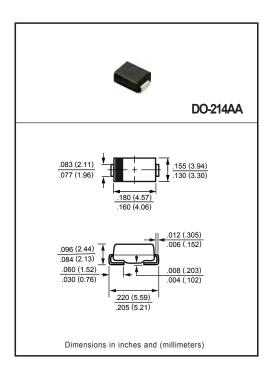
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capabitity
- \* High reliability

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.09 gram

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Resistive or inductive load.



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

RATINGS	SYMBOL	FML120B	FML130B	FML140B	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20 30		40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> =75°C	I <sub>O</sub>	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	40			Amps
Typical Current Square Time	I <sup>2</sup> T	6.6			A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	RθJA	85			°C/W
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub>	25			°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub> 110				pF
Operating Temperature Range	TJ	T <sub>J</sub> 150			۰c
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150			

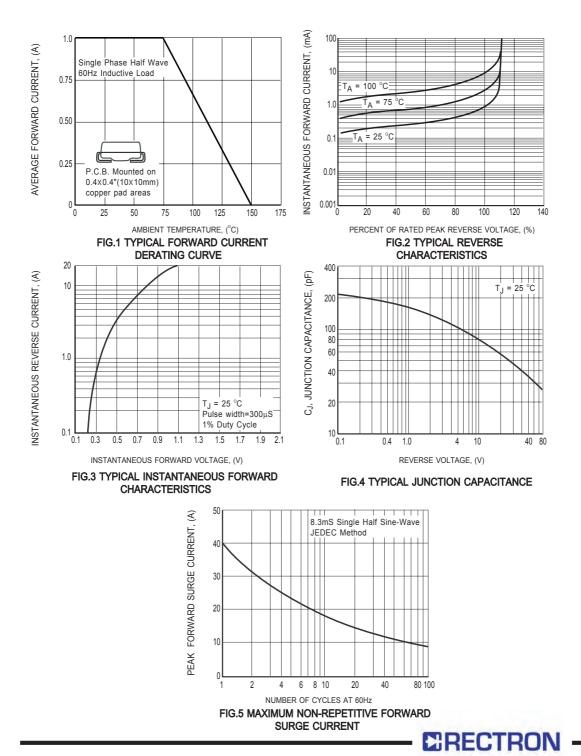
### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS S		SYMBOL	FML120B	FML130B	FML140B	UNITS
Maximum Instantaneous Forward Voltage	e at 1.0A DC	V <sub>F</sub>		.36		Volts
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C			1.0		
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	IR		10		mΑ

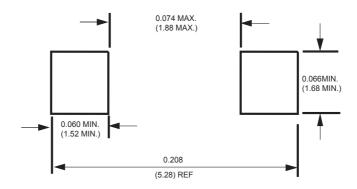
- NOTES: 1. Thermal Resistance: Mounted on PCB.
  2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
  - 3. Also available in DO-214AA (SMB).
  - 4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2010-03 REV: O

# RATING AND CHARACTERISTICS CURVES (FML120B THRU FML140B)



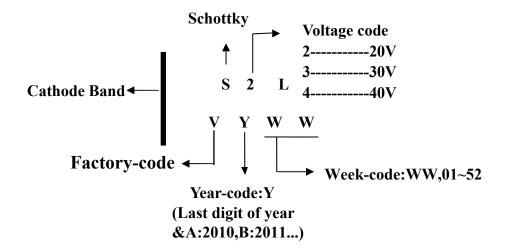
# **Mounting Pad Layout**



Dimensions in inches and (millimeters)



# **Marking Description**



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

## REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)		GROSS WEIGHT(Kg)
SMB	-T	500			178	390*205*310	16,000	
SMB	-W	3,000			330	355*360*350	48,000	13.90

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