

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
- * 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

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: 0.0026 oz., 0.075 g

Handling precaution: None

Electrical Characteristic

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

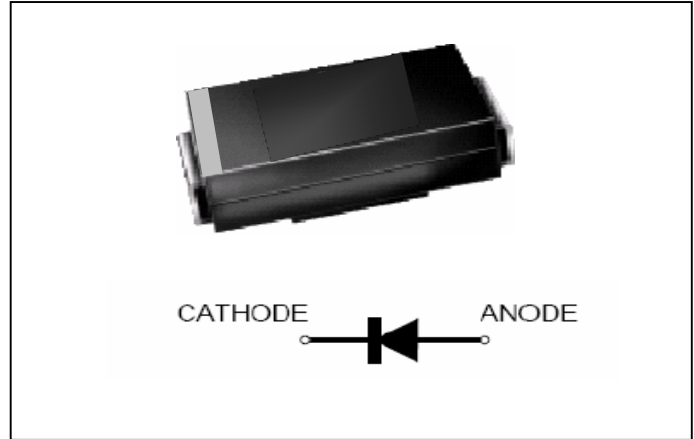
Parameter Symbol	symbol	FM 401	FM 402	FM 403	FM 404	FM 405	FM 406	FM 407	Unit
Device marking code		M01	M02	M03	M04	M05	M06	M07	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 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 1)	$R_{\theta JA}$	75							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-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 $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	IR	5.0							μA
Typical junction capacitance at 4.0V, 1MHz	CJ	8.0							PF

NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



We declare that the material of product compliance with ROHS requirements

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

Fig. 1 - Forward Current Derating Curve

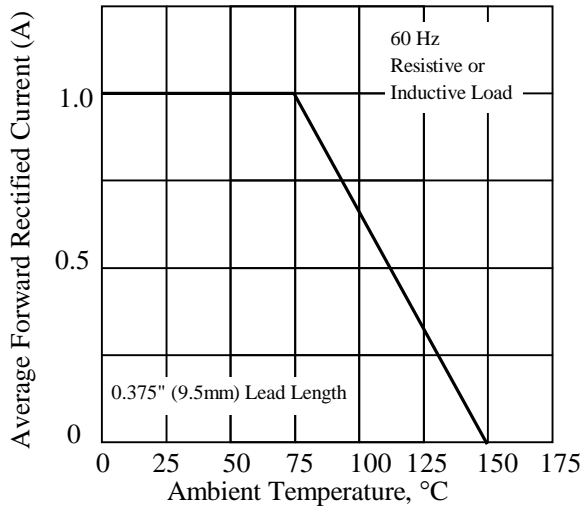


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

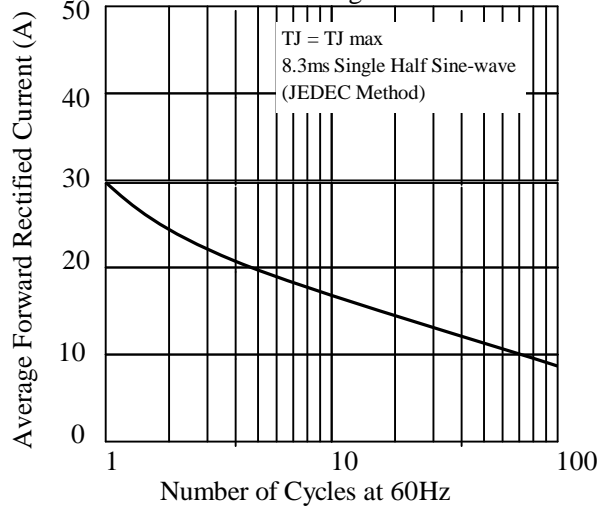


Fig 3. - Typical Instantaneous Forward Characteristics

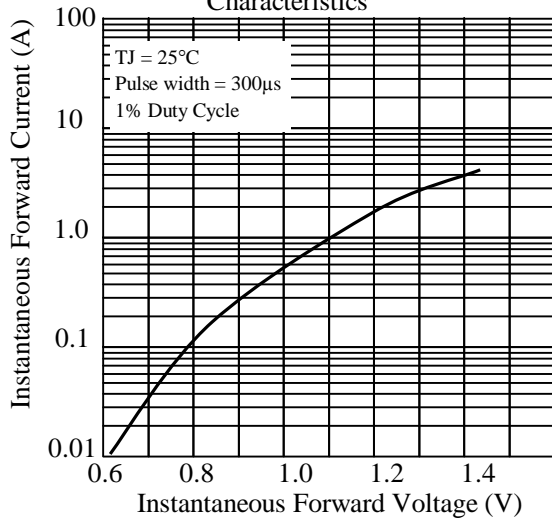


Fig 4. - Typical Reverse Characteristics

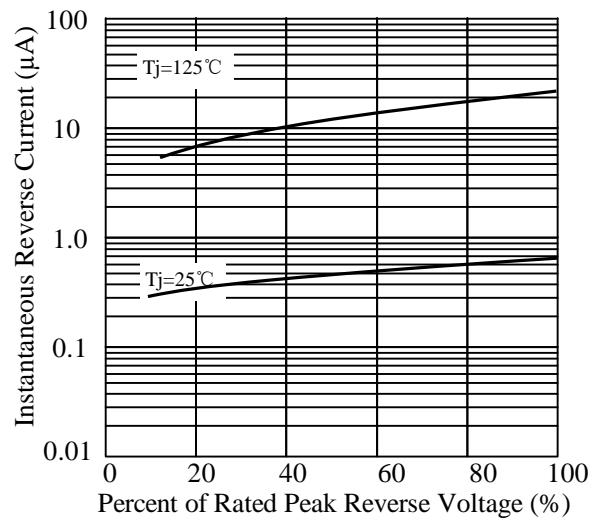


Fig 5. - typical transient thermal impedance

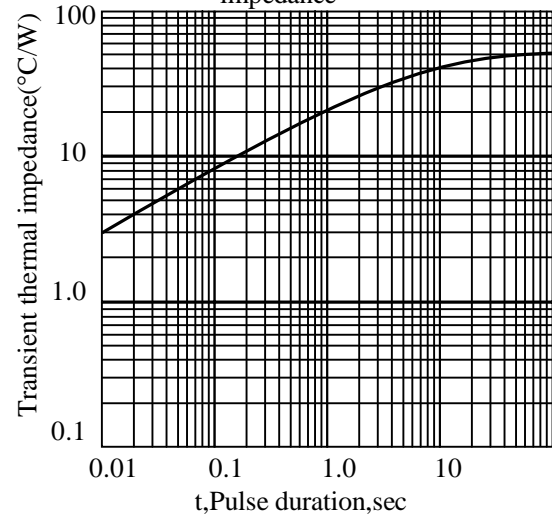
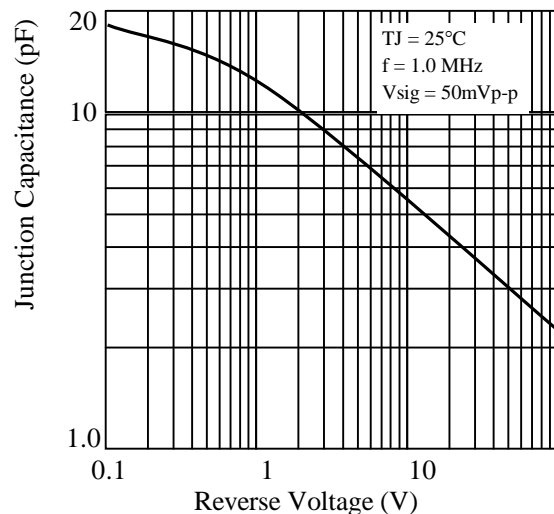


Fig 6. - Typical Junction Capacitance



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3. dimension:

