MBR1040HEWS-AU

SCHOTTKY BARRIER DIODE

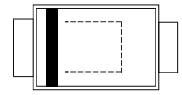
VOLTAGE	40 Volt	CURRENT	1 Ampere

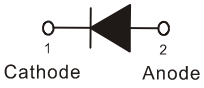
FEATURES

- 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)
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified

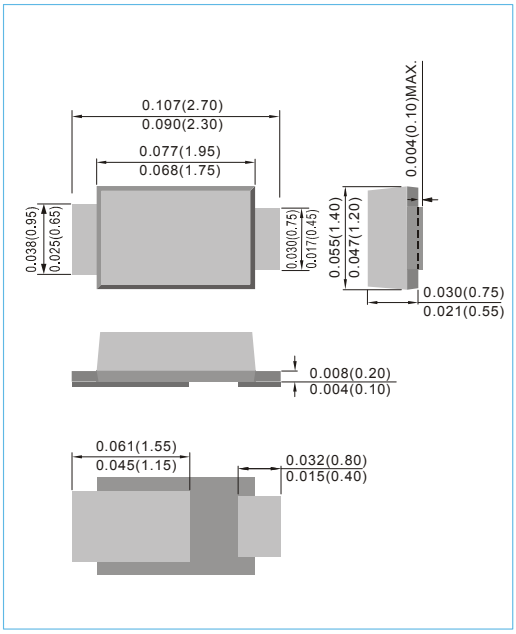
APPLICATIONS

- Case: SOD-323HE, Plastic
- Terminals:Solder plated,solderable per MIL-STD-750,Method2026
- 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) Junction to Ambiente (Note 2)	$R_{\Theta JL}$ $R_{\Theta JA}$	40 280	°C/W
Operating junction temperature range and Storage temperature range	T_J,T_{STG}	-55 to + 150	°C

Note :

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

2.Mounted on a 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 I_F=1A	T_A=25°C	- -	0.49 0.52	- 0.58	V
		I_F=0.7A I_F=1A	T_A=125°C	- -	0.4 0.44	- -	V
Reverse current	I_R	V_R=32V	T_A=25°C	-	0.8	-	μA
		V_R=40V	T_A=25°C T_A=125°C	- -	- 0.8	50 -	μA mA

