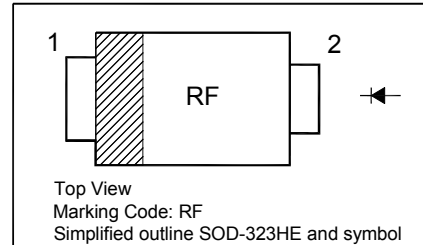


MBR0530HS

SURFACE MOUNT SCHOTTKY POWER RECTIFIER

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	30	V
Maximum DC Blocking Voltage	V_R	30	V
Average Forward Rectified 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	$R_{\theta JL}$	150	$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	206	$^\circ\text{C/W}$
Operating Junction Temperature	T_J	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 125	$^\circ\text{C}$

¹⁾ 1 inch square pad size (1 X 0.5 inch for each lead) on FR4 board

Electrical Characteristics at $T_a = 25^\circ\text{C}$

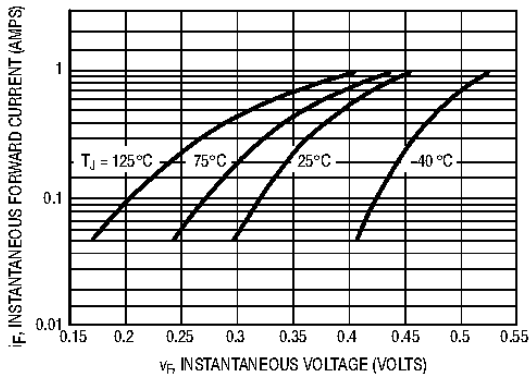
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 500\text{ mA}$	V_F	0.375 0.43	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 15\text{ V}$	I_R	130 20	μA

TOP DYNAMIC

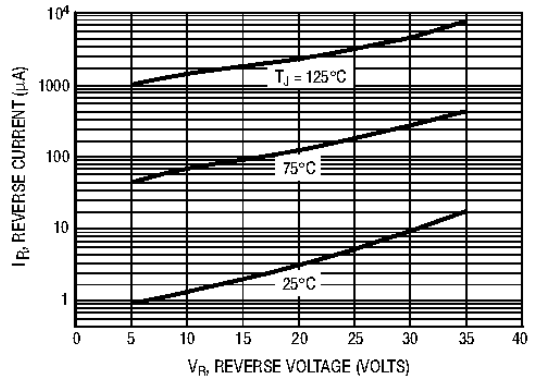


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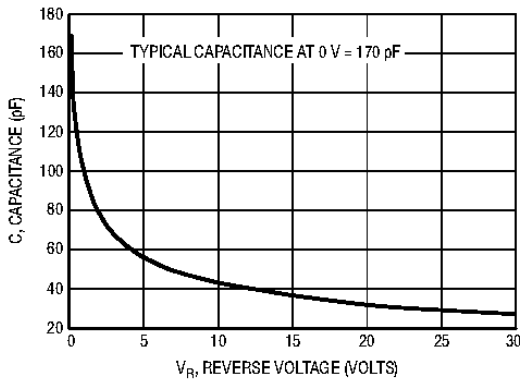
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Typical Forward Voltage



Typical Reverse Current



Typical Capacitance

TOP DYNAMIC

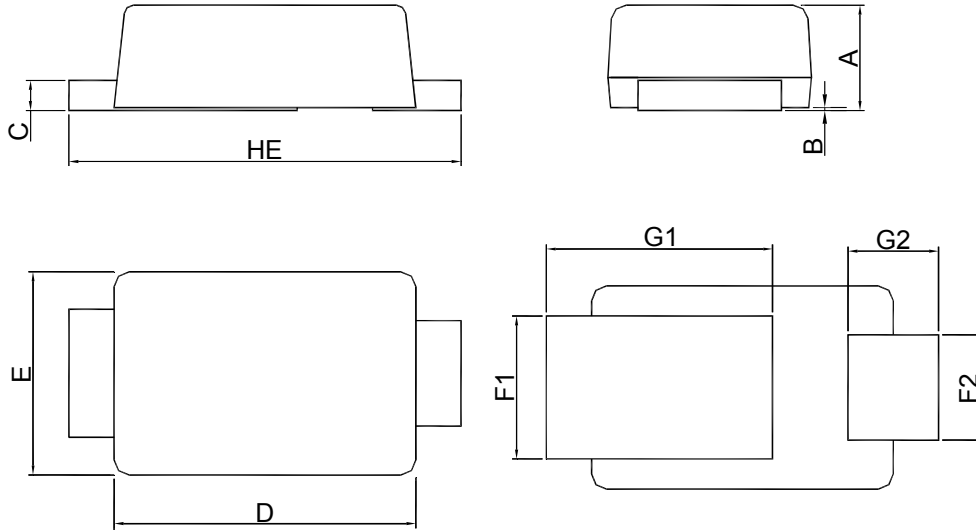


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PACKAGE OUTLINE

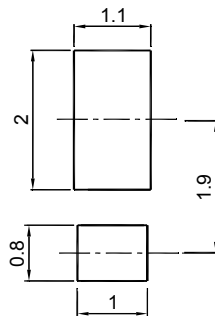
Plastic surface mounted package; 2 leads

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



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



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