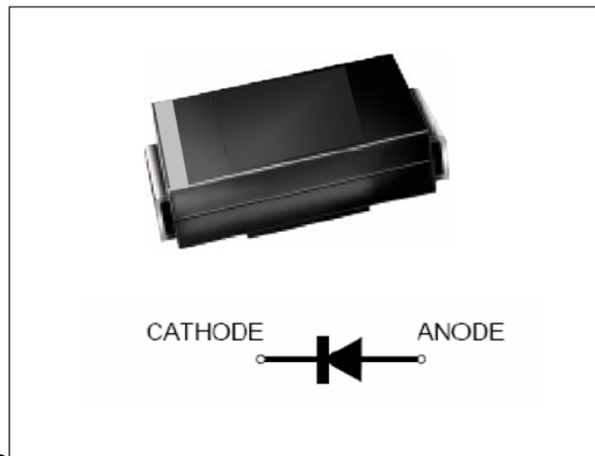


S-EFMA240

Surface Mount Glass Passivated Super Fast Rectifiers Reverse Voltage 200V Forward Current 2.0A

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
- * 2.0 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 precaution: None

Electrical Characteristic

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

Parameter Symbol	symbol	S-EFMA240	Unit
Device marking code		EF24	
Maximum repetitive peak reverse voltage	V_{RRM}	200	V
Maximum RSM voltage	V_{RSM}	140	V
Maximum DC blocking voltage	V_{DC}	200	V
Maximum average forward rectified current at TL = 100°C	IF(AV)	2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50	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-EFMA240	Unit
Maximum instantaneous forward voltage at 2.0A	V_F	0.95	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	35	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.

