

## FM4933 thru FM4937

### 1.FEATURES

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Cavity-free glass passivated junction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 1.0 A operation at TA=75°C with no thermal runaway
- \* Typical IR less than 1.0μA
- \* High temperature soldering guaranteed: 260°C/10 seconds

### 2.Mechanical Data

**Case:** JEDEC DO-214AC, molded plastic over glass body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.002 oz., 0.061 g

**Handling precaution:**None

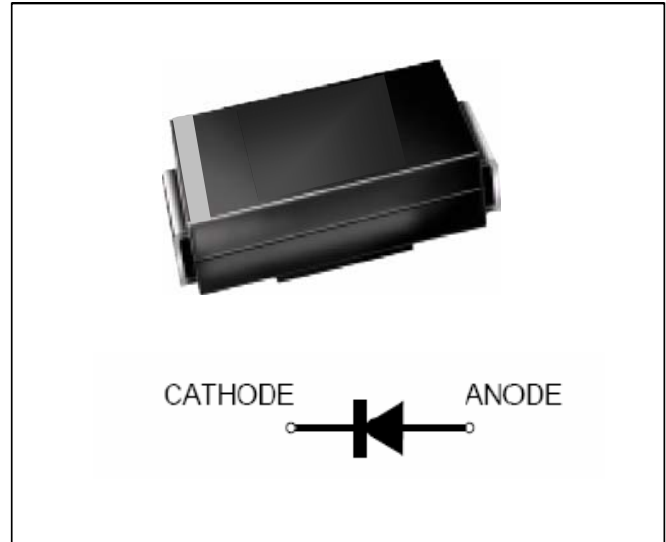
### 3.Electrical Characteristic

**Maximum Ratings & Thermal Characteristics Ratings** at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	FM 4933	FM 4934	FM 4935	FM 4936	FM 4937	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30					A
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55					°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150					°C

### Surface Mount Glass Passivated Fast Recovery Rectifiers

Reverse Voltage 50 to 600V  
Forward Current 1.0A



We declare that the material of product compliance with RoHS requirements.

### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	FM 4933	FM 4934	FM 4935	FM 4936	FM 4937	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.2					V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	$I_R$	5.0 100					μA
Typical reverse recovery time (Note 1)	$t_{rr}$	150					ns
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15.0					PF

NOTES:

