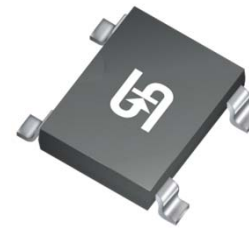


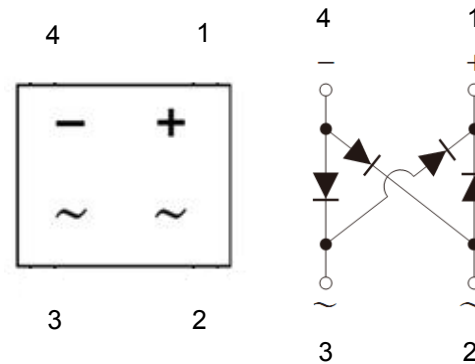
1.5A, 1000V Miniature Fast Recovery Glass Passivated Surface Bridge Rectifier

FEATURES

- Ideal for automated placement, for compact PCB design
- High surge current capability
- Ultrafast reverse recovery time for high frequency
- Negligible leakage current
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



ABS-L



MECHANICAL DATA

Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0

Moisture sensitivity: level 1, per J-STD-020

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: Polarity as marked on the body

Weight: 0.09 g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted) | | | |
|-------------------------------------------------------------------------------------------------|--------------------|--------------|------------------|
| PARAMETER | SYMBOL | RABS15M | UNIT |
| Maximum repetitive peak reverse voltage | V _{RRM} | 1000 | V |
| Maximum RMS voltage | V _{RMS} | 700 | V |
| Maximum DC blocking voltage | V _{DC} | 1000 | V |
| Maximum average forward rectified current | I _{F(AV)} | 1.5 | A |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 50 | A |
| Maximum instantaneous forward voltage (Note 1) I _F = 1.5A | V _F | 1.30 | V |
| Maximum reverse current @ rated V _R T _J =25°C T _J =125°C | I _R | 1 | μA |
| | | 200 | |
| Maximum reverse recovery time per diode (Note 2) | t _{rr} | 500 | ns |
| Rating for fusing (t<8.3ms) | I ² t | 10 | A ² s |
| Typical thermal resistance | R _{θJL} | 26 | °C/W |
| | R _{θJA} | 70 | |
| Operating junction temperature range | T _J | - 55 to +150 | °C |
| Storage temperature range | T _{STG} | - 55 to +150 | °C |

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

| ORDERING INFORMATION | | | | | |
|----------------------|-----------------|--------------|---------------------|---------|-------------------------|
| PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX | PACKAGE | PACKING |
| RABS15M (Note 1) | H | RE | G | ABS-L | 1,000 / 7" Plastic reel |
| | | RG | | ABS-L | 5,000 / 13" Paper reel |

Note 1: Whole series with green compound

| EXAMPLE | | | | | |
|---------------|----------|-----------------|--------------|---------------------|--------------------------------------|
| PREFERRED P/N | PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION |
| RABS15MHREG | RABS15M | H | RE | G | AEC-Q101 qualified Green compound |

