



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

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| | | |
|---|------------------------------|-------------------------------------|
|  | <p>RECTIFIER SPECIALISTS</p> | <p>SM5817S THRU SM5819S</p> |
|---|------------------------------|-------------------------------------|

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 40 Volts


CURRENT - 1.0 Ampere

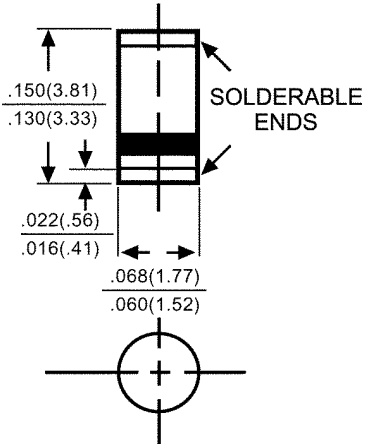
FEATURES

- * High current capability
- * Ideal for surface mounted applications
- * Low leakage current for high efficiency

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.036 gram


 SM-2(DO-213AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | SM5817S | SM5818S | SM5819S | UNITS |
|---|-----------------------------------|--------------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | Volts |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | Volts |
| Maximum Average Forward Rectified Current at TA=90°C | I _O | 1.0 | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 25 | | | Amps |
| Maximum Instantaneous Forward Voltage at 1.0A DC | V _F | .50 | .55 | .60 | Volts |
| Maximum DC Reverse Current at | I _R | 1.0 | | | mAmps |
| Rated DC Blocking Voltage | | 10 | | | |
| Typical Thermal Resistance (Note1) | R _{θJA} | 75 | | | °C/W |
| Typical Junction Capacitance (Note 2) | C _J | 110 | | | pF |
| Storage Operating Temperature Range | T _J , T _{STG} | -65 to + 125 | | | °C |

NOTES : 1. Thermal Resistance (Junction to Ambient), .24in₂ (6.0mm₂) copper pads to each terminal.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.



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RATING AND CHARACTERISTIC CURVES (SM5817S THRU SM5819S)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

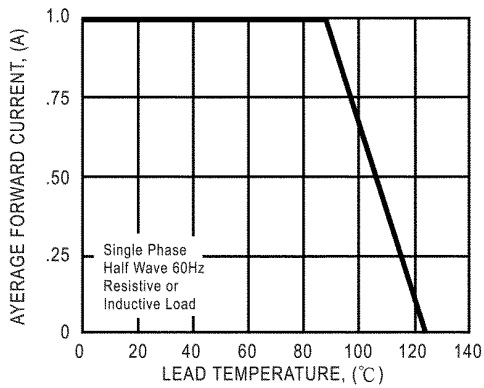


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

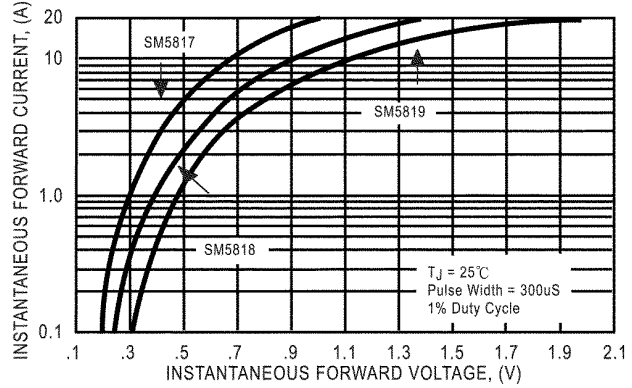


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

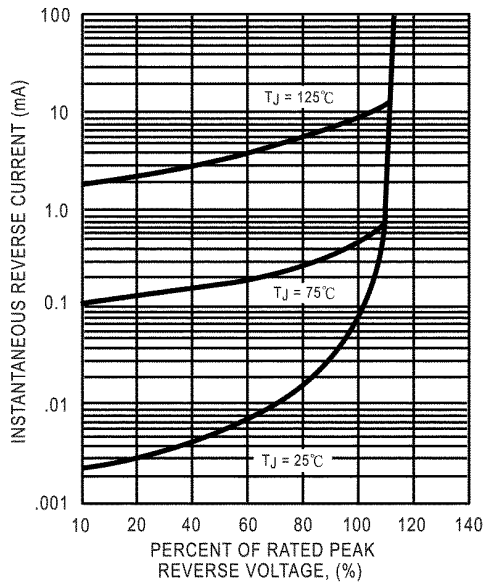


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

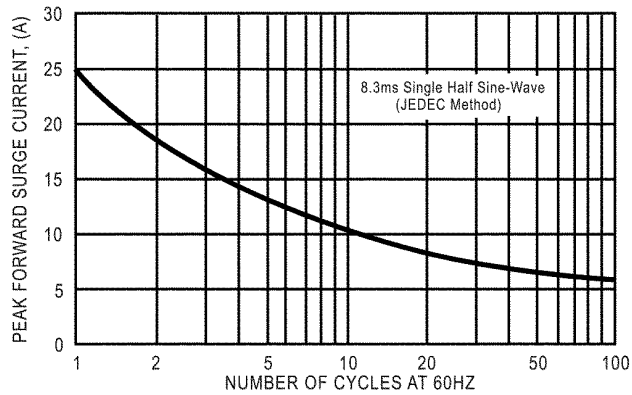


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

