

HSM101 THRU HSM108 (SUF4001 THRU SUF4007)

SURFACE MOUNT GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

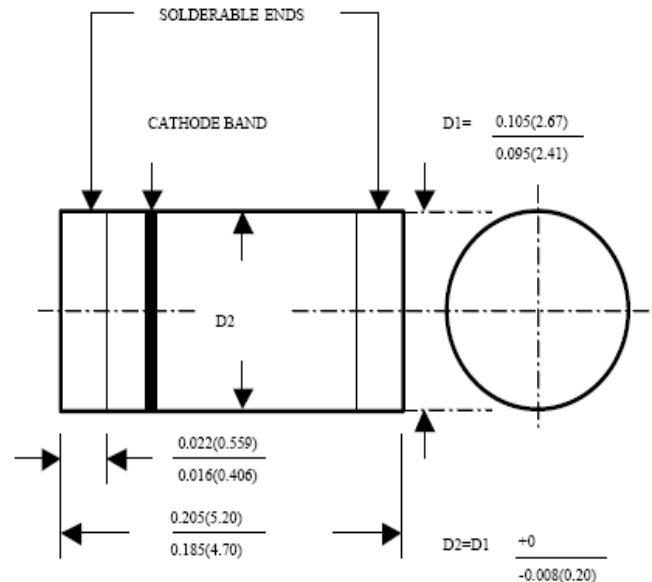
FEATURES

- Ideal for surface mounted applications.
- Low leakage current.
- Glass passivated chips.
- Fast switching.
- High temperature soldering guaranteed
- 250°C/10 seconds/.375", (9.5mm) lead length

MECHANICAL DATA

- Case: Molded plastic use UL94V-0 recognized flame retardant epoxy.
- Terminals: Plated terminals, solderable per MIL-STD-202, method 208
- Polarity: Color band on body denotes cathode.
- Mounting position: Any
- Weight: 0.036 gram

DO-213AB / MELF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. Unless otherwise specified.

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

| | SYMBOL | HSM 101 | HSM 102 | HSM 103 | HSM 104 | HSM 105 | HSM 106 | HSM 107 | HSM 108 | UNITS |
|---|------------------------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Current Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current T _F =55°C | I(AV) | 1.0 | | | | | | | | Amps |
| Peak Forward Surge Current Single Sine-wave on Rated Load (JEDEC Method) | IFSM | 30 | | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage Drop at 1.0A DC | VF | 1.0 | | | 1.3 | | 1.7 | | | Volts |
| Maximum DC Reverse Current T _A =25°C at Rated DC Blocking Voltage T _A =125°C | IR | 5.0 100.0 | | | | | | | | µA |
| Maximum Reverse Recovery Time , Test Conditions. I _F =0.5A, I _R =1.0A, I _{RR} =0.25A | T _{rr} | 50 | | | | | 75 | | | nS |
| VR= 4.0V, f = 1.0MHZ Typical Junction Capacitance | C _J | 15 | | | | | | | | pF |
| Operating Junction And Storage Temperature Range | T _J T _{STG} | -55 to +150 | | | | | | | | °C |