1.  $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

### 4. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

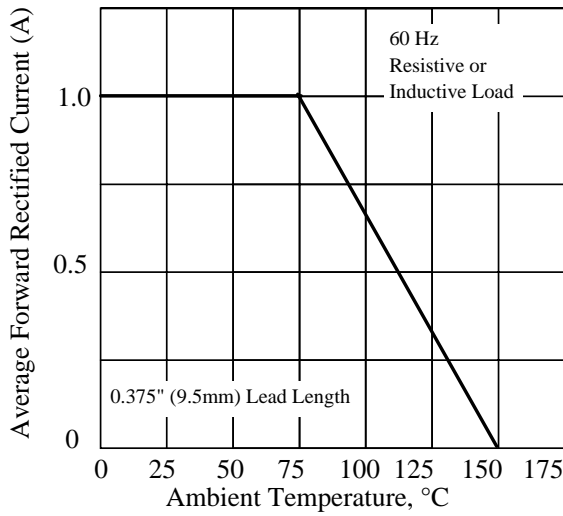


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

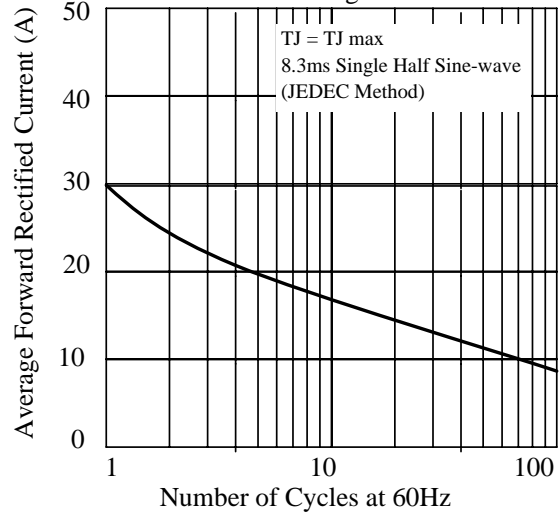


Fig 3. - Typical Instantaneous Forward Characteristics

