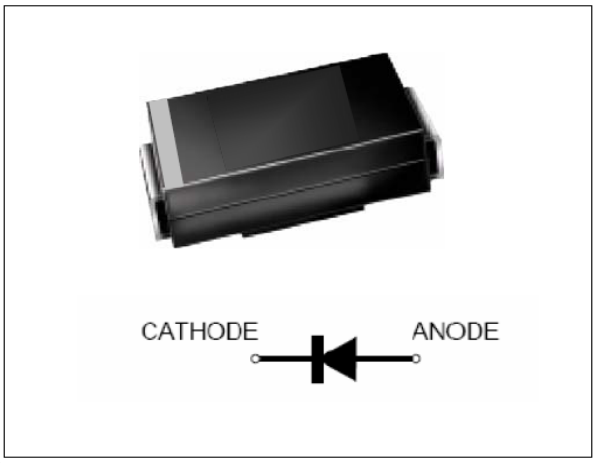
S-HFM108

Surface Mount Glass Passivated High Efficiency Rectifiers

Reverse Voltage 1000V 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
* S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



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 precautin:None

Electrical Characteristic

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

Parameter Symbol	symbol	S-HFM108	Unit
Device marking code		HF8	
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RSM voltage	V_{RSM}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current at TL = 100°C	IF(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)	RθJA	150	°C/W
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	S-HFM108	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.7	V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 125°C	IR	5.0 100	μA
Typical reverse recovery time (Note 1)	trr	75	ns
Typical junction capacitance at 4.0V, 1MHz	CJ	15.0	PF

NOTES:

1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. 8.0mm2 (.013mm thick) land areas
3. VF & TRR & VDC & IR all test； other parameter is scheme out.

