



SS1030HEWS

SCHOTTKY BARRIER DIODE

FEATURES

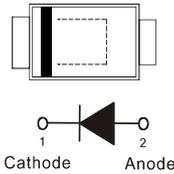
- SOD-323HE low profile package
- Low forward voltage drop, low reverse current
- High Efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOD-323HE, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Apporx. Weight : 0.0002 ounces, 0.005 grams

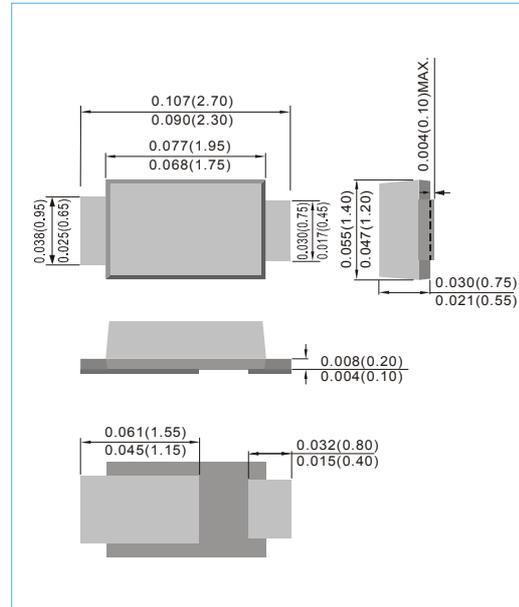
APPLICATIONS

- Low voltage high frequency inverters
- DC/DC converters
- Polarity protection
- Freewheeling



SOD-323HE

Unit : inch(mm)



ABSOLUTE MAXIMUM RATINGS (TA=25°C)

| PARAMETER | SYMBOL | LIMITS | UNIT |
|--|------------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 30 | V |
| Maximum Average Rectified Forward Current | I _O | 1 | A |
| Peak Forward Surge Current (Half Sine Wave , 1 cycle , non-repetitive) | I _{FSM} | 22 | A |
| Operating Junction Temperature Range | T _{JW} | -40 to +150 | °C |
| Storage Temperature Range | T _{STG} | -40 to +150 | °C |

ELECTRICAL CHARACTERISTICS (TA=25°C)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN. | TYP. | MAX. | UNITS |
|---------------------------|------------------|----------------------|------|------|------|-------|
| Forward Voltage | V _{F1} | I _F =0.7A | - | 0.42 | 0.45 | V |
| | V _{F2} | I _F =1A | - | 0.47 | 0.52 | V |
| Reverse Current | I _{R1} | V _R =5V | - | 1 | - | μA |
| | I _{R2} | V _R =30V | - | 10 | 100 | μA |
| Thermal Resistance (Note) | R _{θJA} | Junction to Ambient | - | - | 220 | °C/W |
| | R _{θJL} | Junction to Lead | - | - | 50 | °C/W |

Note : Mounted on P.C Board with (15mmx50mm) copper pad areas.



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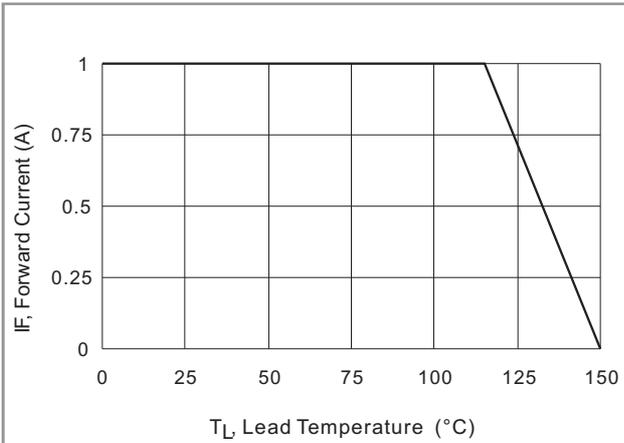


