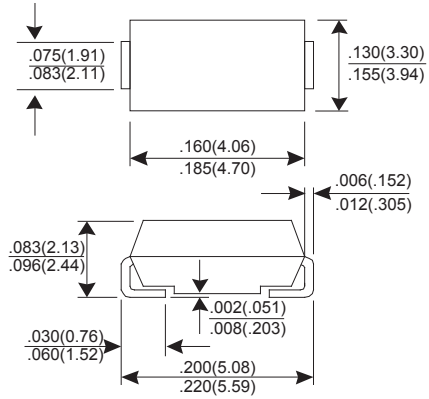


HERS201G~208G

Description



Mechanical Dimensions



SMB/DO-214AA

Dimensions in inches and (millimeters)

Features

- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability
- ★ Glass passivated chip

Mechanical Data

- ★ Case: Molded plastic SMB/DO-214AA
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode
- ★ Mounting position: Any
- ★ Weight: 0.093 gram

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%.

| | SYMBOL | HERS201G | HERS202G | HERS203G | HERS205G | HERS206G | HERS207G | HERS208G | UNIT |
|---|----------|-------------|----------|----------|----------|----------|----------|----------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current TA=90°C | IF(AV) | 2.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method) | IFSM | 60 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 2.0 A | VF | 1.0 | | 1.3 | | 1.7 | | V | |
| Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C | IR | 5.0 | | | | | | | uA |
| | | 100 | | | | | | | uA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 50 | | | | 75 | | | nS |
| Typical junction Capacitance (Note 2) | CJ | 50 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | RθJA | 55 | | | | | | | °CW |
| Operating Junction and Storage Temperature Range | TJ, TSTG | -55 to +150 | | | | | | | °C |

NOTES : (1) Reverse recovery test conditions IF = 0.5A, IR = 1.0A, Irr = 0.25A.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(3) Thermal Resistance junction to ambient.



RATINGS AND CHARACTERISTIC CURVES HERS201G THRU HERS208G

FIG.1 - FORWARD CURRENT DERATING CURVE

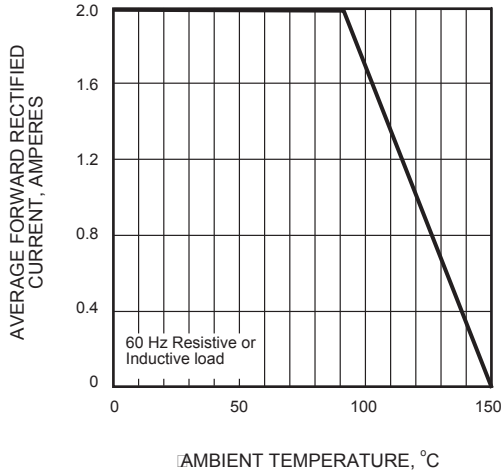


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

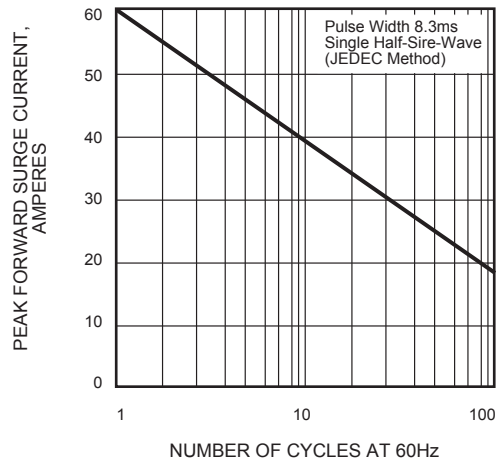


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

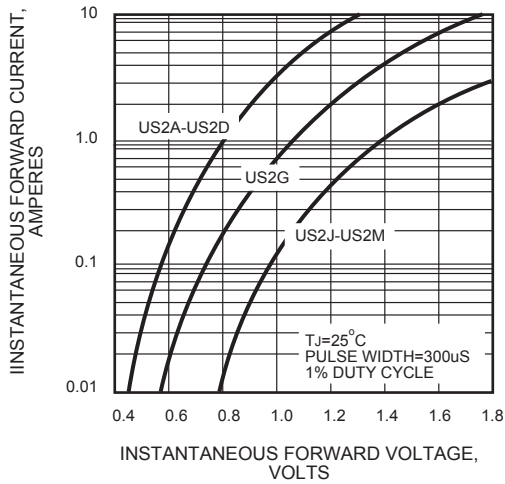


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

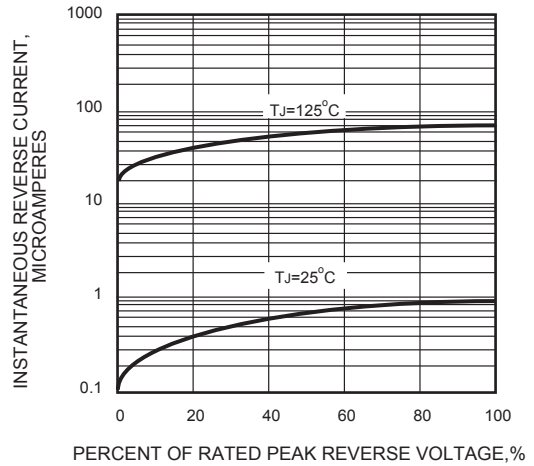


FIG.5 - TYPICAL JUNCTION CAPACITANCE

