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| HIGH EFFICIENCY RECTIFIERS | REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 2.0 Amperes |
| <p>FEATURES</p> <ul style="list-style-type: none"> ● Low cost ● Diffused junction ● Ultra fast switching for high efficiency ● Low reverse leakage current ● Low forward voltage drop ● High current capability ● The plastic material carries UL recognition 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: JEDEC DO-15 molded plastic ● Polarity: Color band denotes cathode ● Weight: 0.015 ounces , 0.4 grams ● Mounting position: Any | <p>DO-15</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p> |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | HER201 | HER202 | HER203 | HER204 | HER205 | HER206 | HER207 | HER208 | UNIT | |
|--|-------------------|-------------|--------|--------|--------|--------|--------|--------|--------|------|----|
| 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 @ T _A =50 °C | I _(AV) | 2.0 | | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | I _{FSM} | 60 | | | | | | | | A | |
| Peak Forward Voltage at 2.0A DC(Note1) | V _F | 1.0 | | | 1.3 | | 1.7 | | | V | |
| Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =100°C | I _R | 5.0 | | | | | | | | uA | |
| Maximum Reverse Recovery Time(Note 1) | T _{RR} | 50 | | | | | 75 | | | | nS |
| Typical Junction Capacitance (Note2) | C _J | 50 | | | | | 30 | | | | pF |
| Typical Thermal Resistance (Note3) | R _{θJA} | 25 | | | | | | | | °C/W | |
| Operating Temperature Range | T _J | -50 to +125 | | | | | | | | °C | |
| Storage Temperature Range | T _{STG} | -50 to +150 | | | | | | | | °C | |

NOTES: 1.Measured with I_F=0.5A, I_R=1A , I_{RR}=0.25A

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

3.Thermal resistance junction to ambient

FIG. 1 – FORWARD CURRENT DERATING CURVE

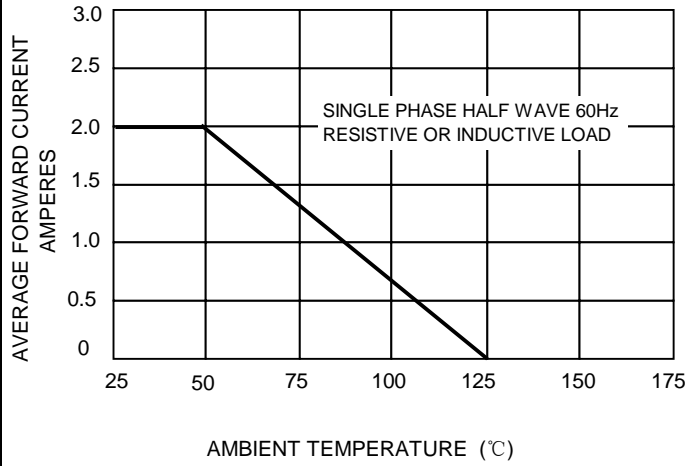


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

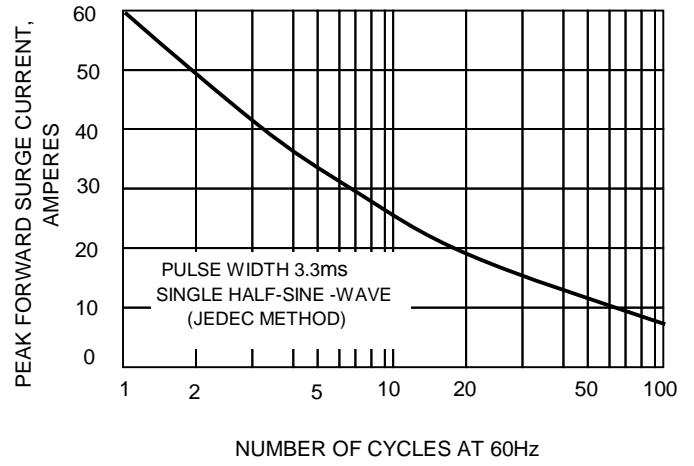


FIG.3 – TYPICAL JUNCTION CAPACITANCE

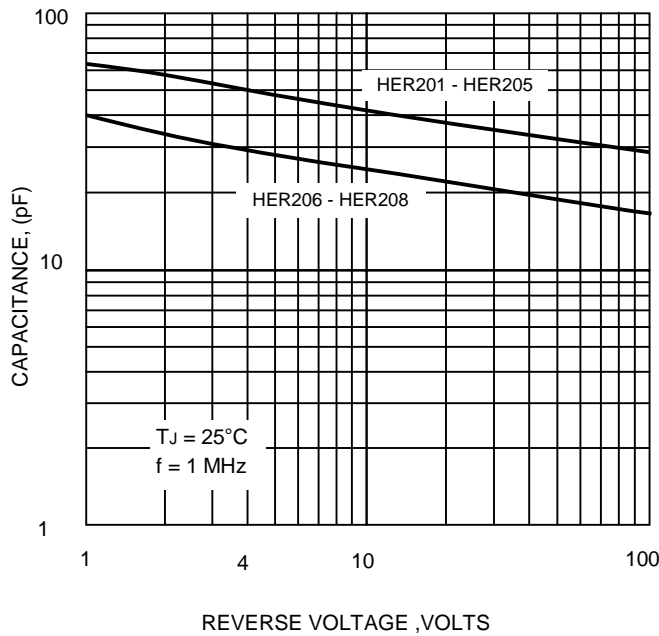


FIG.4-TYPICAL FORWARD CHARACTERISTICS