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RATING AND CHARACTERISTIC CURVES HSM101 THRU HSM108

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

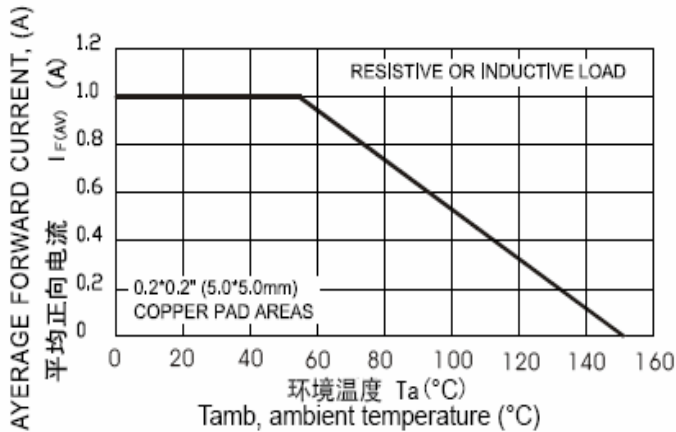


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

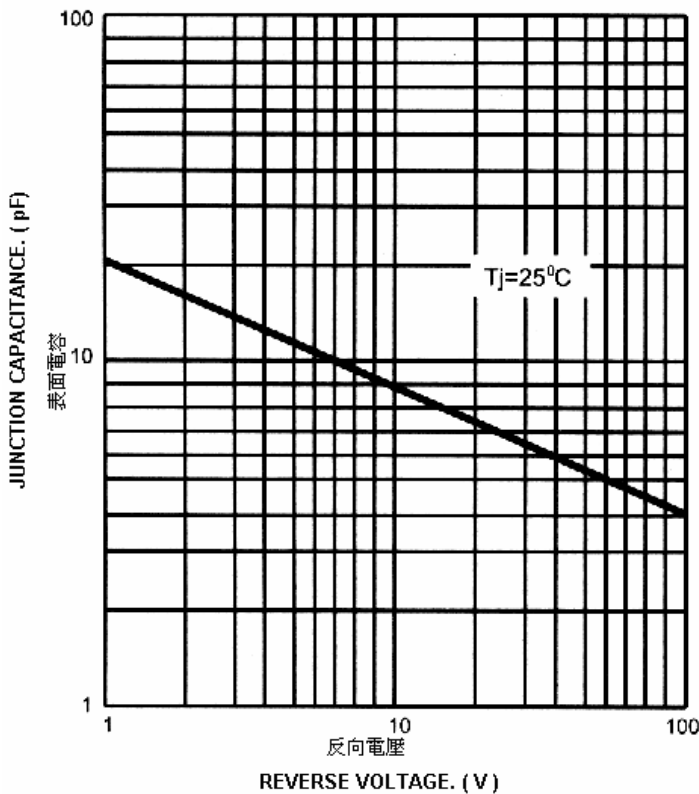


FIG. 2 – MAXIMUM NON – REPETITIVE PEAK RECTIFIER CURRENT

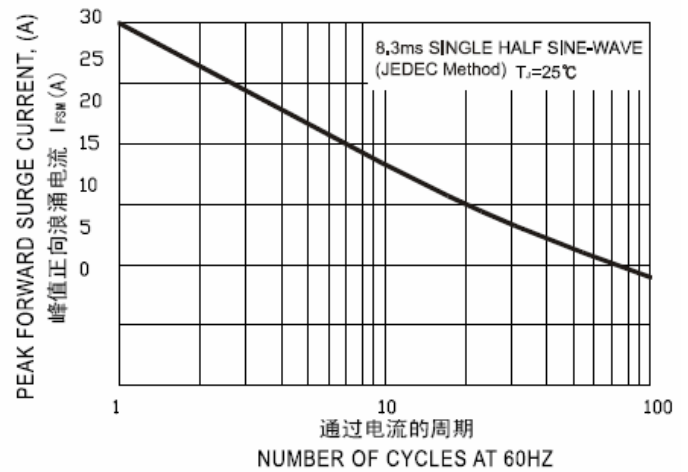
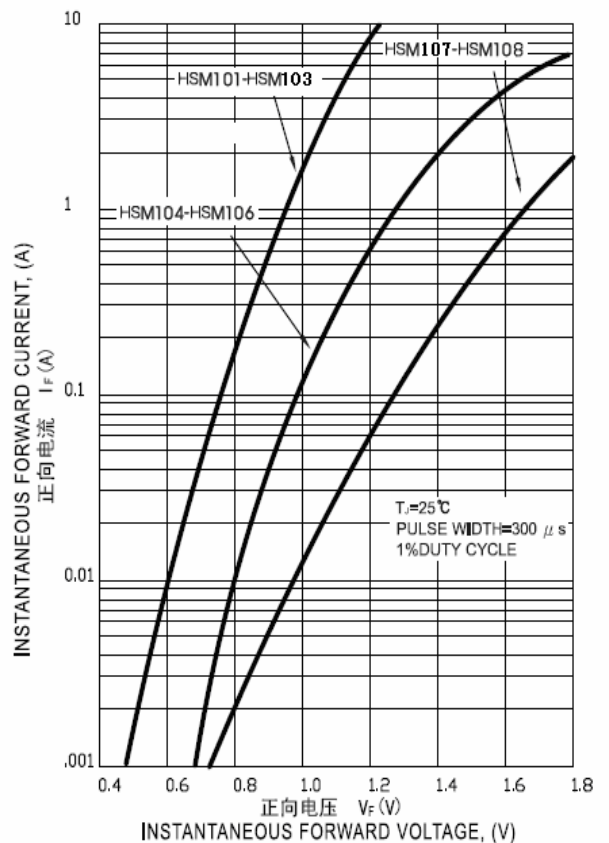


FIG. 4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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FIG. 5 – TYPICAL REVERSE CHARACTERISTICS