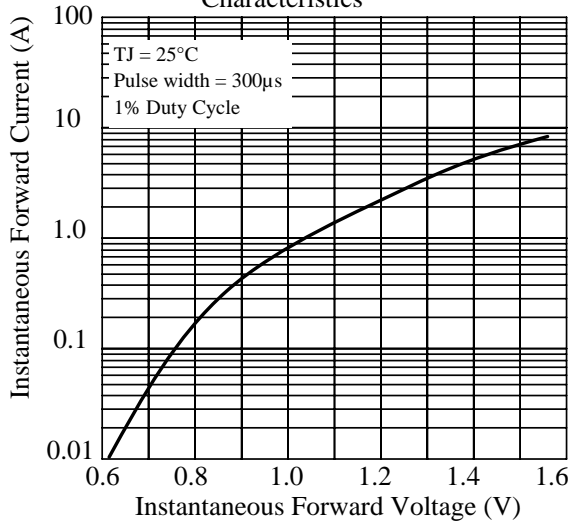


Fig 4. - Typical Reverse Characteristics

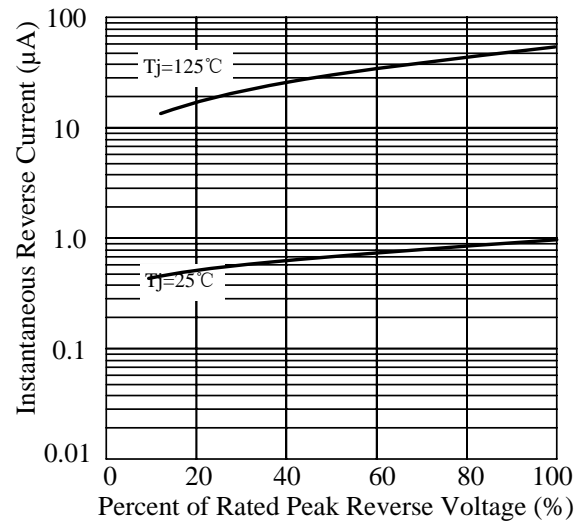


Fig 5. - typical transient thermal impedance

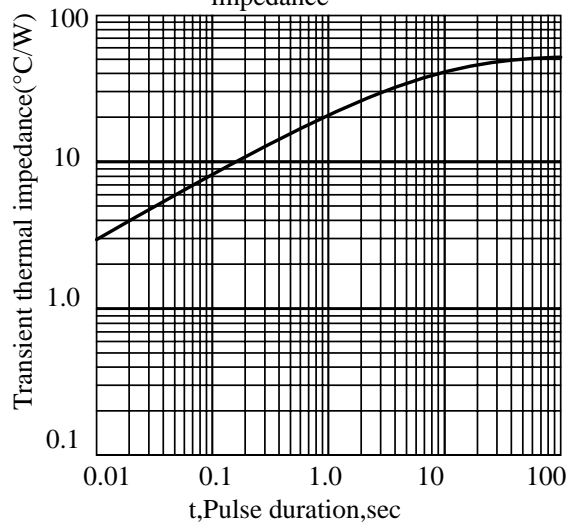
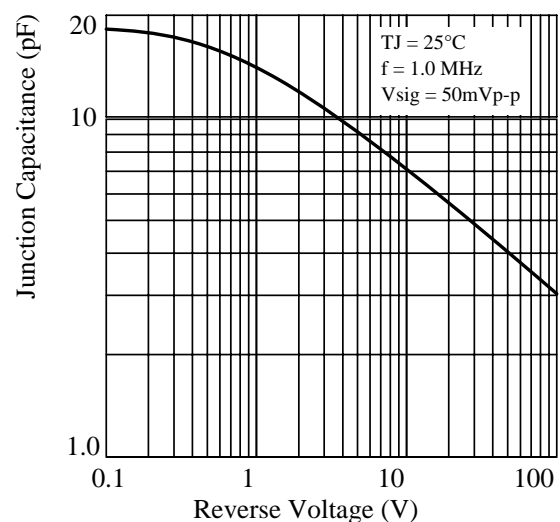
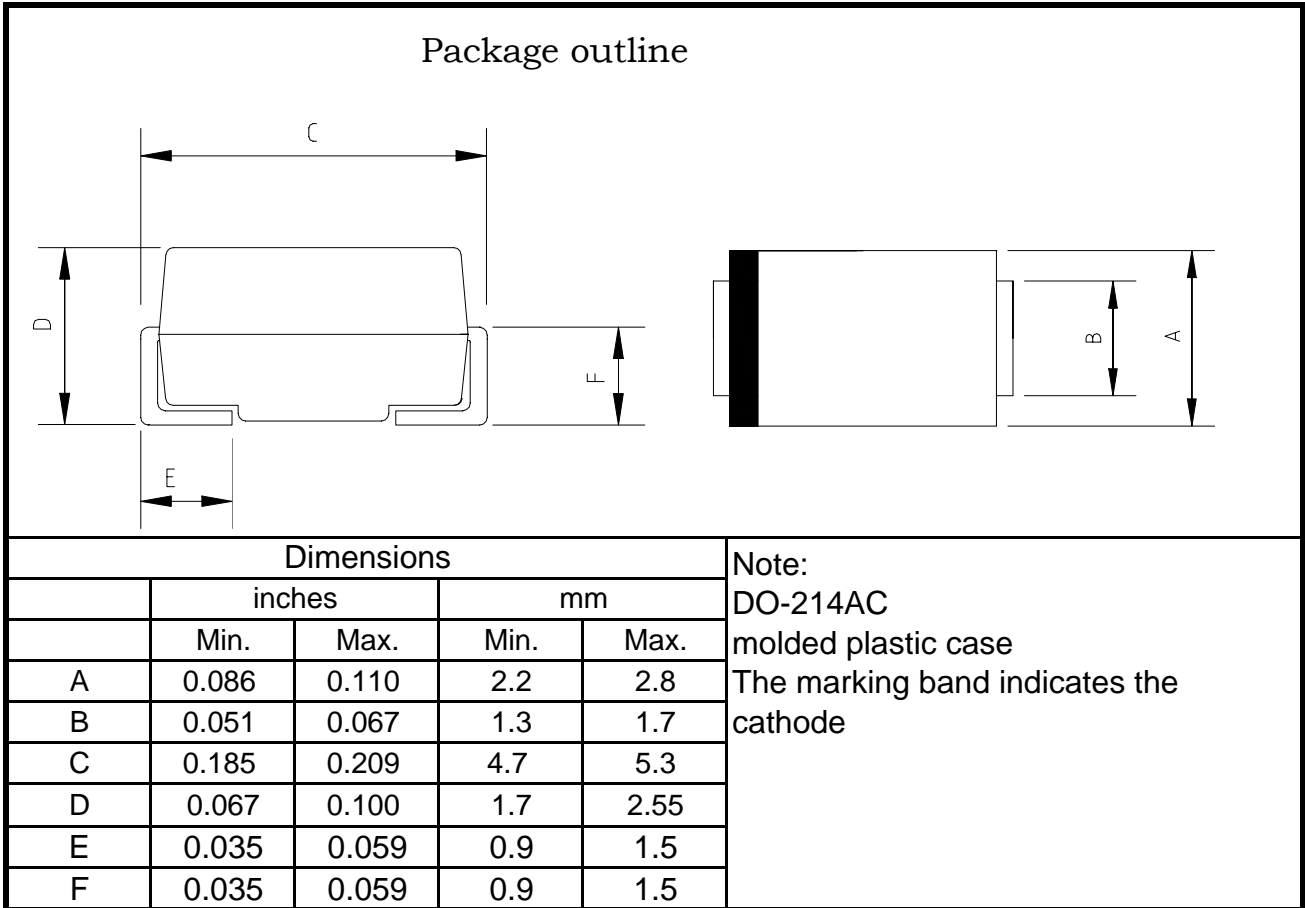