Fig.1 Forward Current Derating Curve

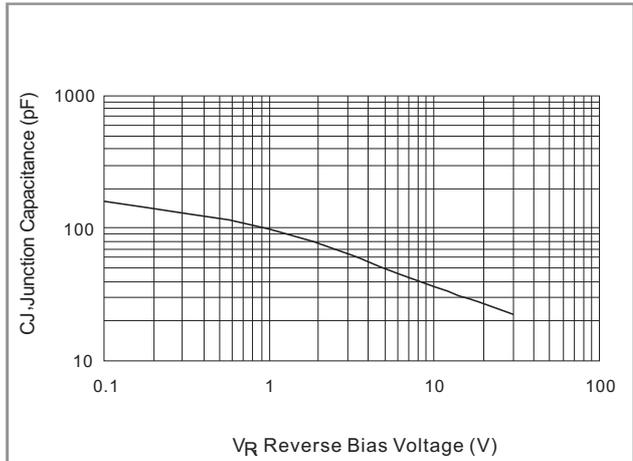


Fig.2 Typical Junction Capacitance

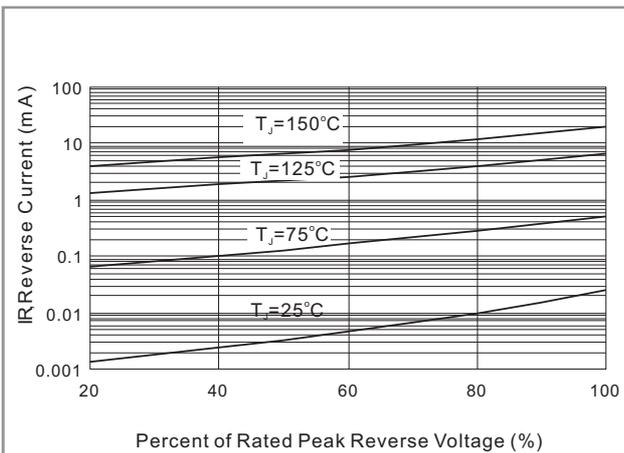


Fig.3 Typical Reverse Characteristics

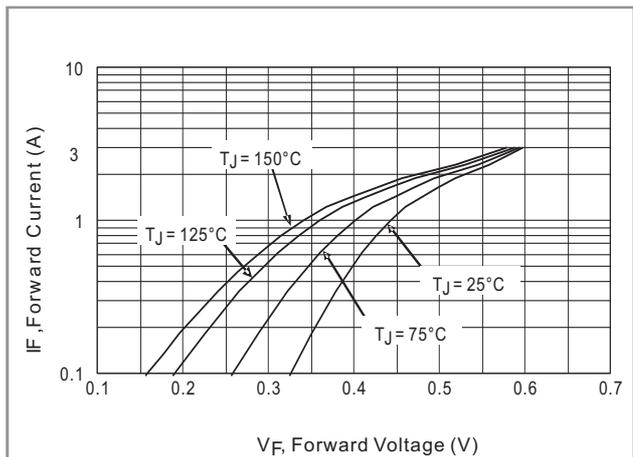


Fig.4 Typical Forward Characteristics

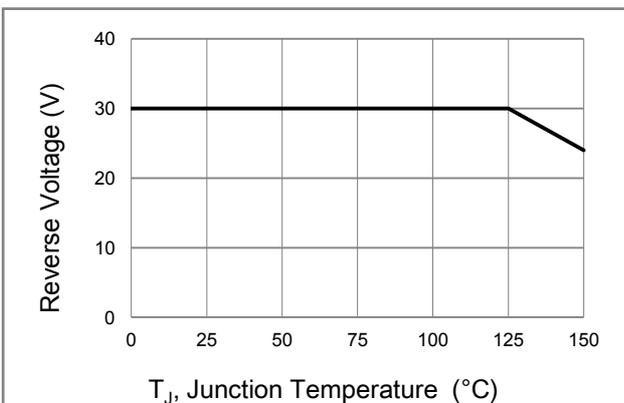


Fig.5 Operating Temperature Derating Curve



SS1030HEWS

PART NO PACKING CODE VERSION

| Part No Packing Code | Package Type | Packing Type | Marking | Version |
|----------------------|--------------|--------------------|---------|--------------|
| SS1030HEWS_R1_00001 | SOD-323HE | 5K pcs / 7" reel | ET | Halogen free |
| SS1030HEWS_R2_00001 | SOD-323HE | 12K pcs / 13" reel | ET | Halogen free |

For example :

RB500V-40 **R2** **00001**



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th 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 | | | |

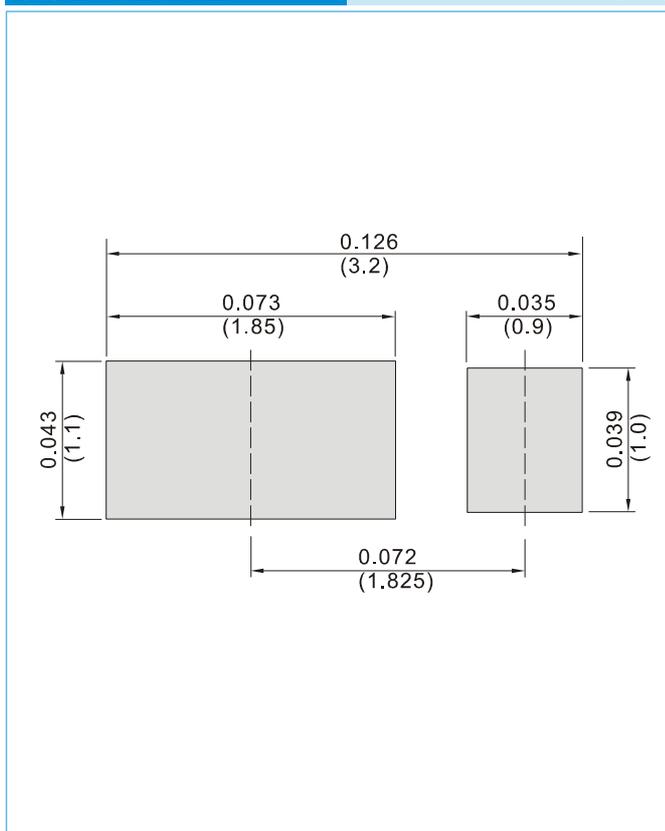


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MOUNTING PAD LAYOUT

SOD-323HE

Unit : inch(mm)





SS1030HEWS

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