

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 60 Volts CURRENT 1.0 Ampere**

**FEATURES**

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

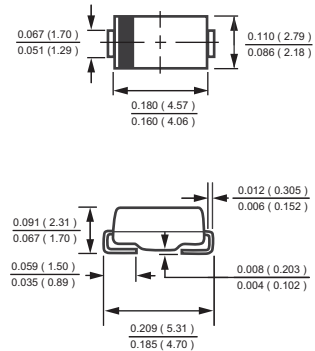
**MECHANICAL DATA**

- \* 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: 0.057 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

**DO-214AC**



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FM160W-W-A01	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	Volts
Maximum RMS Voltage	$V_{RMS}$	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	$I_O$	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50	Amps
Typical Current Square Time	$I^2T$	10.38	A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	85	°C/W
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	25	°C/W
Typical Junction Capacitance (Note 2)	$C_J$	110	pF
Operating Temperature Range	$T_J$	-55 to + 150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 150	°C

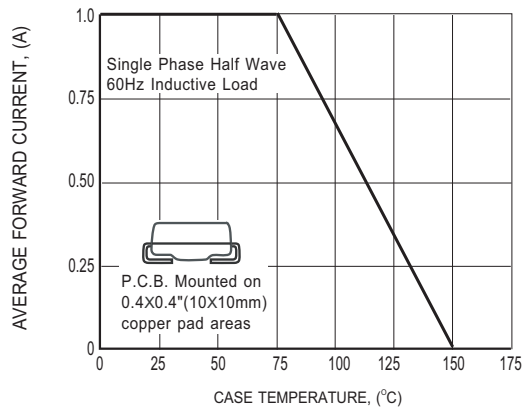
**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	FM160W-W-A01	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	$V_F$	.70	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	0.2	mA
		8.0	mA

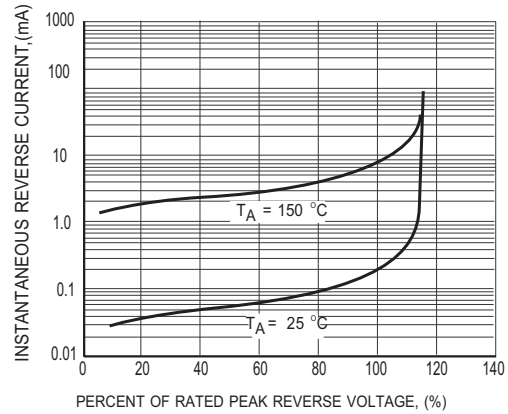
- NOTES : 1. Thermal Resistance : Mounted on PCB.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. Also available in DO-214AA (SMB).  
4. " ROHS compliant" .

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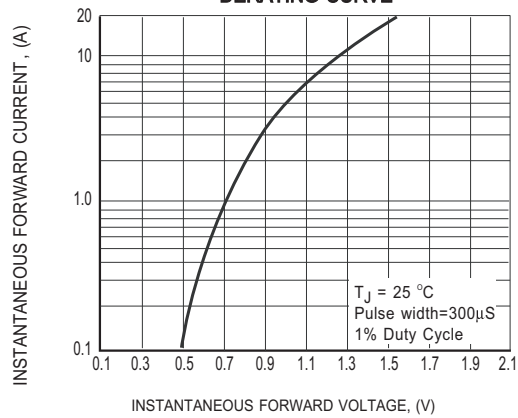
## RATING AND CHARACTERISTICS CURVES ( FM160W-W-A01 )



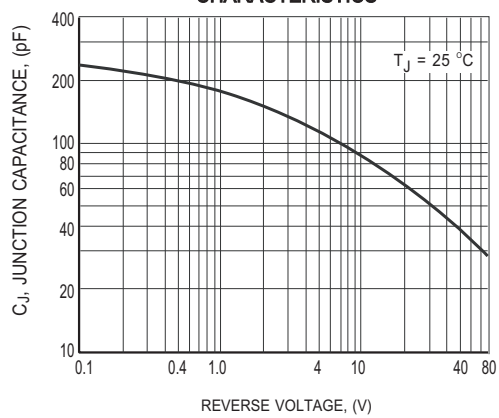
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



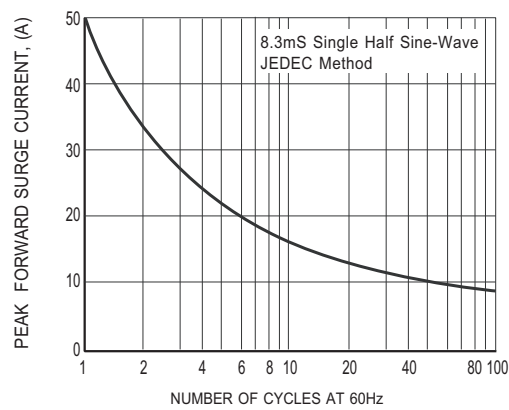
**FIG.2 MAXIMUM REVERSE CHARACTERISTICS**



**FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS**

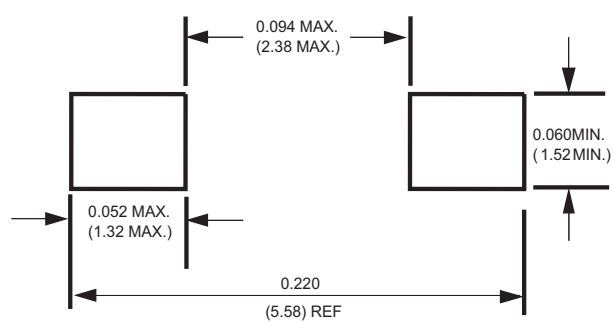


**FIG.4 TYPICAL JUNCTION CAPACITANCE**



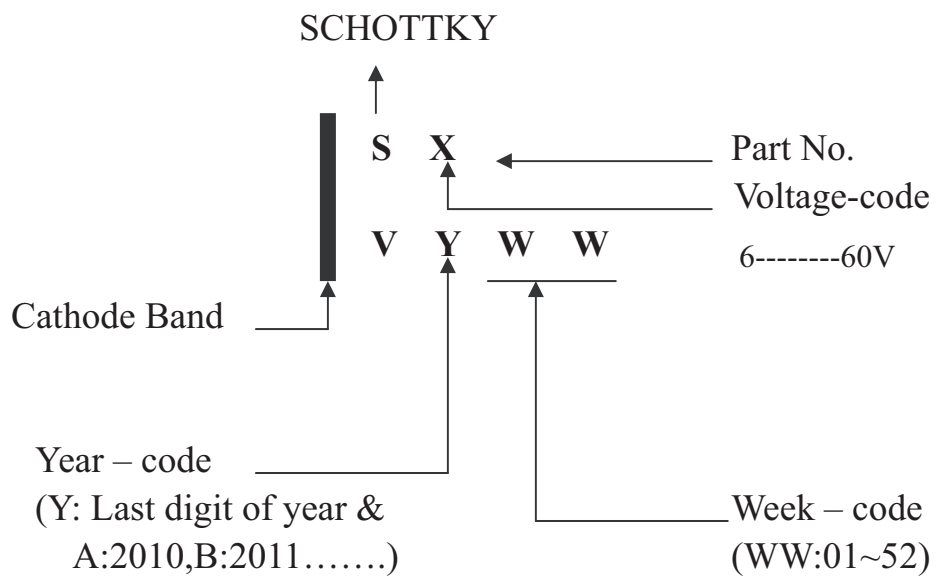
**FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## Mounting Pad Layout



Dimensions in inches and (millimeters)

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMA	-W	7,500	15,000	---	---	330	360*355*360	120,000	15.2

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