



WEET Technology Company Limited

High Efficiency Rectifiers

HER401G THRU HER408G

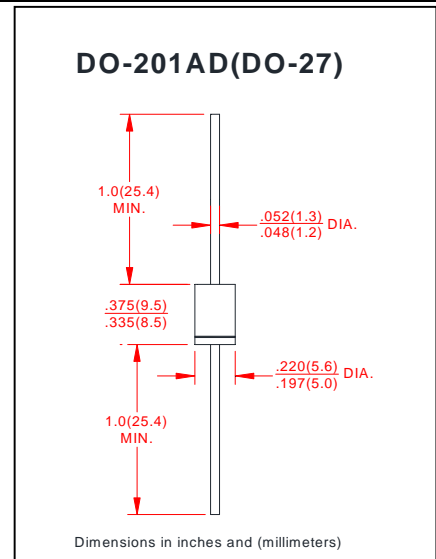
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 4.0 Ampere

FEATURES

- Glass passivated chip junction
- Low power loss, high efficiency
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High reliability
- High temperature soldering guaranteed
260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs (2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

| | SYMBOLS | HER 401G | HER 402G | HER 403G | HER 404G | HER 405G | HER 406G | HER 407G | HER 408G | UNITS | |
|--------------------------------------------------------------------------------------------------|---------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|------------------|----|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | Volts | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum Average Forward Rectified Current at $T_A=50^\circ\text{C}$ | $I_{(AV)}$ | 4.0 | | | | | | | | Amps | |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 200 | | | | | | | | Amps | |
| Maximum Instantaneous Forward Voltage at 4.0A | V_F | 1.0 | | | 1.3 | | 1.7 | | | Volts | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A = 25^\circ\text{C}$ | 10 | | | | | | | | μA | |
| | $T_A = 125^\circ\text{C}$ | 200 | | | | | | | | | |
| Maximum Reverse Recovery Time (NOTE 1) | T_{RR} | 50 | | | | | 75 | | | | nS |
| Typical Junction Capacitance (NOTE 2) | C_J | 75 | | | | | | | | pF | |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | | $^\circ\text{C}$ | |

Notes:

- 1.Reverse Recovery Test Conditions: $I_f=0.5\text{A}, I_r=1.0\text{A}, I_{rr}=0.25\text{A}$.
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.



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| | |
|---------------|------------------|
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| CURRENT | 4.0 Ampere |

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

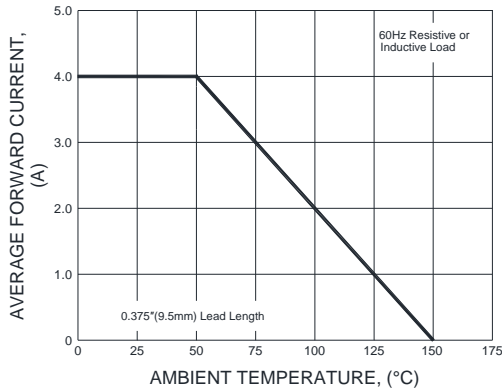


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

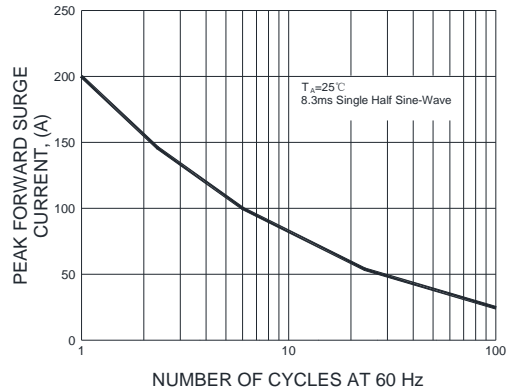


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

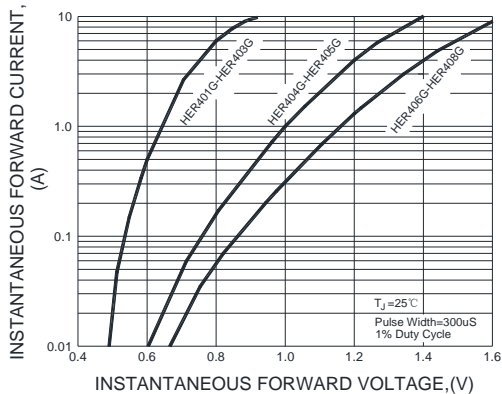


FIG.3-TYPICAL REVERSE CHARACTERISTICS

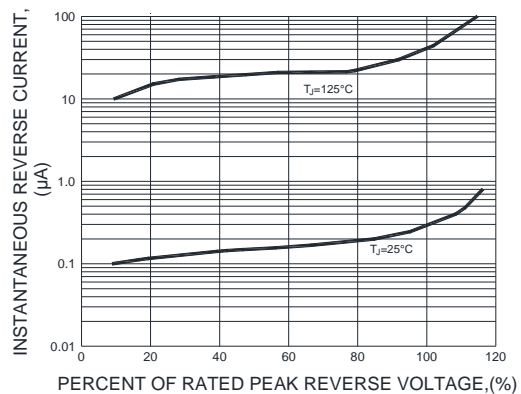


FIG.5-TYPICAL JUNCTION CAPACITANCE

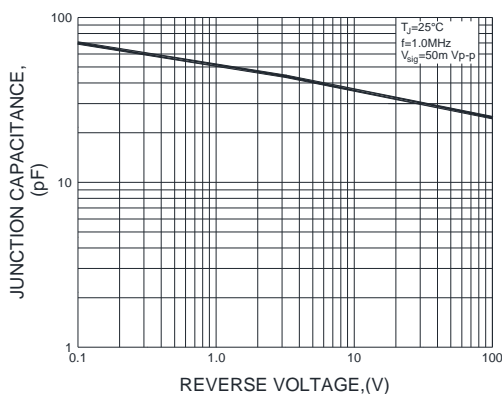
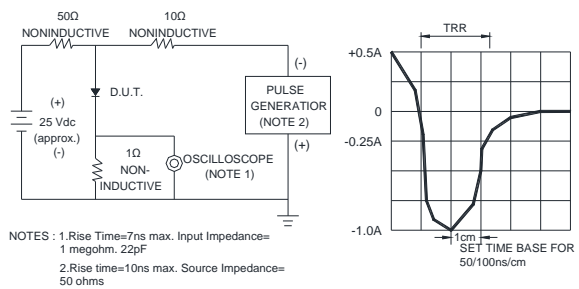


FIG.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.