RATING AND CHARACTERISTIC CURVES

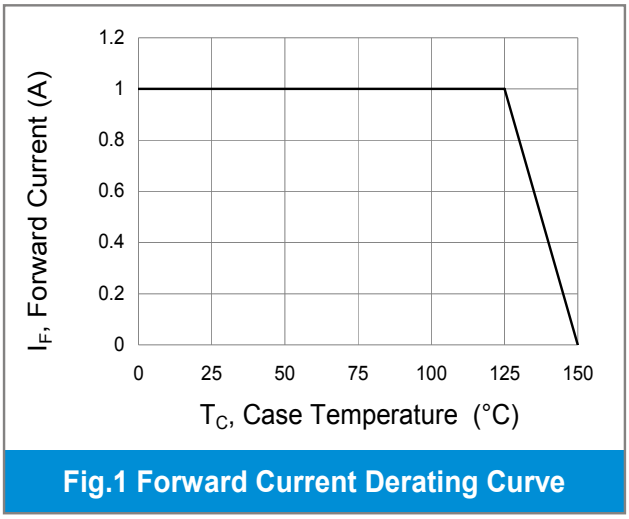

Fig.1 Forward Current Derating Curve

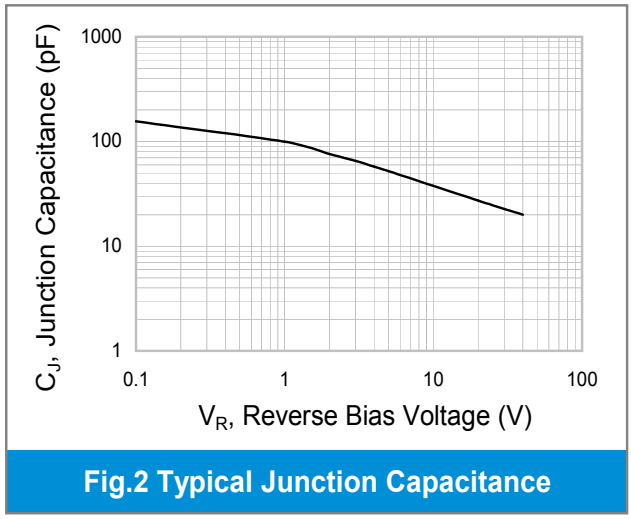

Fig.2 Typical Junction Capacitance

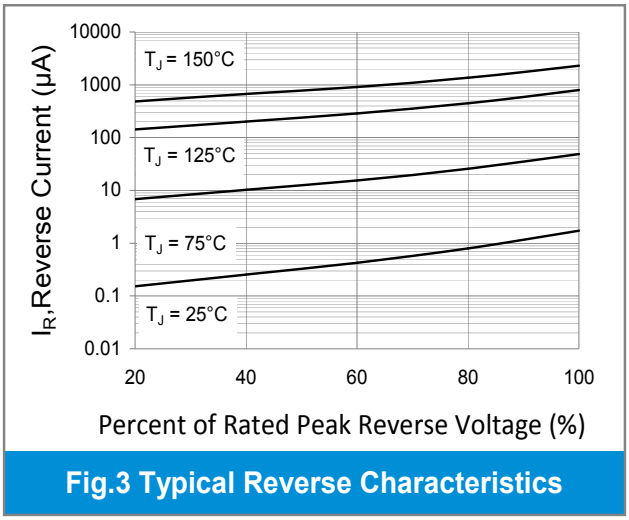

Fig.3 Typical Reverse Characteristics

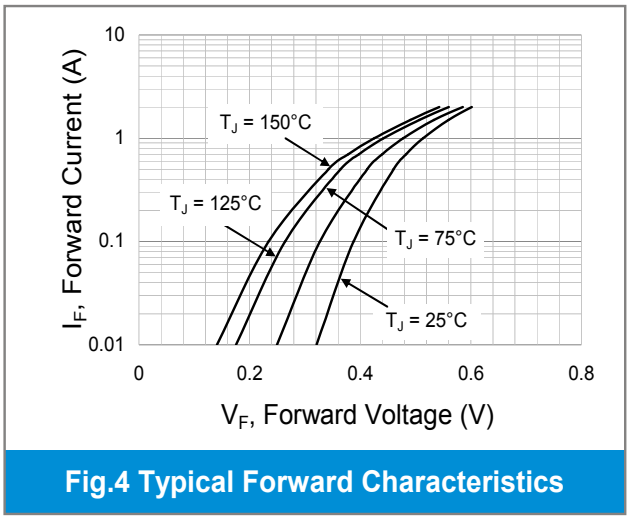

Fig.4 Typical Forward Characteristics

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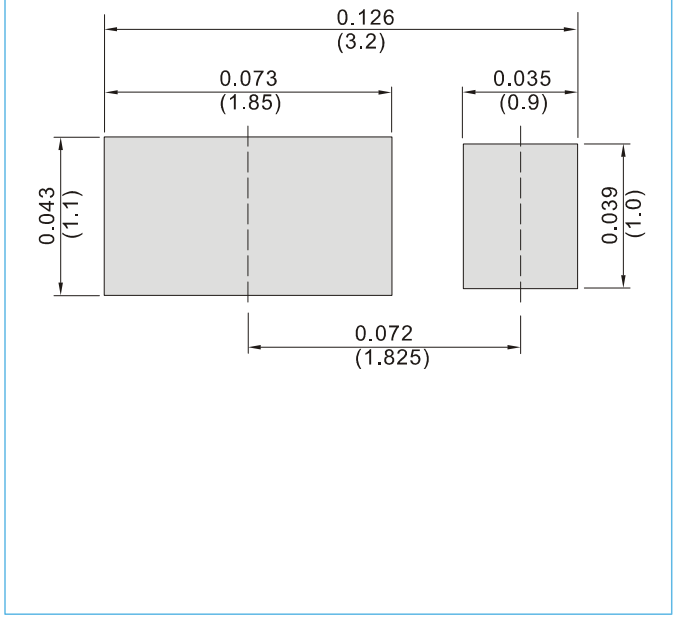
MOUNTING PAD LAYOUT

SOD-323HE Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 5K per 7" plastic Reel

MBR1040HEWS-AU

Part No_packing code_Version

MBR1040HEWS-AU_R1_000A1

MBR1040HEWS-AU_R2_000A1

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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