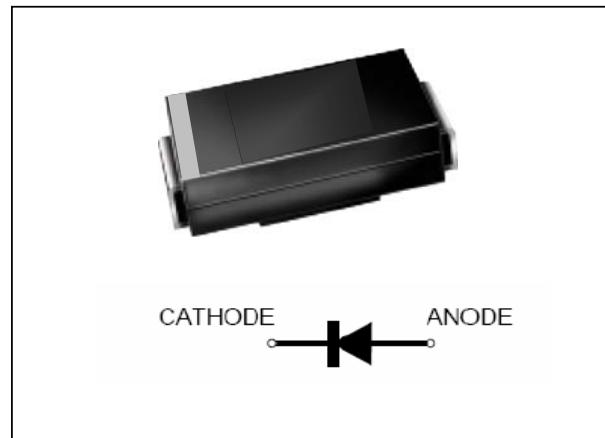


FM401 thru FM407

**Surface Mount Glass Passivated Junction Rectifiers
Reverse Voltage 50 to 1000V Forward Current 1.0A**

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * High temperature metallurgically bonded construction
- * Cavity-free glass passivated junction
- * Capable of meeting environmental standards of MIL-S-19500
- * Typical IR less than 1.0 μ A
- * High temperature soldering guaranteed: 260°C/10 seconds



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: 0.0023 oz., 0.065 g

Handling precautin:None

Electrical Characteristic

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

Parameter Symbol	symbol	FM 401	FM 402	FM 403	FM 404	FM 405	FM 406	FM 407	Unit
Device marking code		M01	M02	M03	M04	M05	M06	M07	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RSM voltage	V _{RSM}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current land areas at T _c = 75°C (Note 1)	I _{AV} (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 1)	R _{θJA} R _{θJC}				150	45			°C/W
Operating junction and storage temperature range	T _J , T _{TSG}				-50 to +150				°C

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

Parameter Symbol	symbol	FM 401	FM 402	FM 403	FM 404	FM 405	FM 406	FM 407	Unit
Maximum instantaneous forward voltage at 1.0A	V _F			1.1					V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 125°C	I _R			5.0	50				μA
Typical junction capacitance at 4.0V, 1MHz	C _J			10.0					PF

NOTES:

