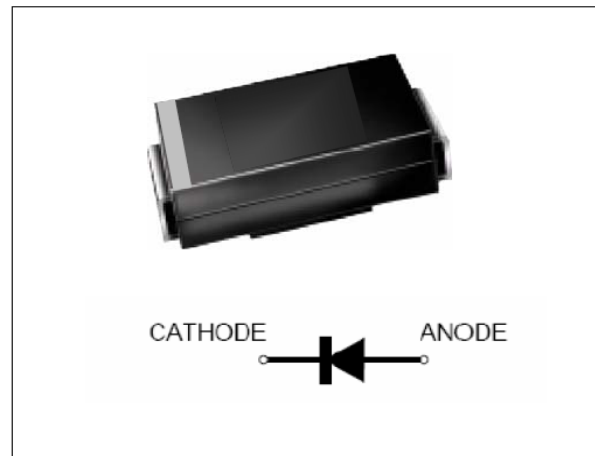


# HFM109

## Surface Mount Glass Passivated High Efficiency Rectifiers Reverse Voltage 1200V Forward Current 1.0A

### 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 TL=100°C with no thermal runaway
- \* Typical IR less than 1.0μA
- \* High temperature soldering guaranteed: 260°C/10 seconds



We declare that the material of product compliance with ROHS requirements

### 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:** 0.0023 oz., 0.065 g

**Handling precaution:** None

### Electrical Characteristic

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

Parameter Symbol	symbol	HFM109	Unit
Device marking code		HF9	
Maximum repetitive peak reverse voltage	$V_{RRM}$	1200	V
Maximum RSM voltage	$V_{RSM}$	840	V
Maximum DC blocking voltage	$V_{DC}$	1200	V
Maximum average forward rectified current at TL = 100°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	150	°C/W
	R $\theta$ JC	50	
Operating junction and storage temperature range	TJ, TSTG	-50 to +150	°C

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

Parameter Symbol	symbol	HFM109	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.85	V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 125°C	IR	5.0	μA
		50	
Maximum reverse recovery time (Note 1)	trr	75	ns
Typical junction capacitance at 4.0V, 1MHz	CJ	10.0	PF

NOTES:

1.  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $IRR = 0.25A$
2. 8.0mm<sup>2</sup> (.013mm thick) land areas
3.  $V_F$  & TRR & VDC & IR all test: other parameter is scheme out.

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### 2. Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted )

