

## CHIP SCHOTTKY BARRIER DIODES

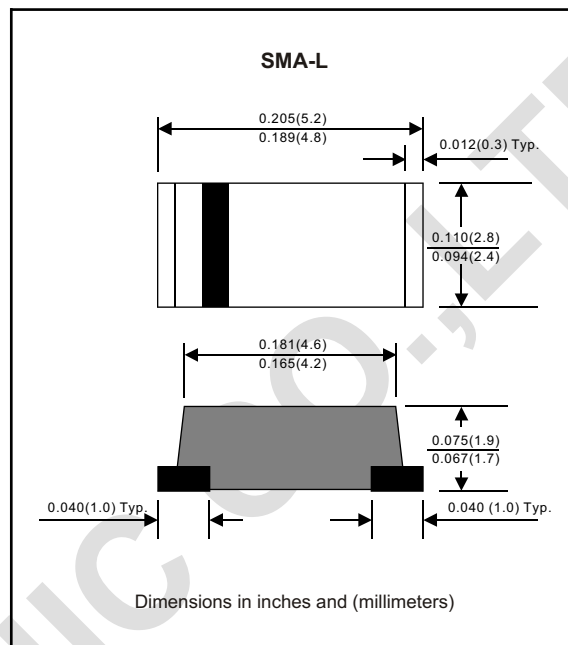
Glass passivated type

## FEATURES

- Plastic package gas Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surfact mounted applications.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage current.

## MECHANICAL DATA

- **Case:** Molded plastic, JEDEC DO-241AC
- **Terminals:** Solder plates, solderable per MIL-STD-750 Method 2026
- **Polarity:** Indicated by cathode end
- **Mounting position:** Any
- **Weight:** 0.0015 ounce, 0.05 gram

MAXIMUM RATINGS (AT T<sub>A</sub> = 25°C unless otherwise note)

| PARAMETER                  | CONDITIONS                                                            | SYMBOL           | MIN. | TYP. | MAX. | UNITS |
|----------------------------|-----------------------------------------------------------------------|------------------|------|------|------|-------|
| Forward rectified current  | Lead temperature = 90°C                                               | I <sub>O</sub>   |      |      | 1.0  | A     |
| Forward surge current      | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | I <sub>FSM</sub> |      |      | 25   | A     |
| Reverse current            | V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 25°C               | I <sub>R</sub>   |      |      | 0.5  | mA    |
|                            | V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 125°C              |                  |      |      | 10   | mA    |
| Thermal resistance         | Junction to ambient                                                   | R <sub>θJA</sub> |      |      | 95   | °C/W  |
| Diode junction capacitance | F = 1MHz and applied 4vDC reverse voltage                             | C <sub>J</sub>   |      | 15   |      | pF    |
| Operating temperature      |                                                                       | T <sub>J</sub>   | -55  |      | +150 | °C    |

| SYMBOL | MARKING CODE | V <sub>RRM</sub> <sup>*1</sup><br>(v) | V <sub>RMS</sub> <sup>*2</sup><br>(v) | V <sub>R</sub> <sup>*3</sup><br>(v) | V <sub>F</sub> <sup>*4</sup><br>(v) | Storage temperature<br>( °C ) |
|--------|--------------|---------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|-------------------------------|
| FM5817 | SK12         | 20                                    | 14                                    | 20                                  | 0.45                                | -55 to +150                   |
| FM5818 | SK13         | 30                                    | 21                                    | 30                                  | 0.55                                |                               |
| FM5819 | SK14         | 40                                    | 28                                    | 40                                  | 0.60                                |                               |

