

GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE: 50 --- 1000 V

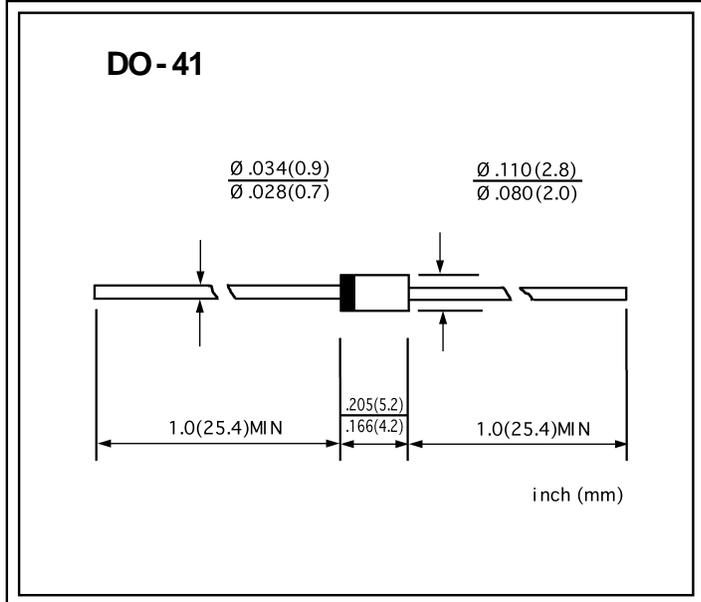
CURRENT: 1.0 A

FEATURES

- ◇ Low cost
- ◇ Glass passivated junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC DO-41, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces, 0.34 grams
- ◇ Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | HER 101G | HER 102G | HER 103G | HER 104G | HER 105G | HER 106G | HER 107G | HER 108G | UNITS | |
|---|-----------------|--------------|----------|----------|----------|----------|----------|----------|----------|--------------|---------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V | |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V | |
| Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$ | $I_{F(AV)}$ | 1.0 | | | | | | | | A | |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$ | I_{FSM} | 30.0 | | | | | | | | A | |
| Maximum instantaneous forward voltage @1.0 A | V_F | 1.0 | | 1.3 | | | 1.7 | | | V | |
| Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$ | I_R | 5.0 | | | | 100.0 | | | | | μA |
| Maximum reverse capacitance (Note1) | t_{rr} | 50 | | | | | 75 | | | | ns |
| Typical junction capacitance (Note2) | C_J | 20 | | | | | 15 | | | | pF |
| Typical thermal resistance (Note3) | $R_{\theta JA}$ | 60.0 | | | | | | | | $^\circ C/W$ | |
| Operating junction temperature range | T_J | -55 --- +175 | | | | | | | | $^\circ C$ | |
| Storage temperature range | T_{STG} | -55 --- +175 | | | | | | | | $^\circ C$ | |

NOTE: 1. Measured with $I_F=0.5A$, $I_R=1A$, $I_r=0.25A$.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

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FIG.1 –FORWARD DERATING CURVE

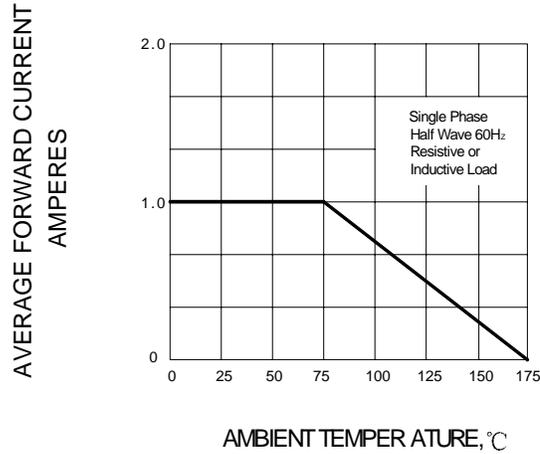


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

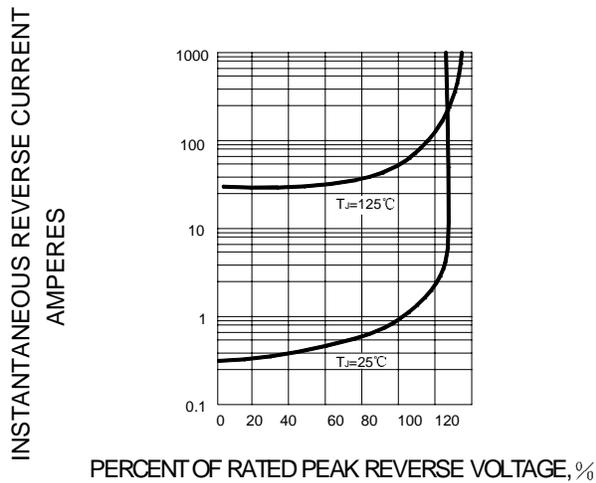


FIG.3 –TYPICAL FORWARD CHARACTERISTICS

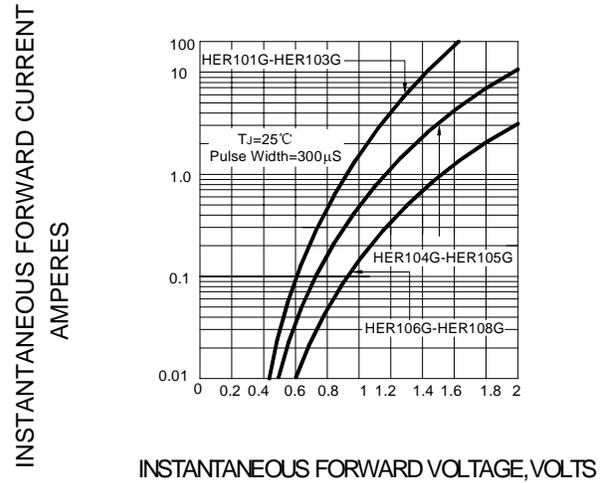


FIG.4–PEAK FORWARD SURGE CURRENT

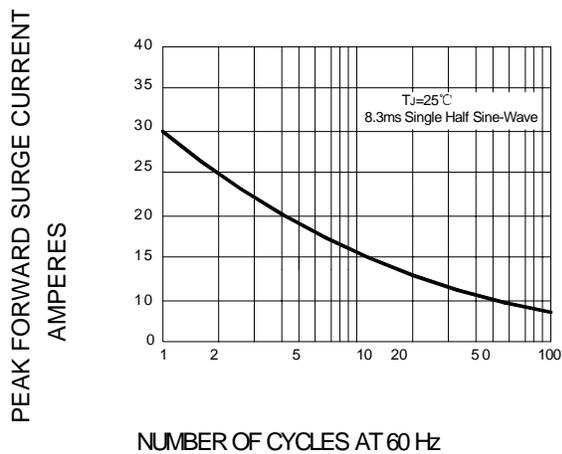


FIG.5–TYPICAL JUNCTION CAPACITANCE

