RECTIFIER DIODE

1A FORWARD CURRENT, 100 TO 1000V REVERSEVOLTAGE

DESCRIPTION

The HER102~HER108 are available in DO-41 Package.

FEATURE

- For Surface Mounted Applications
- Low Profile Package
- Open Junction Chip

MECHANICAL DATA

• Case: DO-41

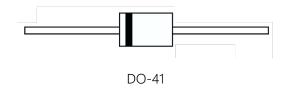
 Terminals: Solderable per MIL-STD-750, Method 2026

• Weight: 0.25g / 0.0088oz

ORDERING INFORMATION

| Package Type | Part Number | | | |
|--|------------------|--|--|--|
| | HER102 | | | |
| DO-41 | HER103 | | | |
| | HER104 | | | |
| | HER105 | | | |
| | HER106 | | | |
| | HER107 | | | |
| | HER108 | | | |
| Note | SPQ: 1000pcs/Box | | | |
| AiT provides all RoHS Compliant Products | | | | |

PIN DESCRIPTION



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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

 $T_A = 25$ °C unless otherwise noted

| Parame | ter | Symbol | HER102 | HER103 | HER104 | HER105 | HER106 | HER107 | HER108 | Unit |
|---|-----------------------|--------------------|-----------|--------|--------|--------|--------|--------|--------|------------------|
| Maximum Repet Reverse Voltage | | V_{RRM} | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS \ | Voltage | V_{RMS} | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC Bl Voltage | ocking | V_{DC} | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum Avera Rectified Curren @Tc =100°C | • | I _{F(AV)} | | | | 1 | | | | А |
| Peak Forward Su Current 8.3ms S Sine-Wave Supe on Rated Load | ingle Half | I _{FSM} | | | | 35 | | | | А |
| Maximum Instan Forward Voltage | | V _F | 0.95 | 0.95 | 0.95 | 1.25 | 1.65 | 1.65 | 1.65 | V |
| Maximum DC Reverse Current | | 10 | | | | | | | | |
| at Rated DC Blocking Voltage | T _A =125°C | I _R | 500 | | | | | | | μΑ |
| Maximum Rever Recovery Time ⁽¹ | | Trr | 50 | 50 | 50 | 50 | 75 | 75 | 75 | A ² S |
| Typical Thermal Capacitance ⁽²⁾ | | CJ | 15 | | | | | | > | |
| Typical Thermal Resistance R | | $R_{\theta JA}$ | 50 | | | | | | °C/W | |
| Operating Temperature T _. | | Tı | -55 ~+150 | | | | | | °C | |
| Storage Temperature Range | | T _{STG} | -55 ~+150 | | | | | | °C | |

⁽¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C

⁽²⁾ Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Derating Curve Output Forward Current

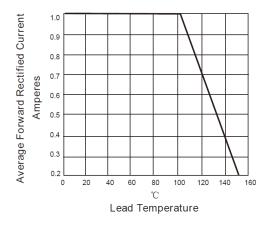


Fig 3. Typical Forward Voltage Characteristics

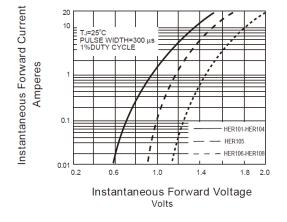


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

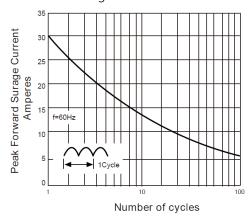
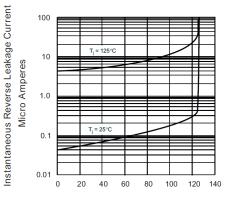


Fig 4. Typical Reverse Leakage Characteristics

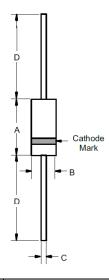


Percent Of Rated Peak Reverse Voltage(%)

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PACKAGE INFORMATION

Dimension in GBJ Package



| Cumbal | MILLIMETERS | | | |
|--------|-------------|-------|--|--|
| Symbol | MIN | MAX | | |
| A | 4.100 | 5.200 | | |
| В | 2.000 | 2.700 | | |
| С | 0.700 | 0.900 | | |
| D | 25.400 | - | | |

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