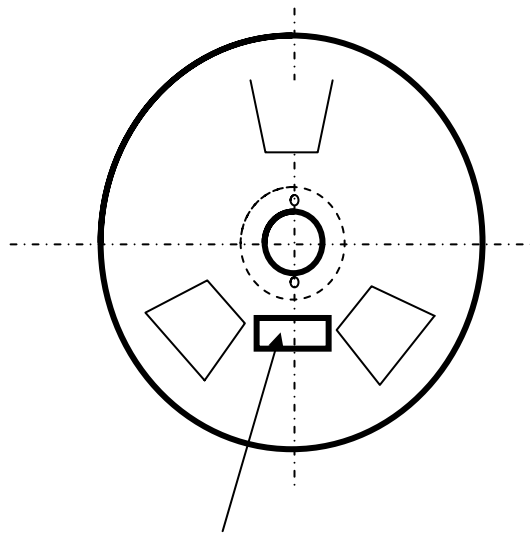
Fig 6. - Typical Junction Capacitance



**5.Package Dimensions in inches and (millimeters)**


## SMA Packing Specification

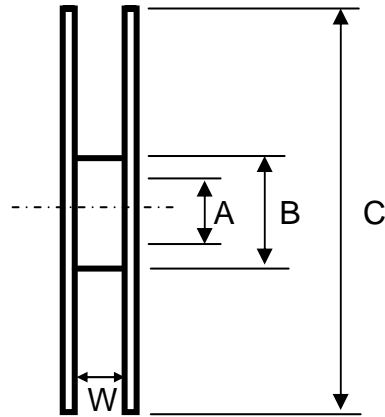
### 1. 卷盘规格/Reel Packing



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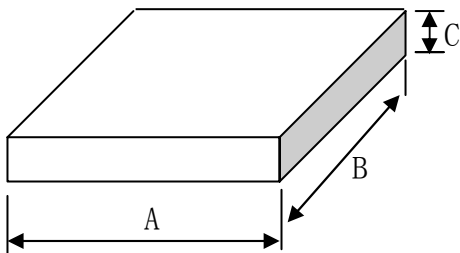
Item	Q'ty/Taping
7"	2K
13"	5K

Unit:mm



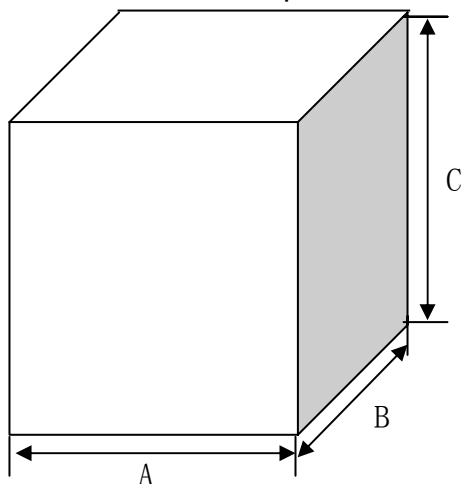
Item	Symbol	Dimension
13" Size	A	13.0±0.2
	B	75.0±0.5
	C	330±1.0
	W	13.2±1.0
7" Size	A	13.0±0.2
	B	54±0.5
	C	177±1.0
	W	13.2±1.0

### 2. 内箱规格/ Inside Box Specification



Item	Symbol	Dimension
Size	A	335±2
	B	335±2
	C	40±1

### 3. 外箱规格/Outer Box Specification



Item	Symbol	Dimension
Size	A	350±2
	B	350±2
	C	345±2