S-EFMA240

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

Fig. 1 - Forward Current Derating Curve

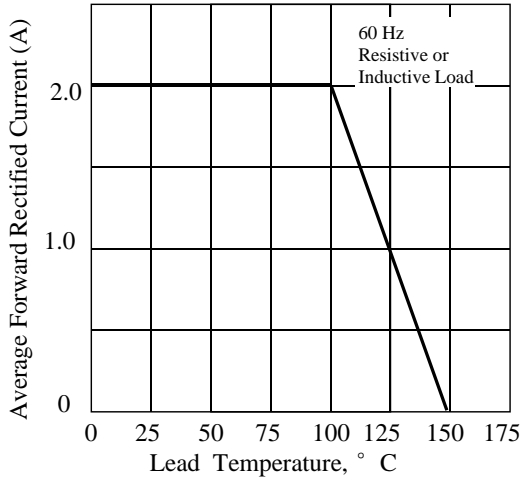


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

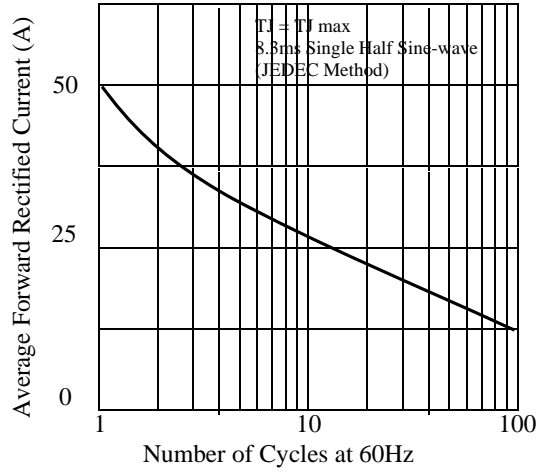


Fig 3. - Typical Instantaneous Forward Characteristics

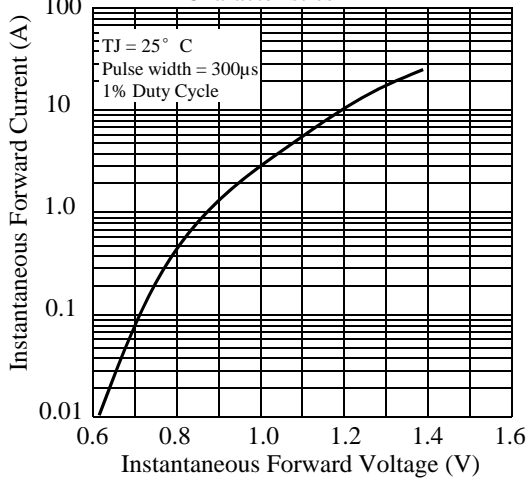


Fig 4. - Typical Reverse Characteristics

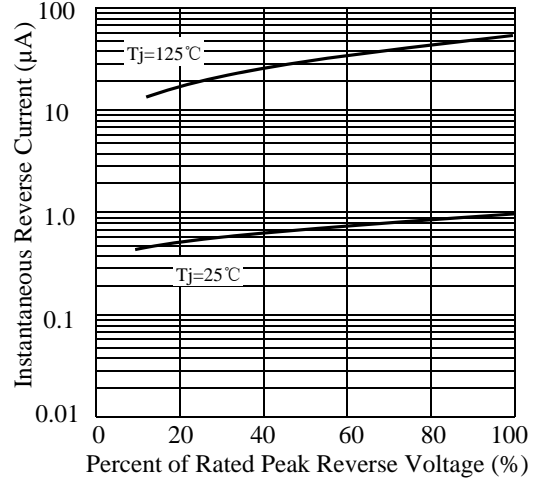


Fig 5. - typical transient thermal impedance

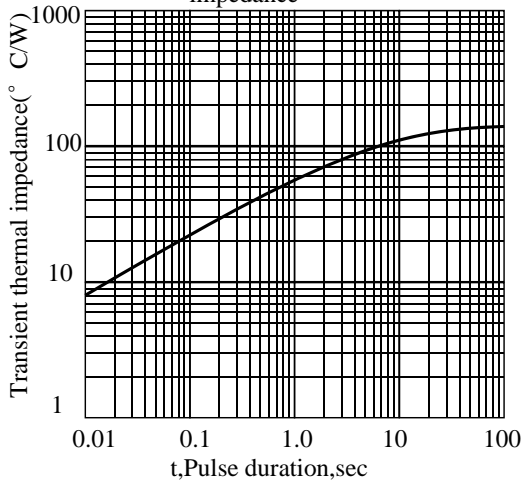
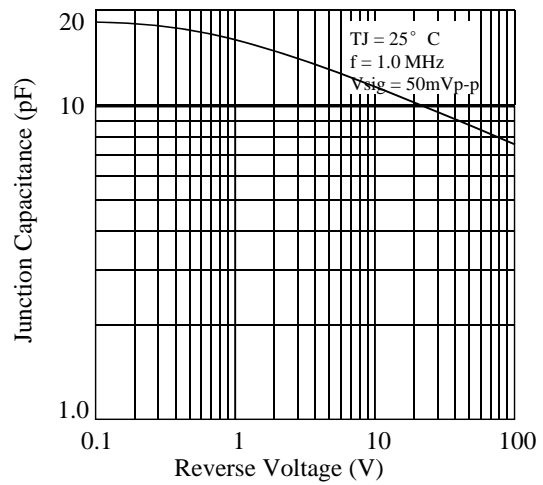
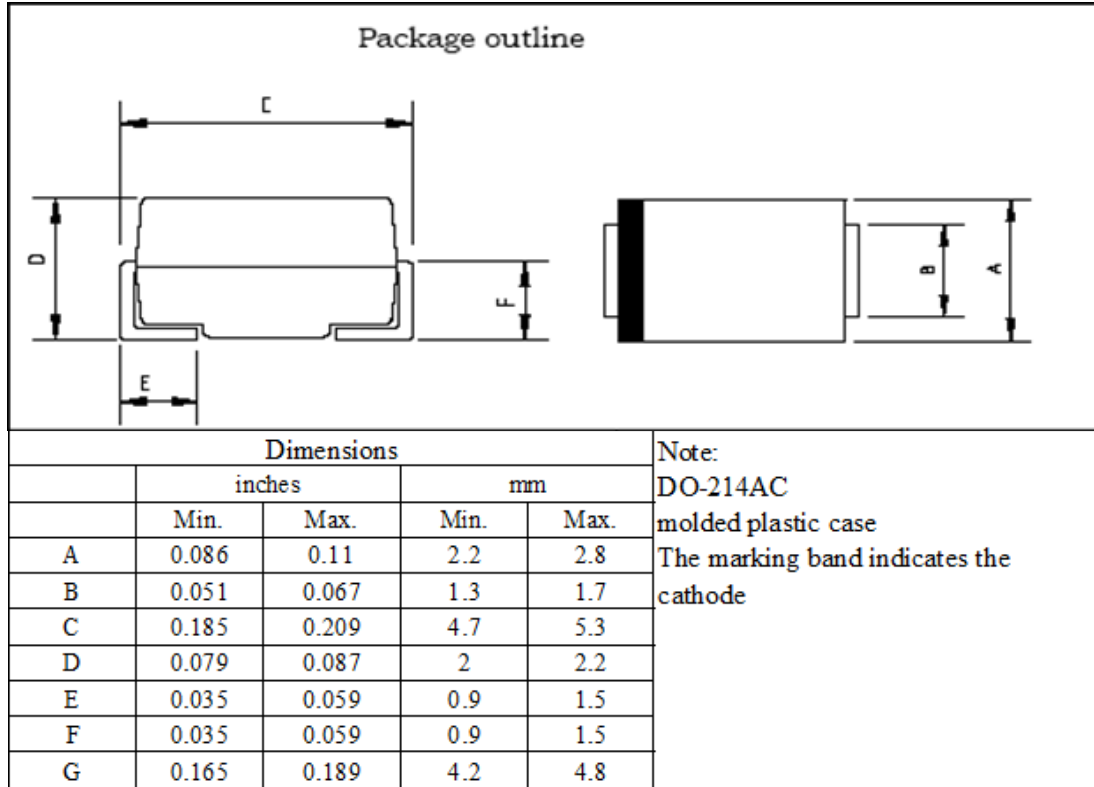


Fig 6. - Typical Junction Capacitance

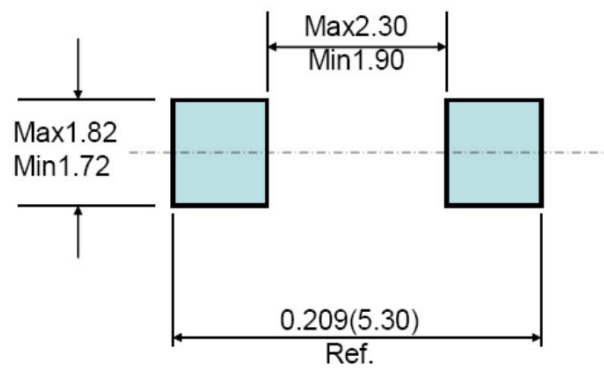


S-EFMA240

3. dimension:



Mounting Pad Layout ---SMA



S-EFMA240

4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	谭志伟	2018-9-18
2	D尺寸标注调整	谭志伟	2019-10-10