Fig. 1 - Forward Current Derating Curve

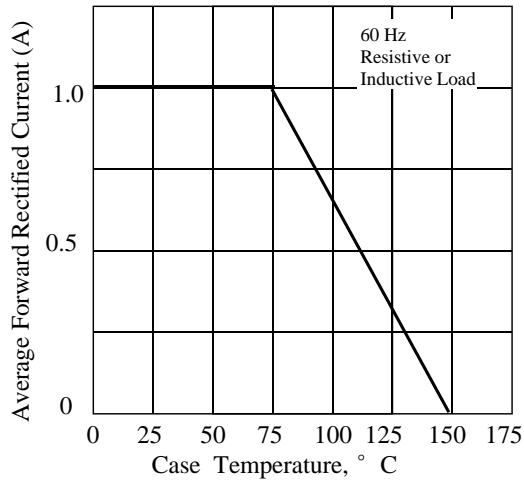


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

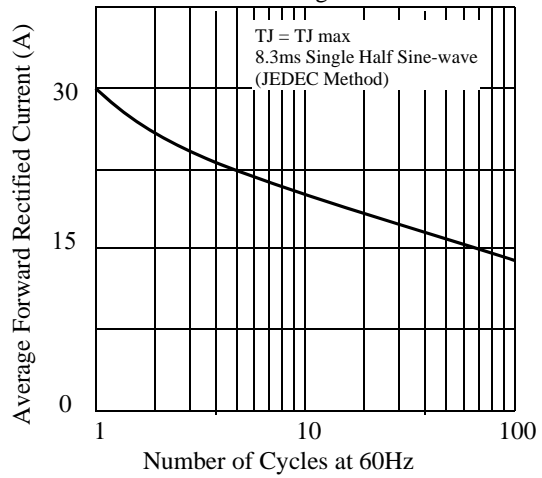


Fig 3. - Typical Instantaneous Forward Characteristics

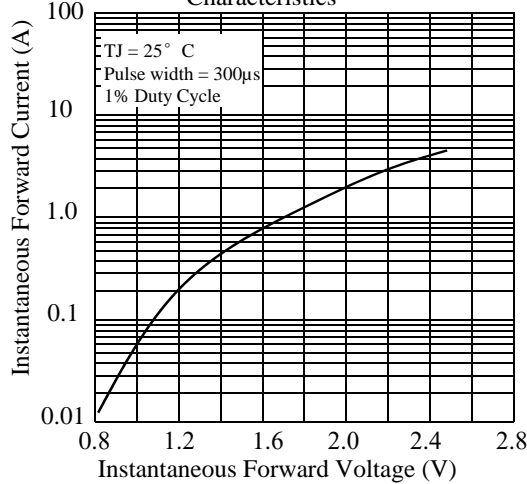


Fig 4. - Typical Reverse Characteristics

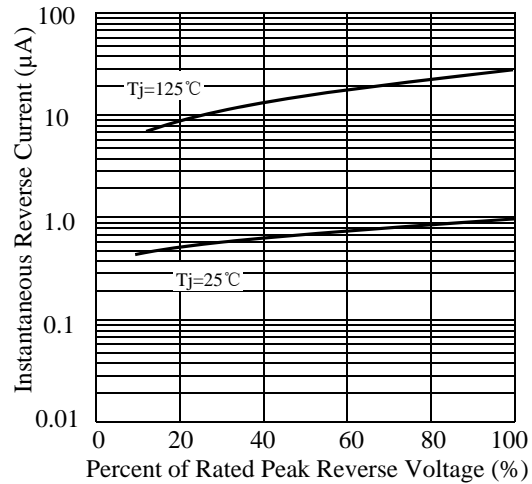


Fig 5. - typical transient thermal impedance

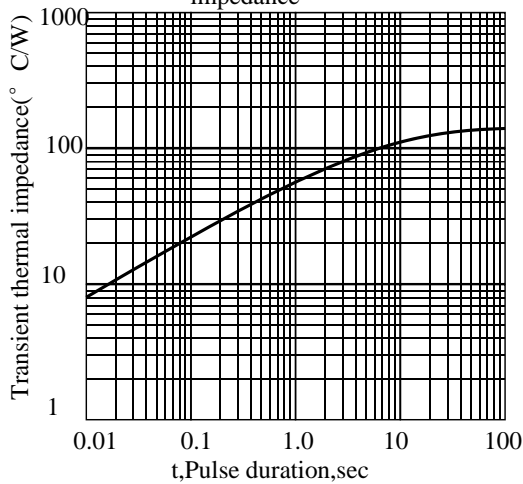
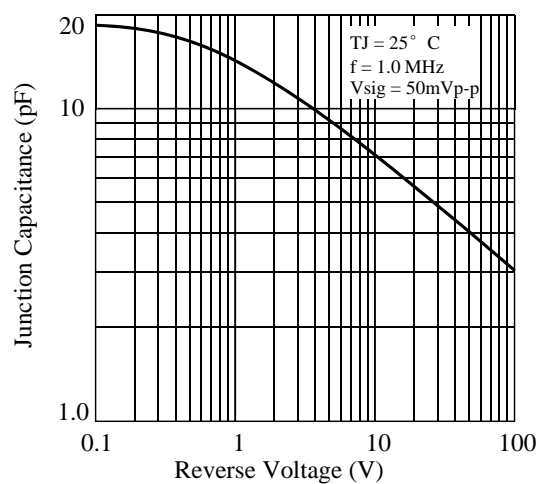
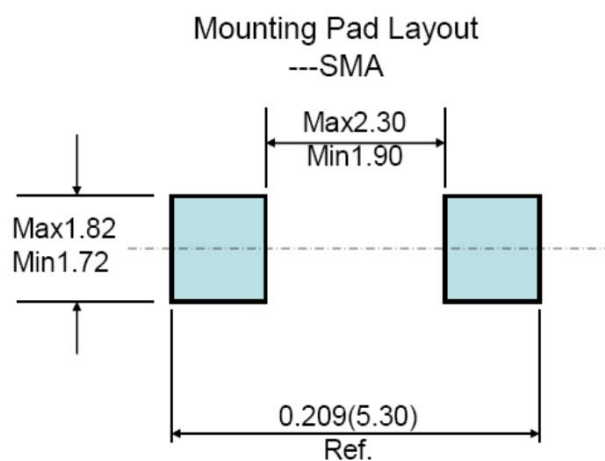
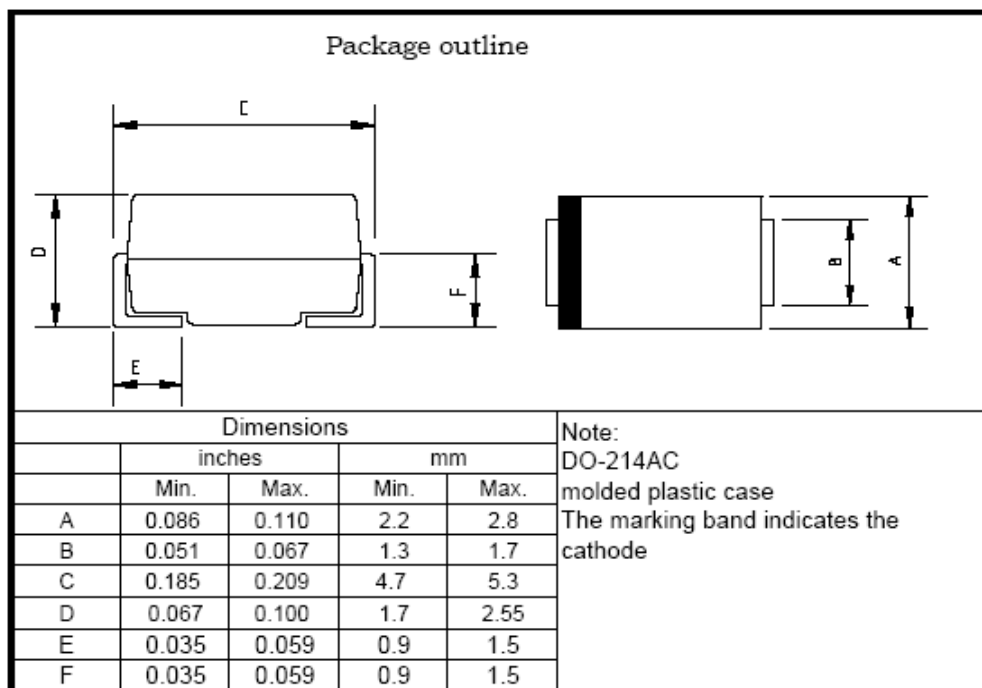


Fig 6. - Typical Junction Capacitance



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## 3. dimension:



单击下面可查看定价，库存，交付和生命周期等信息

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