

Chip Schottky Barrier Diodes

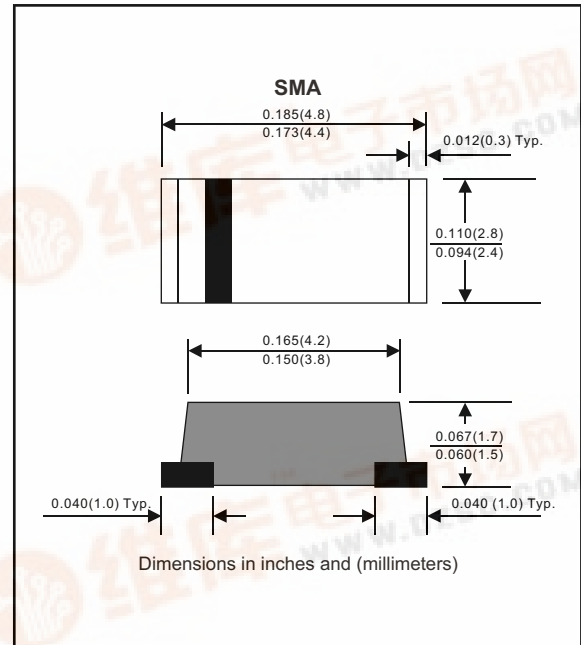
Formosa MS

# FM150L THRU FM160L

Silicon epitaxial planer type

## Features

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



## Mechanical data

Case : Molded plastic, JEDECDO-214AC

Terminals : Solder plated, solderable per ML-STD-750, Method 2026

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.0015 ounce, 0.05 gram

## MAXIMUM RATINGS (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER                  | CONDITIONS                                                            | Symbol    | MIN. | TYP. | MAX. | UNIT                          |
|----------------------------|-----------------------------------------------------------------------|-----------|------|------|------|-------------------------------|
| Forward rectified current  | See Fig.1                                                             | $I_0$     |      |      | 1.0  | A                             |
| Forward surge current      | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | $I_{FSM}$ |      |      | 30   | A                             |
| Reverse current            | $V_R = V_{RRM} \quad T_A = 25^{\circ}\text{C}$                        | $I_R$     |      |      | 0.5  | mA                            |
|                            | $V_R = V_{RRM} \quad T_A = 125^{\circ}\text{C}$                       |           |      |      | 10   | mA                            |
| Thermal resistance         | Junction to ambient                                                   | $R_{JA}$  |      | 88   |      | $^{\circ}\text{C} / \text{w}$ |
| Diode junction capacitance | f=1MHz and applied 4vDC reverse voltage                               | $C_J$     |      | 120  |      | pF                            |
| Storage temperature        |                                                                       | $T_{STG}$ | -55  |      | +150 | $^{\circ}\text{C}$            |

| SYMBOLS | MARKING CODE | $V_{RRM}^{*1}$<br>(V) | $V_{RMS}^{*2}$<br>(V) | $V_R^{*3}$<br>(V) | $V_F^{*4}$<br>(V) | Operating temperature<br>( $^{\circ}\text{C}$ ) |
|---------|--------------|-----------------------|-----------------------|-------------------|-------------------|-------------------------------------------------|
| FM150L  | SS15         | 50                    | 35                    | 50                | 0.60              | -55 to +150                                     |
| FM160L  | SS16         | 60                    | 42                    | 60                |                   |                                                 |

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage

## RATING AND CHARACTERISTIC CURVES (FM150L THRU FM160L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

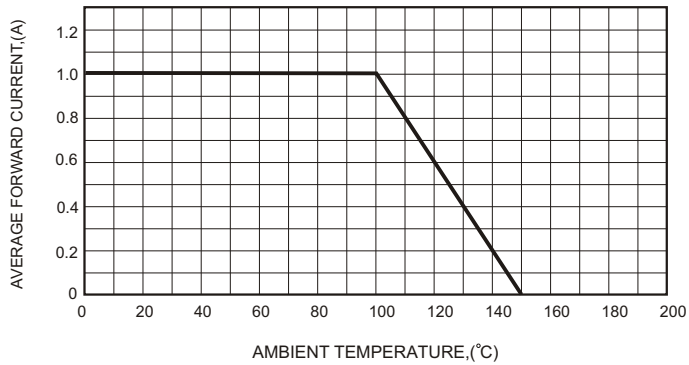


FIG.2-TYPICAL FORWARD CHARACTERISTICS

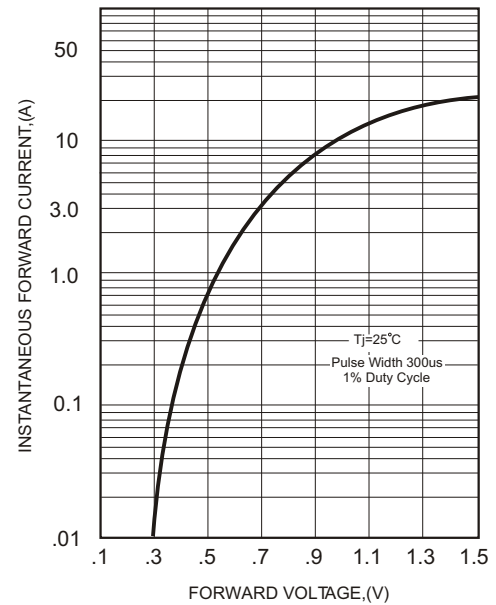


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

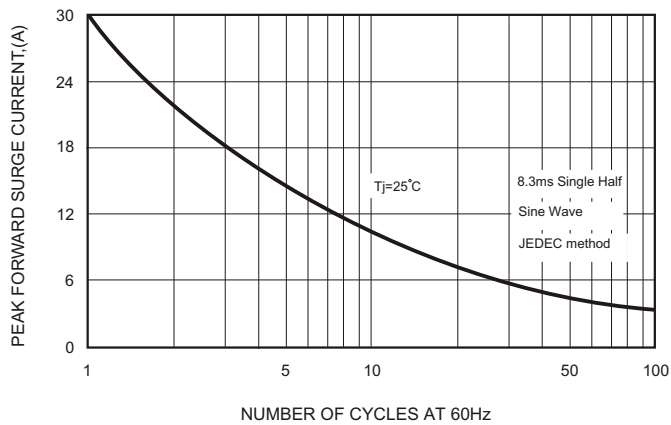


FIG.4-TYPICAL JUNCTION CAPACITANCE

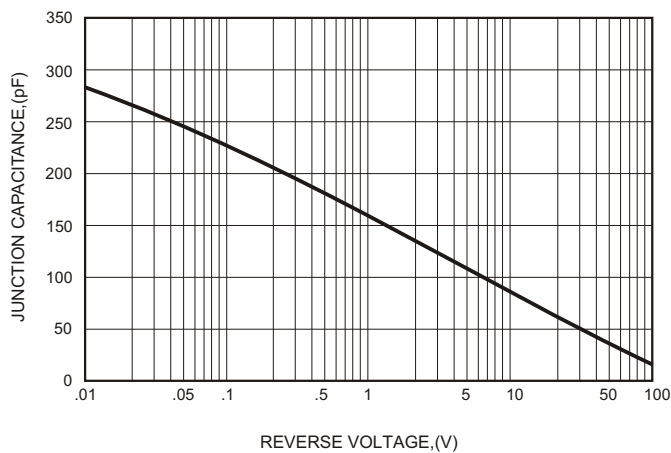


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