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

Fig. 1 – Forward Current Derating Curve

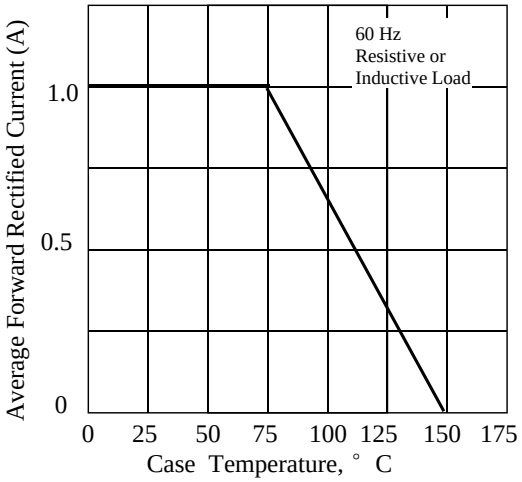


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

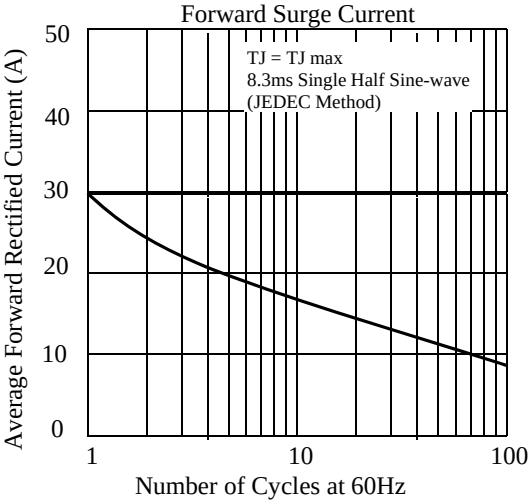


Fig 3. – Typical Instantaneous Forward Characteristics

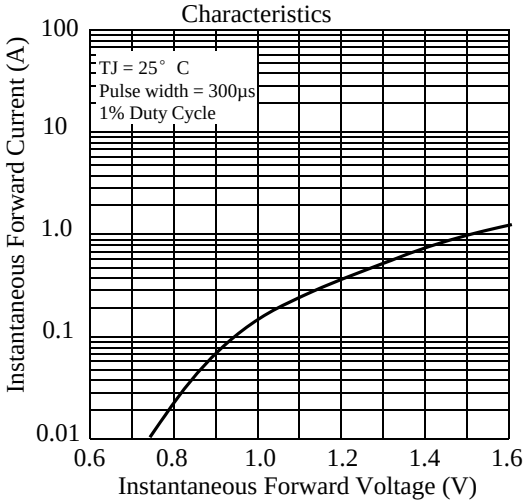


Fig 4. – Typical Reverse Characteristics

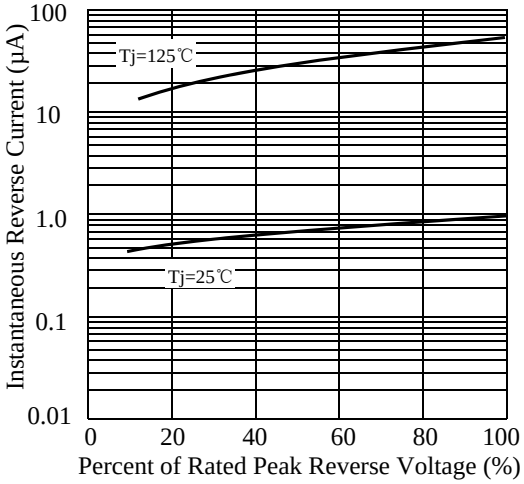


Fig 5. – typical transient thermal impedance

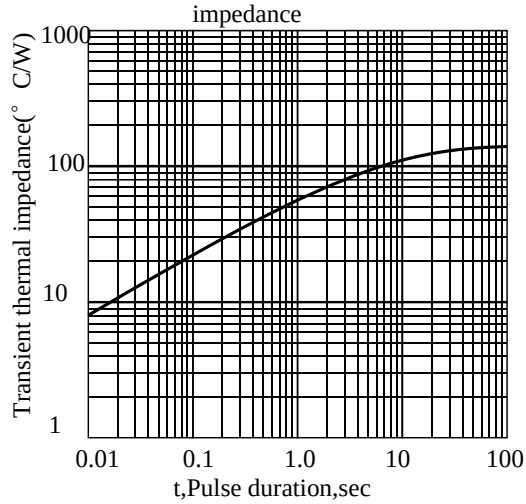
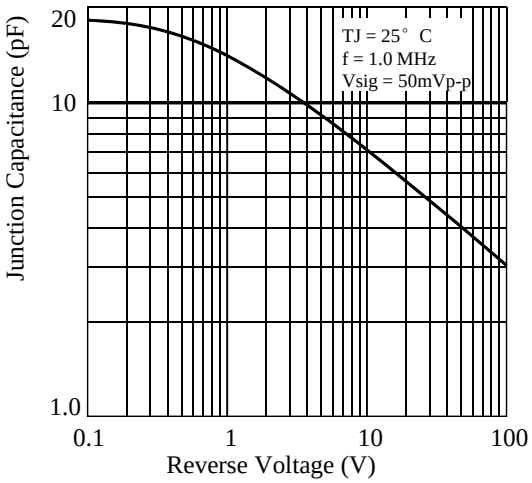


Fig 6. – Typical Junction Capacitance



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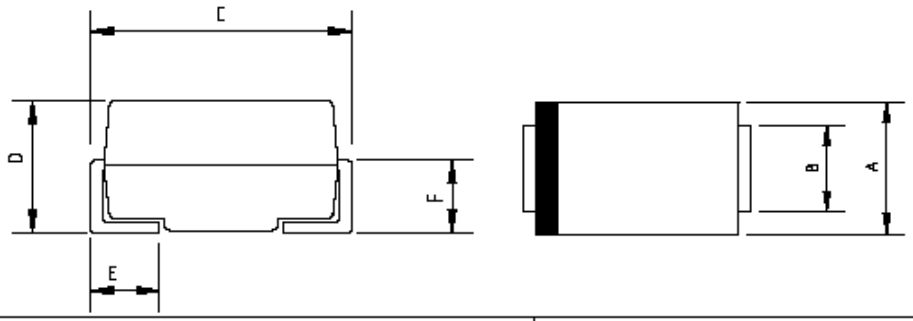
3. dimension:

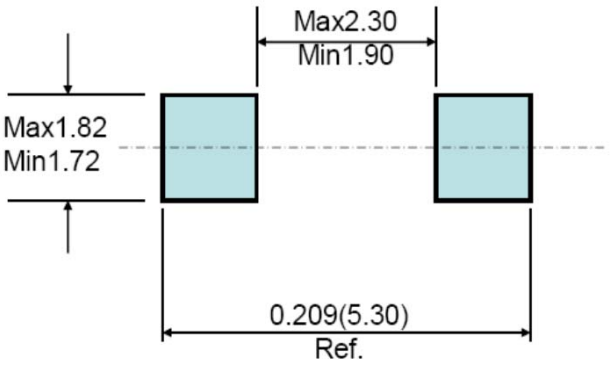
Package outline

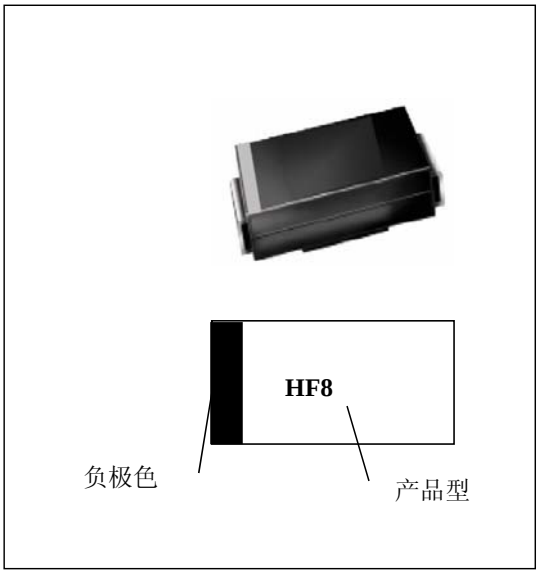


Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
A	0.086	0.110	2.2	2.8
B	0.051	0.067	1.3	1.7
C	0.185	0.209	4.7	5.3
D	0.067	0.100	1.7	2.55
E	0.035	0.059	0.9	1.5
F	0.035	0.059	0.9	1.5

Note:
DO-214AC
molded plastic case
The marking band indicates the cathode

Mounting Pad Layout
---SMA





S-HFM108：S-- 满足AECQ101可靠性标准； HF----高效二极管；M---贴片产品；1----IF=1A; 108----VB=1000V;

4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	谭志伟	2017-10-30