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

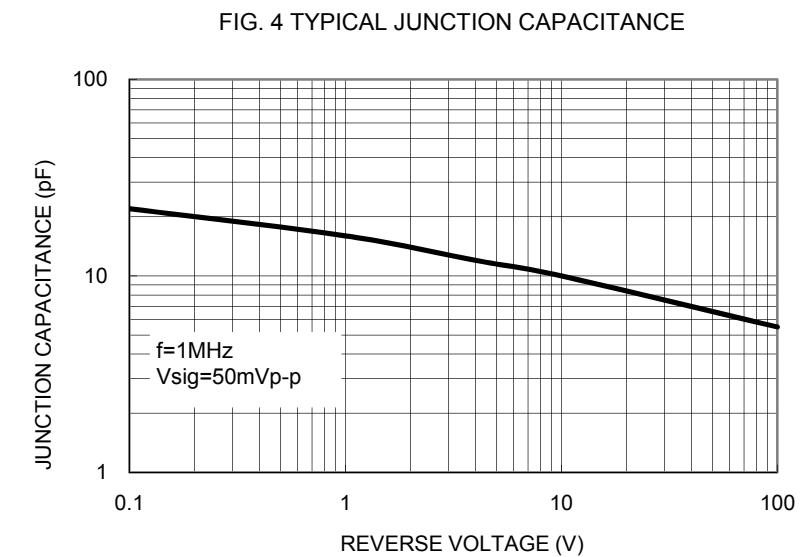
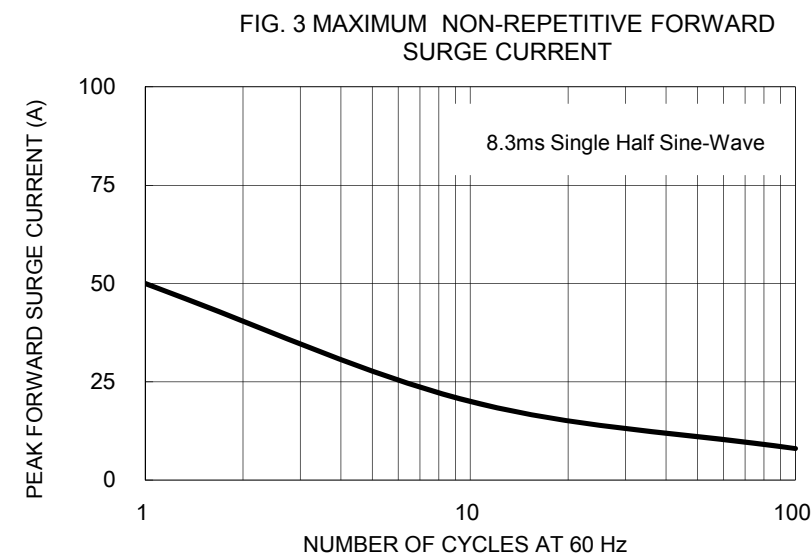
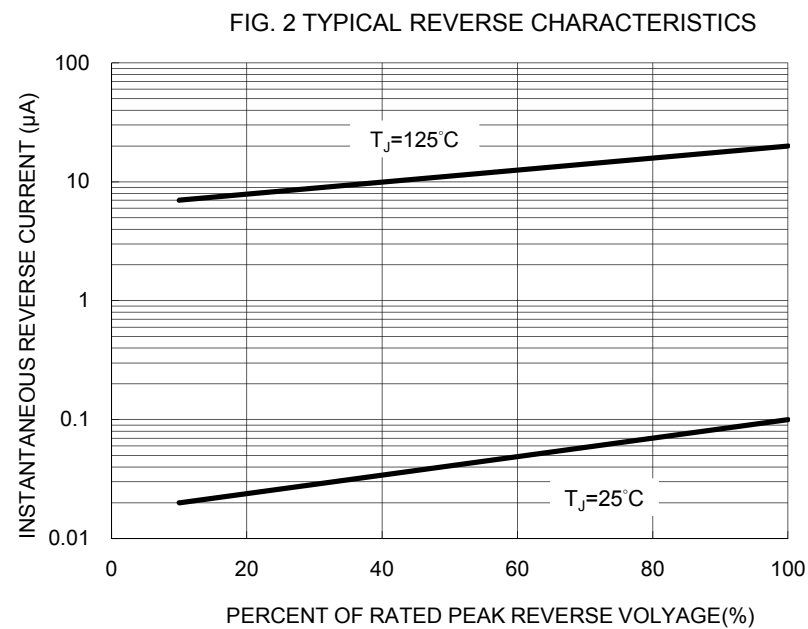
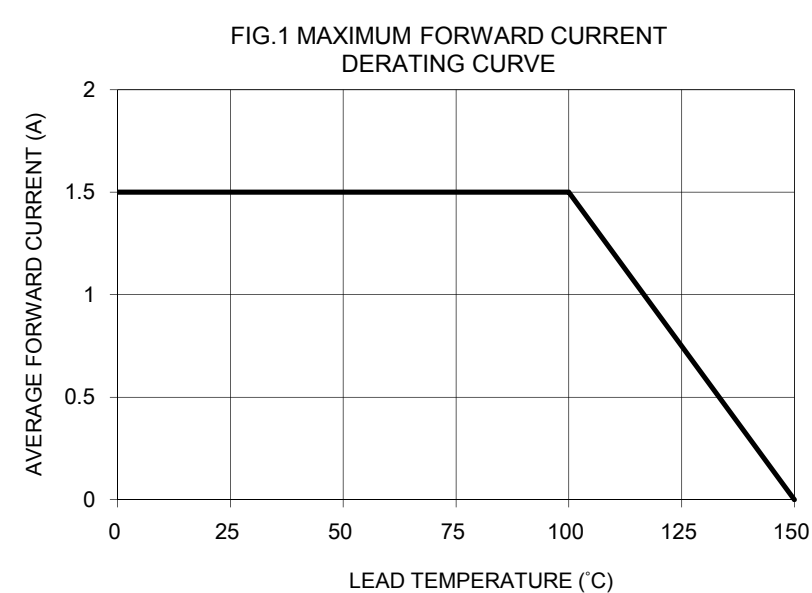
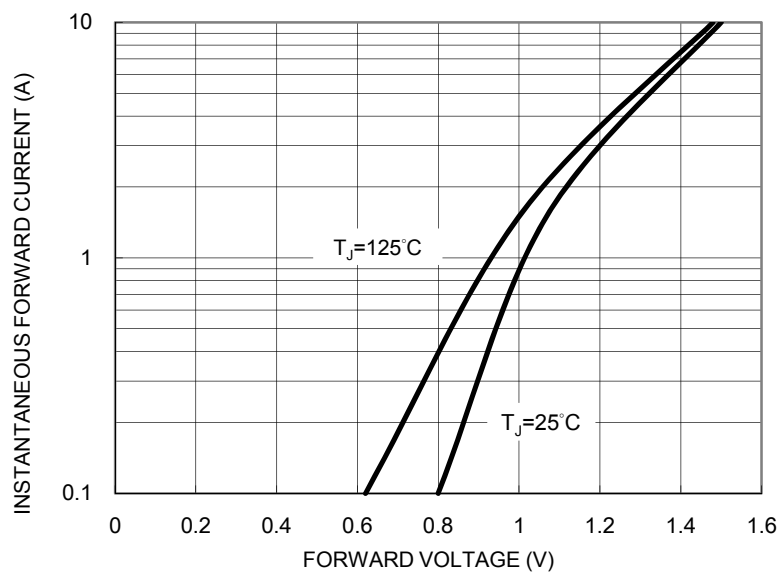
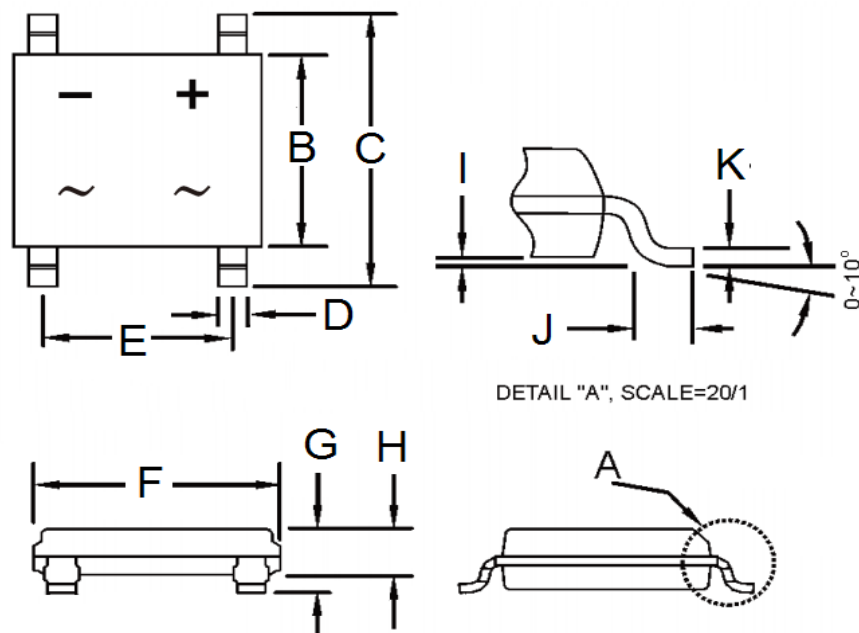


