MBR0540HS

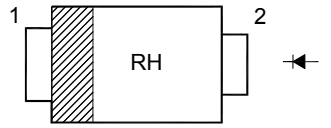
Surface Mount Schottky Barrier Diode

Features

- Low forward voltage
- High conductance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: RH
Simplified outline SOD-323HE and symbol

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current (8.3 ms Single Half Sine-wave)	I_{FSM}	20	A
Thermal Resistance Junction to Lead [1)]	$R_{\theta JL}$	118	℃/W
Thermal Resistance Junction to Ambient [2)]	$R_{\theta JA}$	206	℃/W
Operating Junction Temperature Range	T_j	- 65 to + 150	℃
Storage Temperature Range	T_{stg}	- 65 to + 150	℃

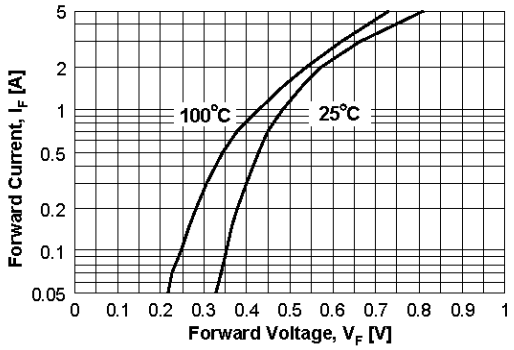
[1)] Device mounted on FR-4 PCB 0.013 mm.

[2)] 1 inch" pad size (1 X 0.5 inch for each lead) on FR4 board.

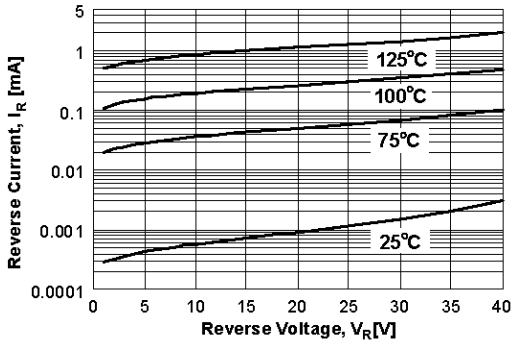
Characteristics at T_a = 25℃

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 0.5 A at I_F = 1 A at I_F = 0.5 A, T_a = 100°C at I_F = 1 A, T_a = 100°C	V_F	 0.51 0.62 0.46 0.61	V
Reverse Current at V_R = 20 V at V_R = 40 V at V_R = 20 V, T_a = 100°C at V_R = 40 V, T_a = 100°C	I_R	 10 20 5 13	 μA μA mA mA

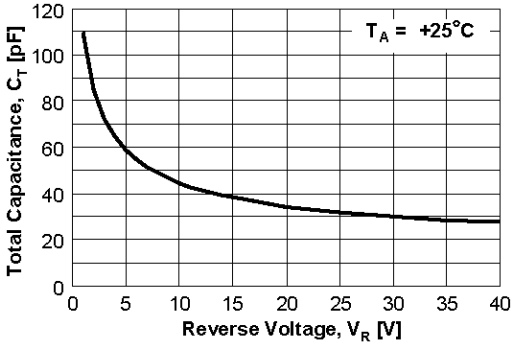
TOP DYNAMIC



Forward Voltage Characteristics



Reverse Current vs Reverse Voltage

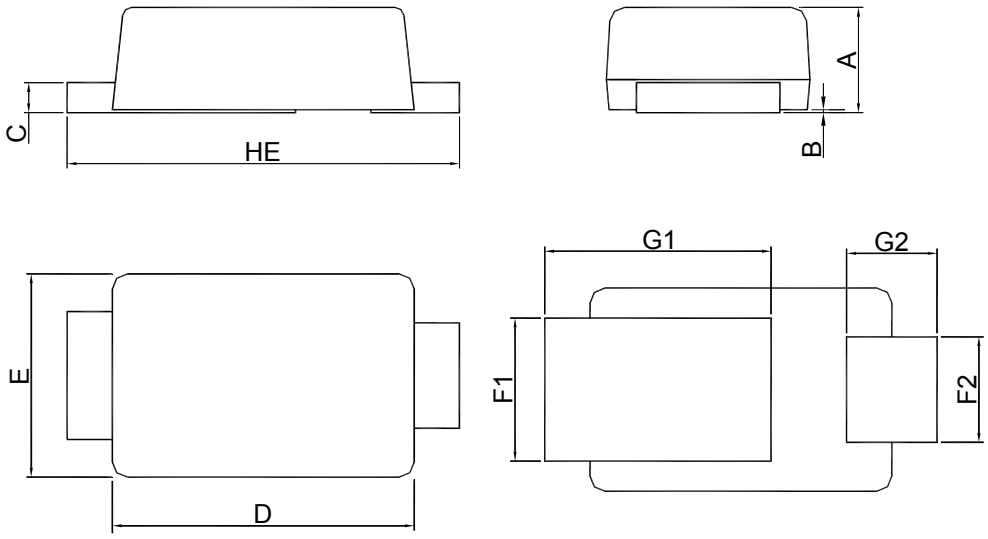


Total Capacitance

TOP DYNAMIC

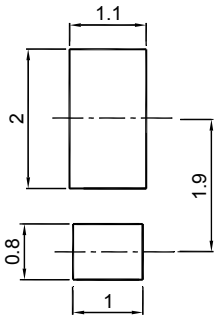
PACKAGE OUTLINE

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



SOD-323HE

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

TOP DYNAMIC