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Forward rectified current

## RATING AND CHARACTERISTIC CURVES

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

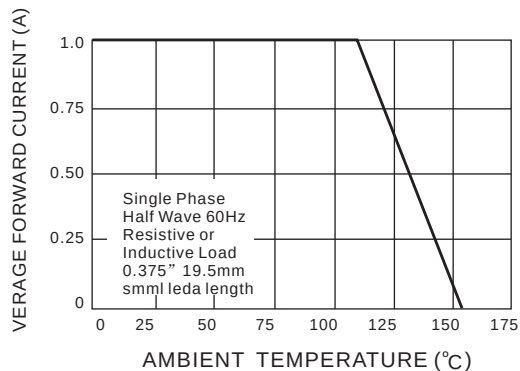


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

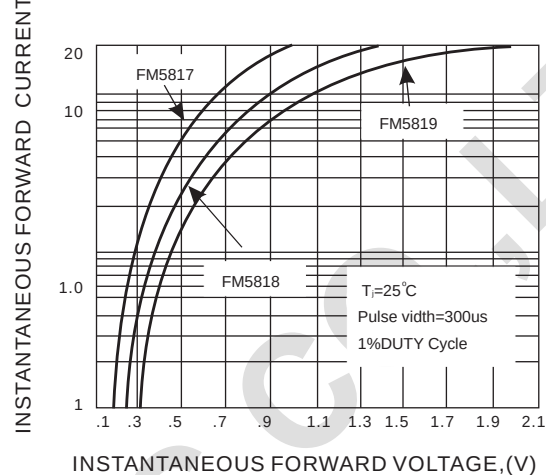


FIG.3 TYPICAL REVERSE CHARACTERISTICS

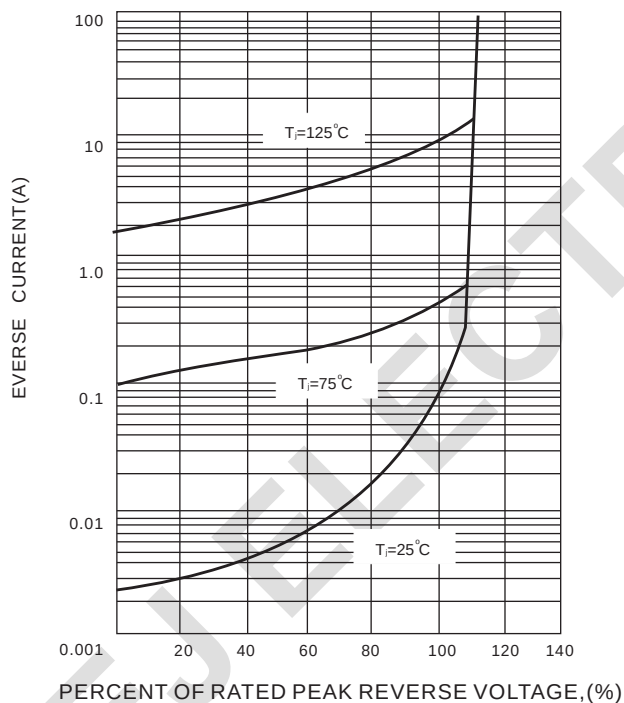


FIG.4 -MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

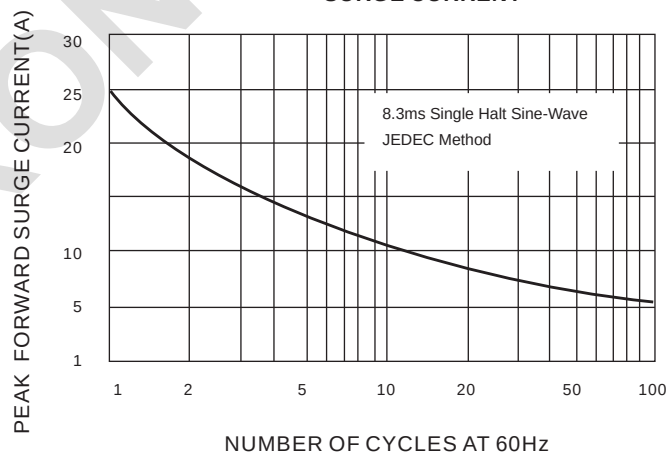


FIG.5 TYPICAL JUNCTION CAPACITANCE

