

MBR1100HT-AH

Surface Mount Schottky Barrier Rectifier

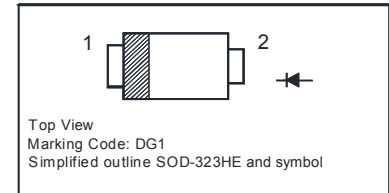
Reverse Voltage at 100 V
Forward Current at 1 A

Features

- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings and Characteristics

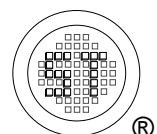
Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load.

For capacitive load, derate by 20%

Parameter	Symbols	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current at $T_c = 75^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC methode)	I_{FSM}	22	A
Maximum Instantaneous Forward Voltage at $I_F = 1\text{ A}$	V_F	0.85	V
Maximum Instantaneous Reverse Current at $T_a = 25^\circ\text{C}$ at DC Blocking Voltage at $T_a = 125^\circ\text{C}$	I_R	0.02 10	mA
Typical Junction Capacitance ¹⁾	C_j	160	pF
Typical Thermal Resistance, Junction to Ambient ²⁾	$R_{\theta JA}$	220	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

¹⁾ Measured at 1 MHz and reverse voltage of 4 V.

²⁾ 8.0mm ² (.013mm thick) land areas.



Electrical characteristic curves

Fig 1. Forward Current Derating Curve

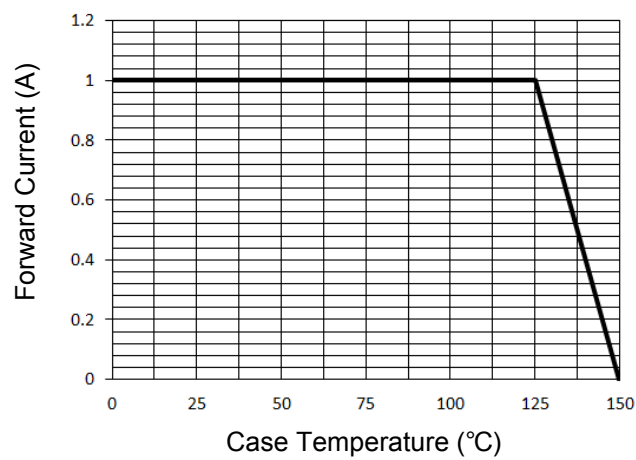


Fig 2. Forward Characteristic Curve

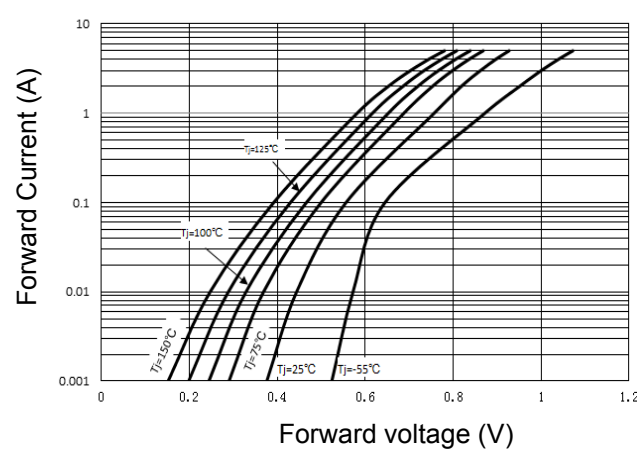


Fig 3. Reverse Characteristic Curve

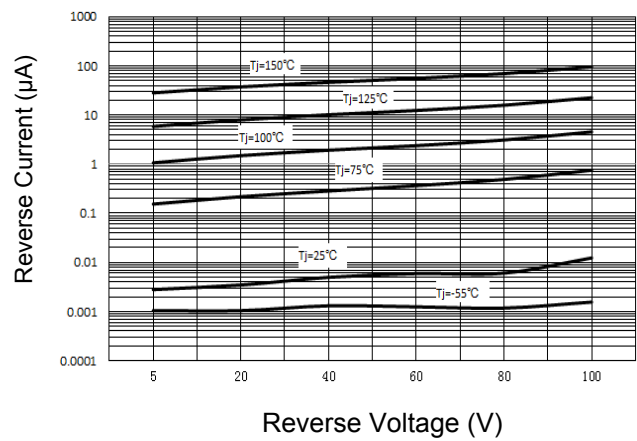
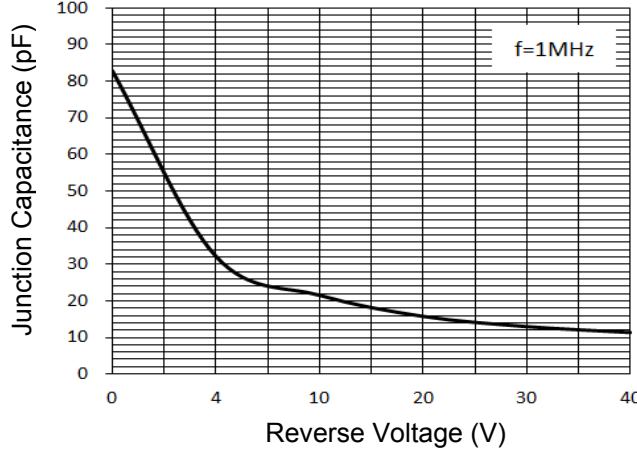


Fig 4. Junction Capacitance

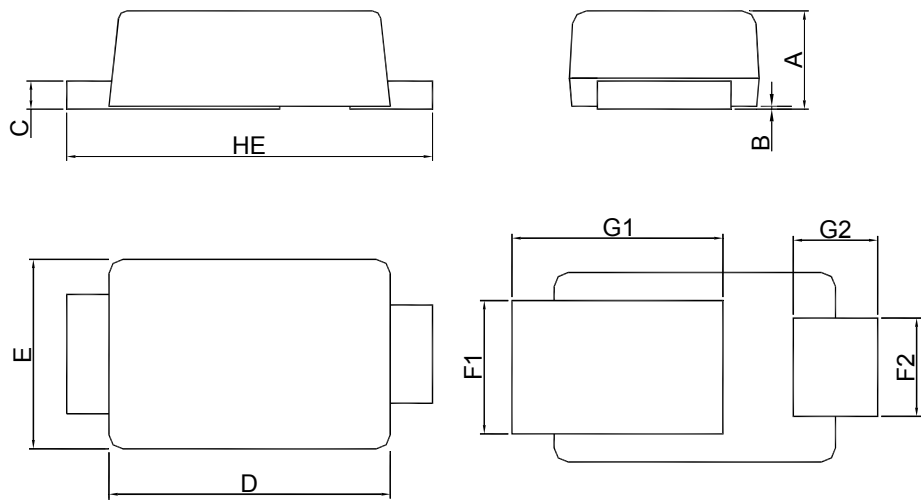


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PACKAGE OUTLINE

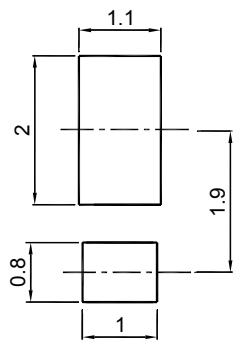
Plastic surface mounted package; 2 leads

SOD-323HE



UNIT	A	B	C	D	E	F1	F2	G1	G2	H _E
mm	0.7	0.02	0.2	2	1.35	0.95	0.7	1.5	0.6	2.6
	0.5	0	0.1	1.8	1.15	0.75	0.5	1.3	0.4	2.4

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323HE	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line

" DG1 " = Part No.

" • " = HAF (Halogen and Antimony Free)

Font type: Arial

