

FML0220 THRU FML0240

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### VOLTAGE RANGE 20 to 40 Volts CURRENT 0.2 Ampere

#### **FEATURES**

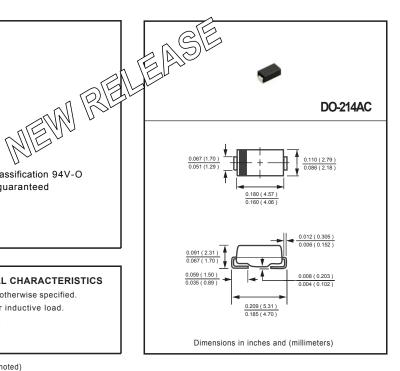
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capabitity
- \* High reliability

#### **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  $^{\circ}$ 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 (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	FML0220	FML0230	FML0240	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> = 110°C	Io	0.2			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60			Amps
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	85			°C/W
Typical Thermal Resistance (Note 1)	Røjl	25			°C/W
Typical Junction Capacitance (Note 2)	CJ	110			pF
Operating Temperature Range	TJ	150			°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150			°C

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

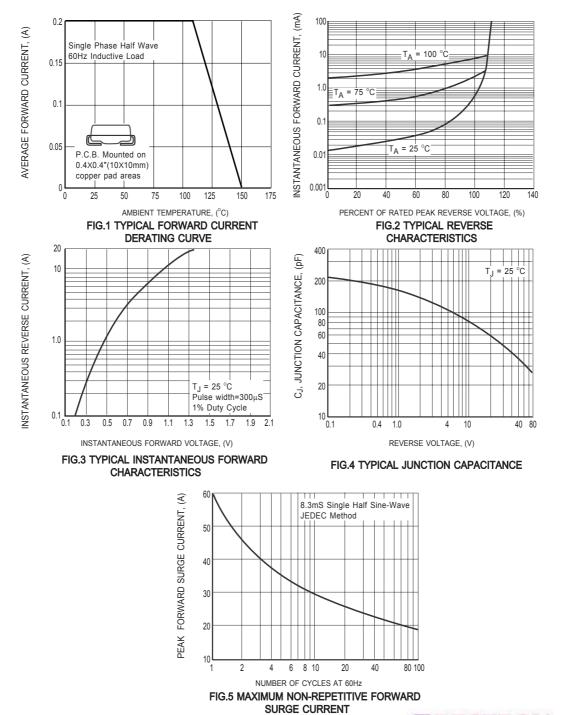
CHARACTERISTICS		SYMBOL	FML0220	FML0230	FML0240	UNITS				
Maximum Instantaneous Forward Voltage at 0.2A DC		V <sub>F</sub>	.28			Volts				
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C	-	1.0			mA				
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	'R		10		m A				

NOTES: 1. Thermal Resistance: Mounted on PCB.

- 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)".

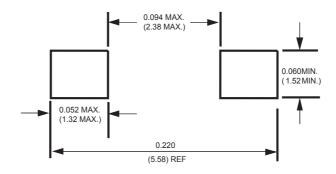
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# RATING AND CHARACTERISTICS CURVES (FML0220 THRU FML0240)





# **Mounting Pad Layout**



Dimensions in inches and (millimeters)



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