

## HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 2.0 Ampere

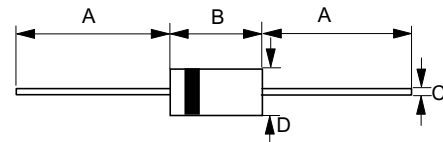
### FEATURES

- Glass passivated chip
- Super fast switching for high efficiency
- High current capability
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

### MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.015 ounces, 0.4 grams

### DO-15



| DO-15                        |                    |                    |
|------------------------------|--------------------|--------------------|
| Dim.                         | Min.               | Max.               |
| A                            | 25.4               | -                  |
| B                            | 5.80               | 7.60               |
| C                            | 0.70 $\varnothing$ | 0.90 $\varnothing$ |
| D                            | 2.60 $\varnothing$ | 3.60 $\varnothing$ |
| All Dimensions in millimeter |                    |                    |

## 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%

| CHARACTERISTICS  | SYMBOL           | HER         | HER  | HER  | HER  | HER  | HER  | HER  | HER  | UNIT |    |
|--|------------------|-------------|------|------|------|------|------|------|------|------|----|
|  |                  | 201G        | 202G | 203G | 204G | 205G | 206G | 207G | 208G |      |    |
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub> | 50          | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |    |
| Maximum RMS Voltage  | V <sub>RMS</sub> | 35          | 70   | 140  | 210  | 280  | 420  | 560  | 700  | V    |    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>  | 50          | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |    |
| Maximum Average Forward Rectified Current @T <sub>L</sub> =75 C                                      | I(AV)            | 2.0         |      |      |      |      |      |      |      | A    |    |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)    | I <sub>FSM</sub> | 60          |      |      |      |      |      |      |      | A    |    |
| Maximum forward Voltage at 2.0A DC   | V <sub>F</sub>   | 1.0         |      | 1.3  |      | 1.70 |      |      |      | V    |    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C | I <sub>R</sub>   | 5.0         |      |      |      | 100  |      |      |      | uA   |    |
| Maximum Reverse Recovery Time (Note 1)   | T <sub>RR</sub>  | 50          |      |      |      |      | 75   |      |      |      | nS |
| Typical Junction Capacitance (Note 2)  | C <sub>J</sub>   | 50          |      |      |      |      | 30   |      |      |      | pF |
| Typical Thermal Resistance (Note 3)  | R <sub>θJL</sub> | 30          |      |      |      |      |      |      |      | °C/W |    |
| Operating Temperature Range  | T <sub>J</sub>   | -55 to +150 |      |      |      |      |      |      |      | °C   |    |
| Storage Temperature Range  | T <sub>STG</sub> | -55 to +150 |      |      |      |      |      |      |      | °C   |    |

NOTES : 1.Reverse Recovery Test Conditions :I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A.  
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3.Thermal Resistance junction to Lead.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

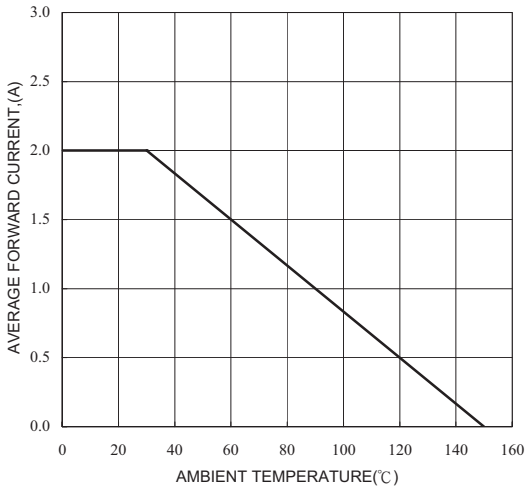


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

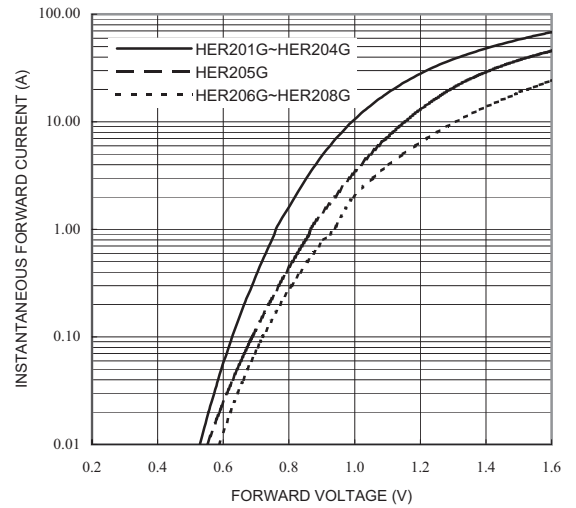


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

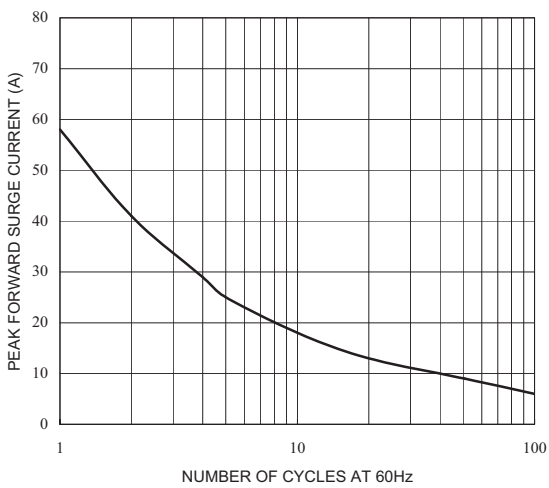


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

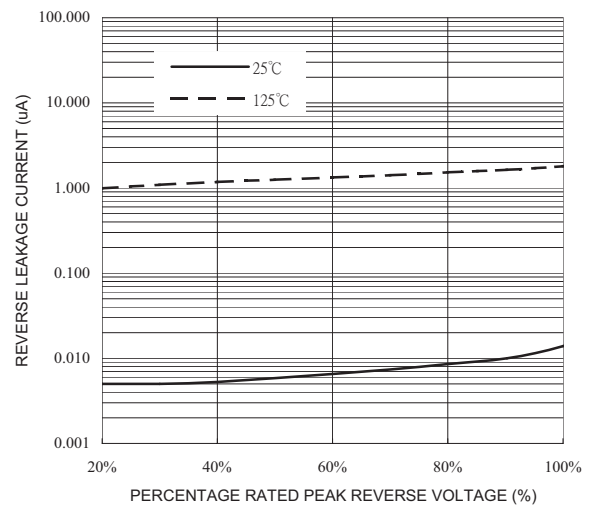


FIG. 5-TYPICAL JUNCTION CAPACITANCE

