

Chip Silicon Rectifier

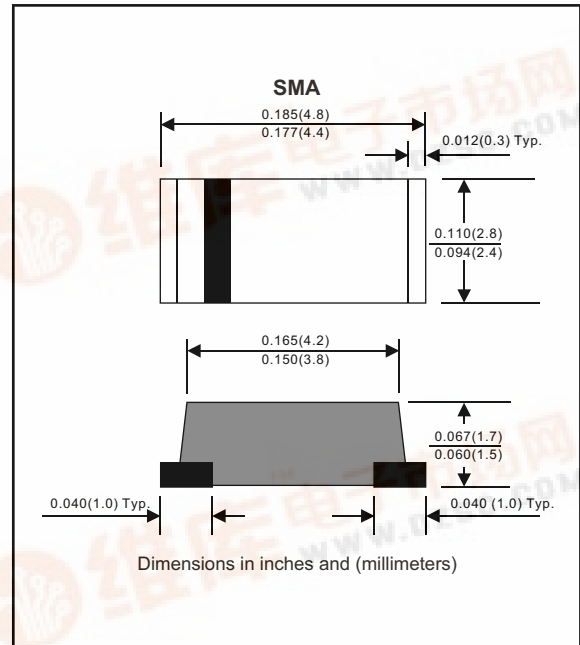
Formosa MS

## FM4001 THRU FM4007

Glass passivated 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.2                                                             | $I_O$     |      |      | 1.0  | A                           |
| Forward surge current      | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | $I_{FSM}$ |      |      | 30   | A                           |
| Reverse current            | $V_R = V_{RRM} \quad T_A = 25^\circ\text{C}$                          | $I_R$     |      |      | 5.0  | $\mu\text{A}$               |
|                            | $V_R = V_{RRM} \quad T_A = 100^\circ\text{C}$                         |           |      |      | 50   | $\mu\text{A}$               |
| Thermal resistance         | Junction to ambient                                                   | $R_{QJA}$ |      | 50   |      | $^\circ\text{C} / \text{w}$ |
| Diode junction capacitance | f=1MHz and applied 4vDC reverse voltage                               | $C_J$     |      | 15   |      | 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>( $^\circ\text{C}$ ) |
|---------|--------------|-----------------------|-----------------------|-------------------|-------------------|-----------------------------------------------|
| FM4001  | A1           | 50                    | 35                    | 50                | 1.1               | -55 to +150                                   |
| FM4002  | A2           | 100                   | 70                    | 100               |                   |                                               |
| FM4003  | A3           | 200                   | 140                   | 200               |                   |                                               |
| FM4004  | A4           | 400                   | 280                   | 400               |                   |                                               |
| FM4005  | A5           | 600                   | 420                   | 600               |                   |                                               |
| FM4006  | A6           | 800                   | 560                   | 800               |                   |                                               |
| FM4007  | A7           | 1000                  | 700                   | 1000              |                   |                                               |

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage



## RATING AND CHARACTERISTIC CURVES (FM4001 THRU FM4007)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

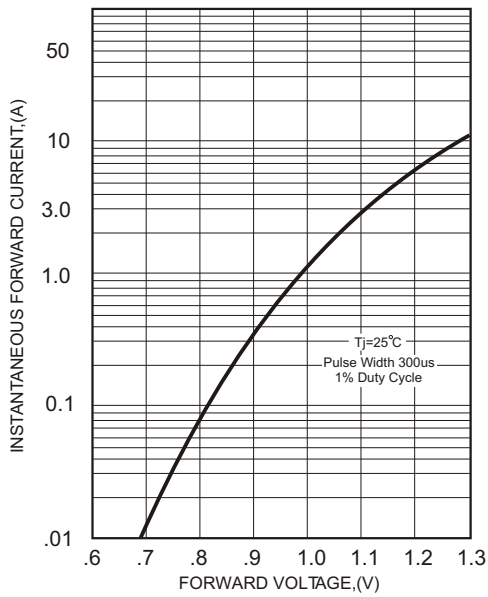


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

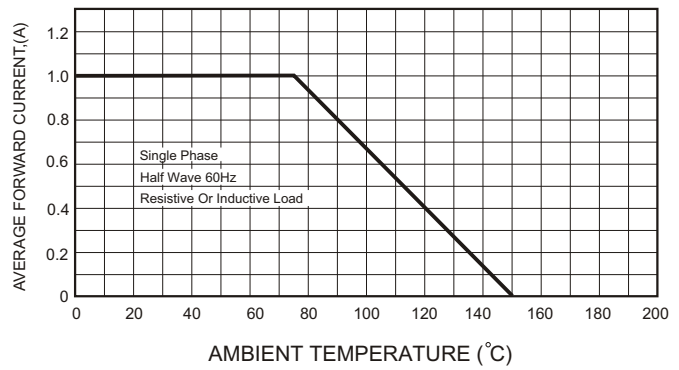


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

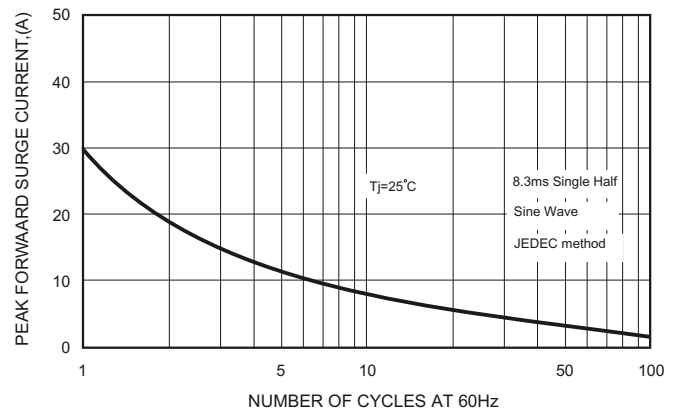


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

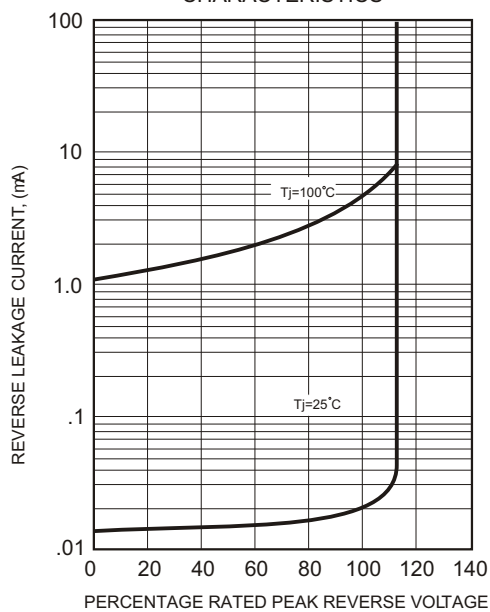


FIG.5-TYPICAL JUNCTION CAPACITANCE

