

**SURFACE MOUNT GLASS PASSIVATED  
ZENER SILICON RECTIFIER  
VOLTAGE RANGE 16 Volts STEADY STATE POWER 1.0 WATT**

**FEATURES**

- \* Plastic package has underwriters laboratory
- \* Excellent clamping capability
- \* Low zener impedance
- \* Low regulation factor

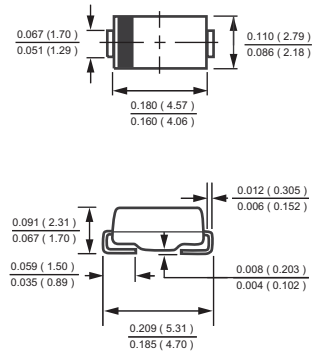
**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0
- \* AECQ-101 certificated

**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%.

**DO-214AC**



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

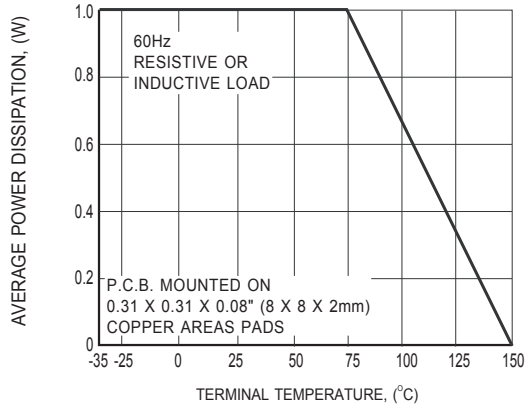
**ELECTRICAL CHARACTERISTICS ( At  $T_A = 25^\circ\text{C}$  unless otherwise noted)**

TYPE	NOMINAL ZENER VOLTAGE	TEST CURRENT	MAXIMUM DYNAMIC IMPEDANCE			MAXIMUM DC REVERSE LEAKAGE CURRENT		MAXIMUM SURGE CURRENT	MAXIMUM FORWARD VOLTAGE
	at $I_{ZT}$ $V_Z$ (NOTE 1) (Volts)	$I_{ZT}$ (mA)	$Z_{ZT}$ at $I_{ZT}$ (ohms)	$Z_{Zk}$ at (ohms)	(NOTE 1) $I_{ZK}$ (mA)	$I_R$ ( $\mu\text{A}$ )	$V_R$ (Volts)	(NOTE 2) $I_{RM}$ (mApk)	at 200mA $V_F$ (Volts)
FM4745WA	16.0	15.5	16.0	700	0.25	5.0	12.2	285.0	1.2

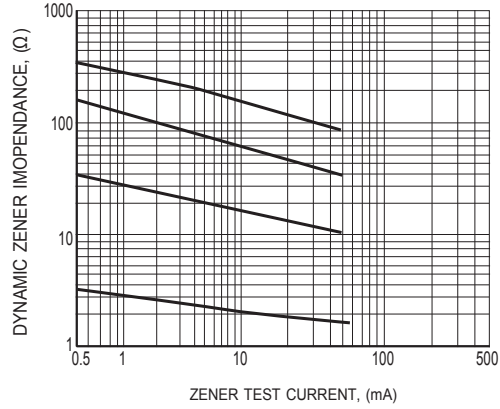
- Notes :
1. Standard Voltage Tolerance :  $\pm 20\%$  , Suffix " A " :  $\pm 10\%$  .
  2. Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on  $I_{ZT}$  per JEDEC Method.
  3. Maximum steady state power dissipation is 1.0 watt at  $T_L = 75^\circ\text{C}$ .
  4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
  5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

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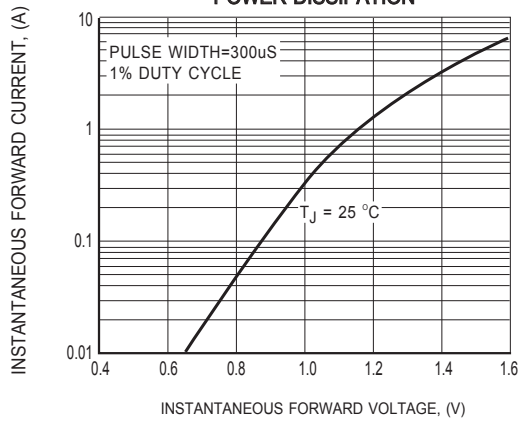
## RATING AND CHARACTERISTICS CURVES ( FM4745WA )