FIG. 5 TYPICAL FORWARD CHARACTERISTICS



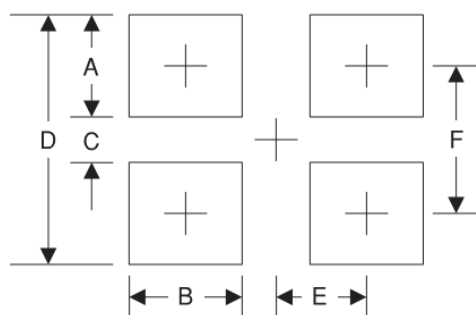
PACKAGE OUTLINE DIMENSIONS

ABS-L



| DIM. | Unit (mm) | | Unit (inch) | |
|------|-----------|------|-------------|-------|
| | Min | Max | Min | Max |
| B | 4.30 | 4.50 | 0.169 | 0.177 |
| C | 6.25 | 6.65 | 0.246 | 0.262 |
| D | 0.60 | 0.70 | 0.024 | 0.028 |
| E | 3.90 | 4.10 | 0.154 | 0.161 |
| F | 4.90 | 5.10 | 0.193 | 0.201 |
| G | 1.25 | 1.35 | 0.049 | 0.053 |
| H | 1.20 | 1.30 | 0.047 | 0.051 |
| I | 0.05 | 0.15 | 0.002 | 0.006 |
| J | 0.30 | 0.70 | 0.012 | 0.028 |
| K | 0.15 | 0.25 | 0.006 | 0.010 |

SUGGESTED PAD LAYOUT



| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A | 1.50 | 0.059 |
| B | 0.90 | 0.035 |
| C | 4.22 | 0.166 |
| D | 7.22 | 0.284 |
| E | 2.05 | 0.081 |
| F | 5.72 | 0.225 |

MARKING DIAGRAM



P/N = Specific Device Code
YW = Date Code
F = Factory Code

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