1. 8.0mm² (.013mm thick) land areas

FM401 thru FM407

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

Fig. 1 - Forward Current Derating Curve

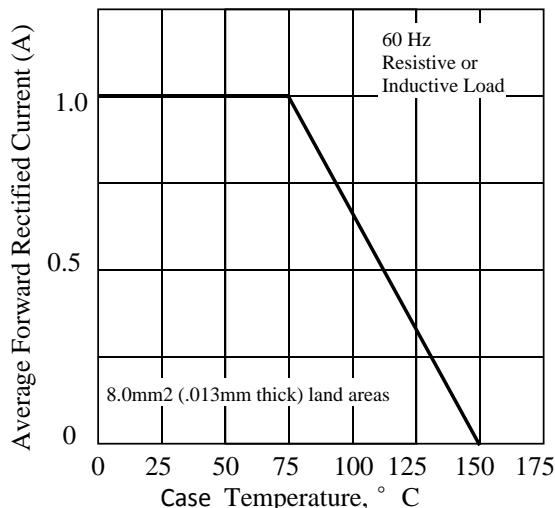


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

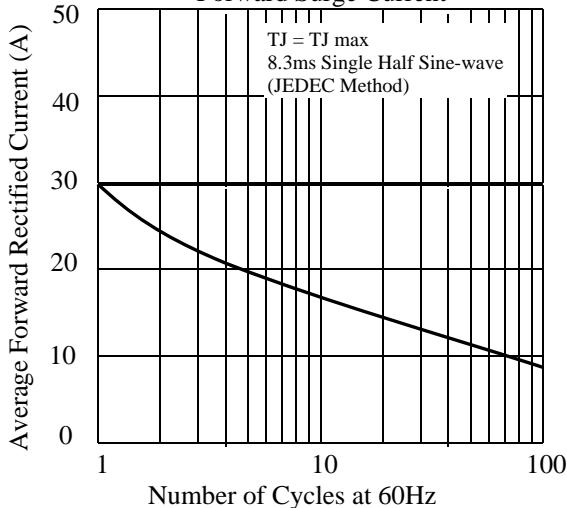


Fig. 3. - Typical Instantaneous Forward Characteristics

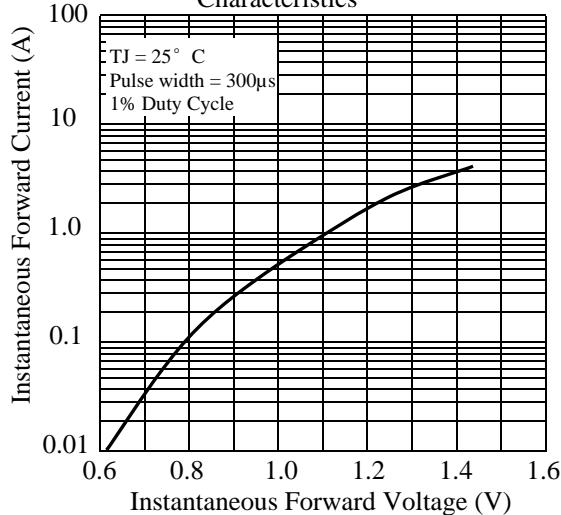


Fig. 4. - Typical Reverse Characteristics

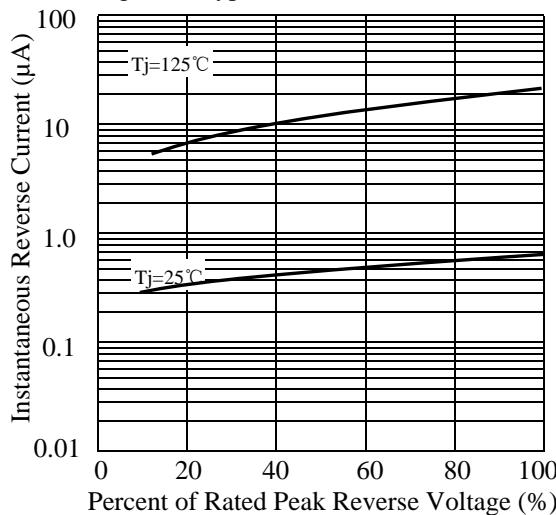


Fig. 5. - typical transient thermal impedance

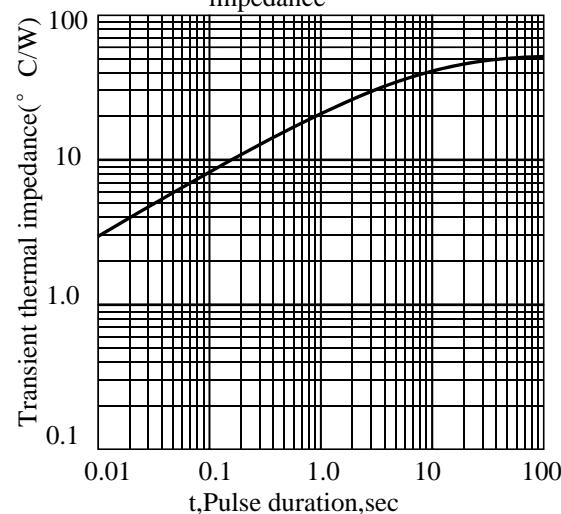
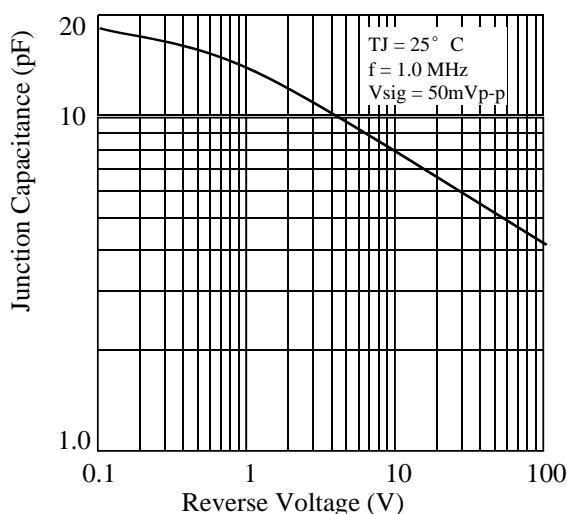


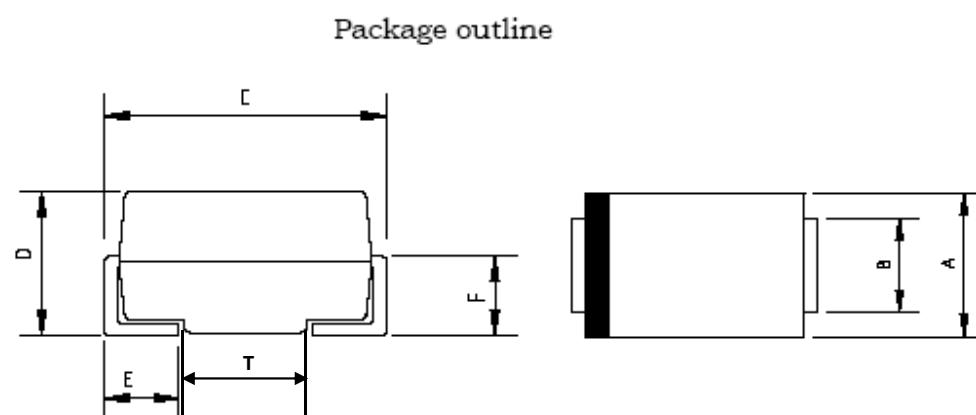
Fig. 6. - Typical Junction Capacitance



FM401 thru FM407

3. dimension:

Package outline



Dimensions

	inches		mm		Note: DO-214AC molded plastic case The marking band indicates the cathode
	Min.	Max.	Min.	Max.	
A	0.086	0.11	2.2	2.8	
B	0.051	0.067	1.3	1.7	
C	0.185	0.209	4.7	5.3	
D	0.067	0.1	1.7	2.55	
E	0.035	0.059	0.9	1.5	
F	0.035	0.059	0.9	1.5	
T	0.055	0.071	1.4	1.8	

Mounting Pad Layout
---SMA