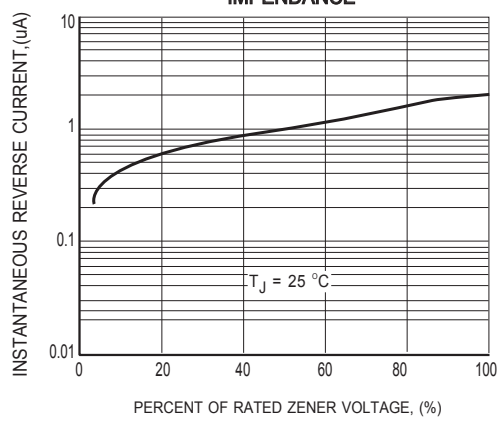
**FIG.1 MAXIMUM CONTINUOUS  
POWER DISSIPATION**



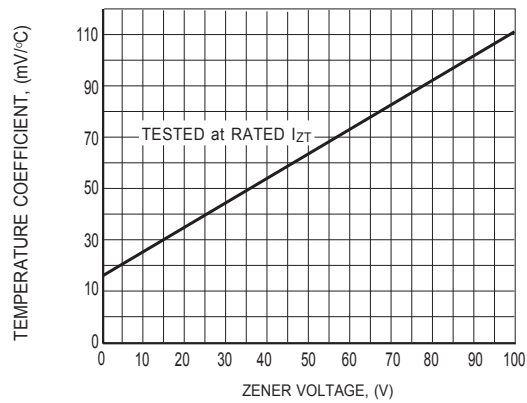
**FIG.2 TYPICAL ZENER  
IMPEDANCE**



**FIG.3 TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS FOR FM4763W**

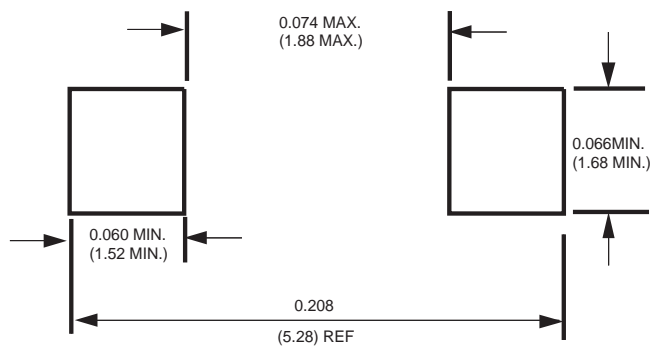


**FIG.4 TYPICAL REVERSE CHARACTERISTICS**



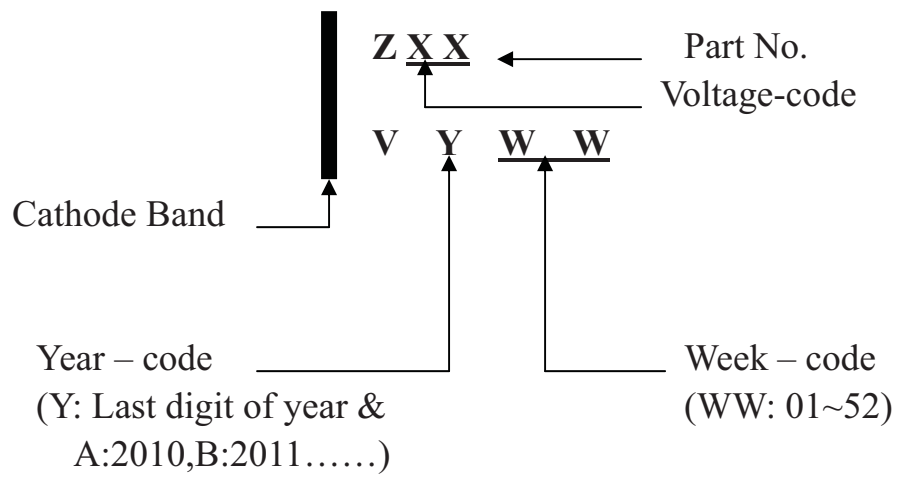
**FIG.5 TYPICAL TEMPERATURE COEFFICIENTS**

## 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	-T	1,500	6,000	---	---	178	390*205*310	48,000	8.40
SMA	-W	5,000	10,000	---	---	330	360*355*360	80,000	14.20

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