

MBR1040HEWS

SCHOTTKY BARRIER DIODE

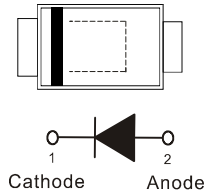
VOLTAGE 40 Volt **CURRENT** 1 Ampere

FEATURES

- SOD-323HE low profile package
- Low forward voltage drop, low reverse current
- High Efficiency
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

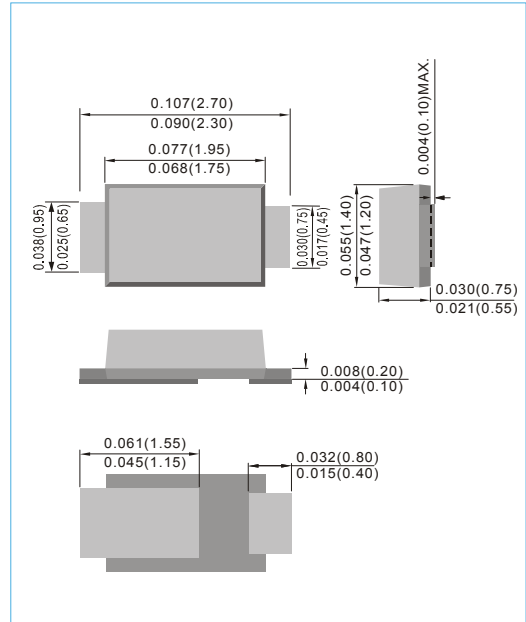
APPLICATIONS

- Case: SOD-323HE, Plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.005 grams
- Marking: KC



SOD-323HE

Unit : inch(mm)



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	40	V
RMS Voltage	V _{RMS}	28	V
DC Blocking Voltage	V _R	40	V
Average Rectified Output Current	I _{F(AV)}	1	A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	22	A
Typical Thermal Resistance, Junction to Lead (Note 1)	R _{θJL}	40	°C/W
Junction to Ambiente (Note 2)	R _{θJA}	280	°C/W
Operating junction temperature range and Storage temperature range	T _J , T _{STG}	-55 to + 150	°C

Note :

1. Mounted on an FR-4 PCB , single-sided copper , with 48cm² copper pad area.
2. Mounted on an FR-4 PCB , single-sided copper , mini pad.

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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Breakdown voltage	V _{BR}	I _R =1mA T _A =25°C	40	-	-	V
Instantaneous forward voltage	V _F	I _F =0.7A	-	0.49	-	V
		I _F =1A	-	0.52	0.58	V
		I _F =0.7A	-	0.4	-	V
		I _F =1A	-	0.44	-	V
Reverse current	I _R	V _R =32V T _A =25°C	-	0.8	-	μA
		V _R =40V T _A =25°C	-	-	50	μA
		V _R =40V T _A =125°C	-	0.8	-	μA
		V _R =40V T _A =125°C	-	-	-	mA

RATING AND CHARACTERISTIC CURVES

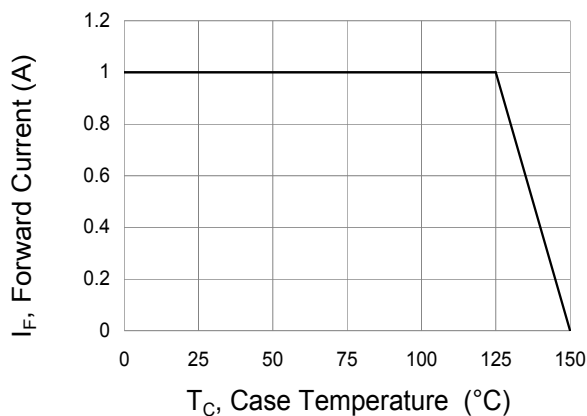


Fig.1 Forward Current Derating Curve

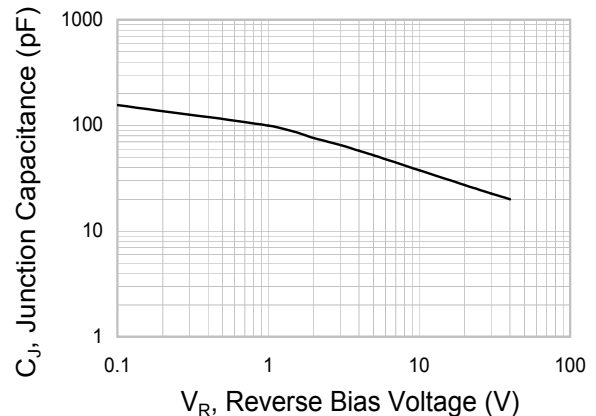


Fig.2 Typical Junction Capacitance

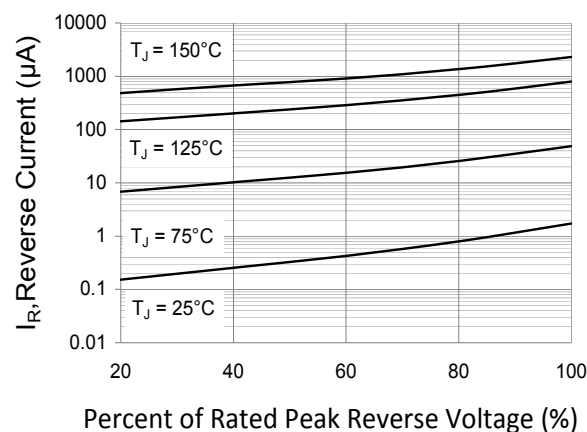


Fig.3 Typical Reverse Characteristics

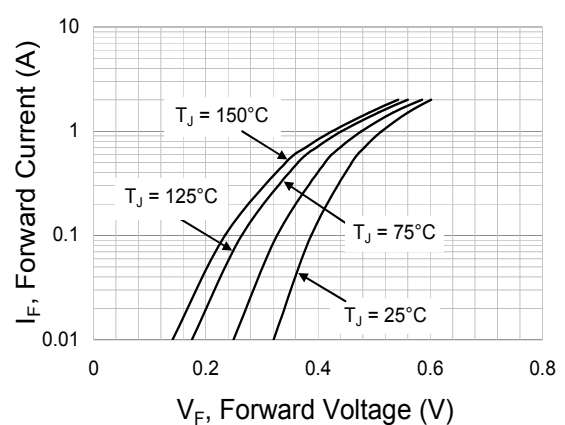


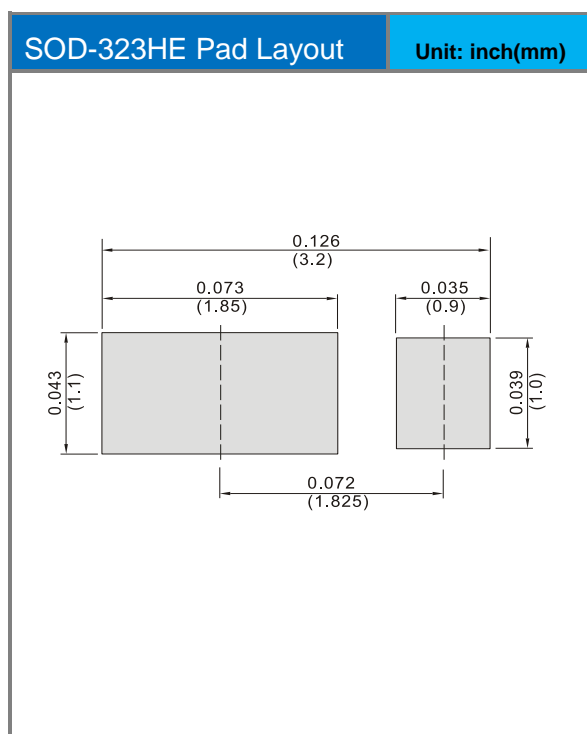
Fig.4 Typical Forward Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
MBR1040HEWS	SOD-323HE	5K pcs / 7" reel	KC
MBR1040HEWS	SOD-323HE	12K pcs / 13" reel	KC

Mounting Pad Layout



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