

FM1020-T THRU FM1040-T

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

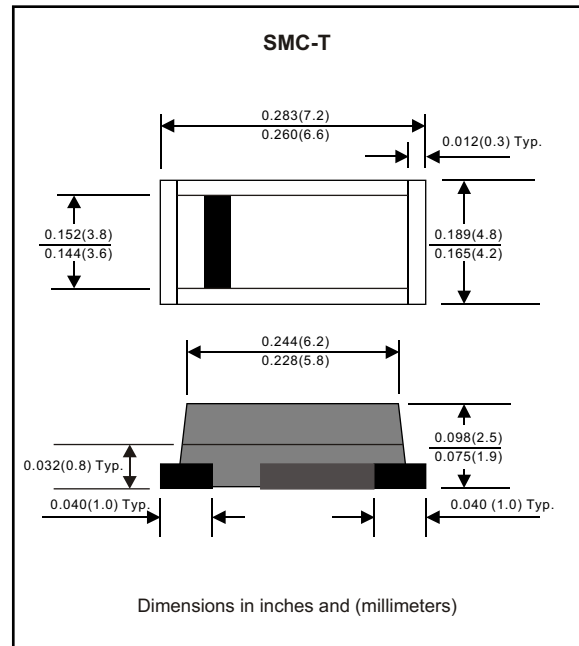
Case : Molded plastic, JEDEC DO-214AB

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

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.00585 ounce, 0.195 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_O | | | 10.0 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | I_{FSM} | | | 150 | A |
| Reverse current | $V_R = V_{RRM} \quad T_A = 25^{\circ}\text{C}$ | I_R | | | 1.0 | mA |
| | $V_R = V_{RRM} \quad T_A = 100^{\circ}\text{C}$ | | | | 50 | mA |
| Thermal resistance | Junction to ambient | R_{JA} | | 55 | | $^{\circ}\text{C} / \text{w}$ |
| Diode junction capacitance | f=1MHz and applied 4vDC reverse voltage | C_J | | 700 | | pF |
| Storage temperature | | T_{STG} | -55 | | +150 | $^{\circ}\text{C}$ |

| SYMBOLS | MARKING CODE | V_{RRM}^{*1} (V) | V_{RMS}^{*2} (V) | V_R^{*3} (V) | V_F^{*4} (V) | Operating temperature ($^{\circ}\text{C}$) |
|----------|--------------|-----------------------|-----------------------|-------------------|-------------------|---|
| FM1020-T | SS102 | 20 | 14 | 20 | 0.55 | -55 to +125 |
| FM1030-T | SS103 | 30 | 21 | 30 | | |
| FM1040-T | SS104 | 40 | 28 | 40 | | |

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (FM1020-T THRU FM1040-T)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

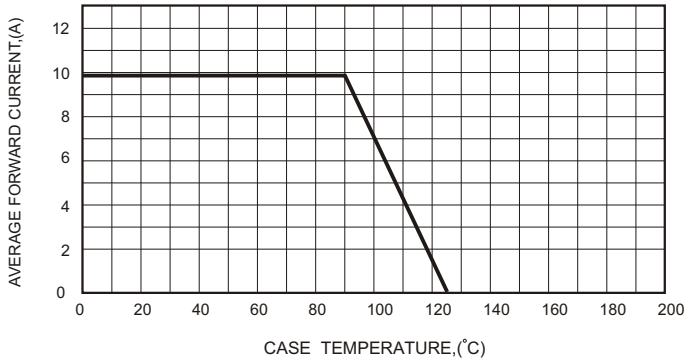


FIG.2-TYPICAL FORWARD CHARACTERISTICS

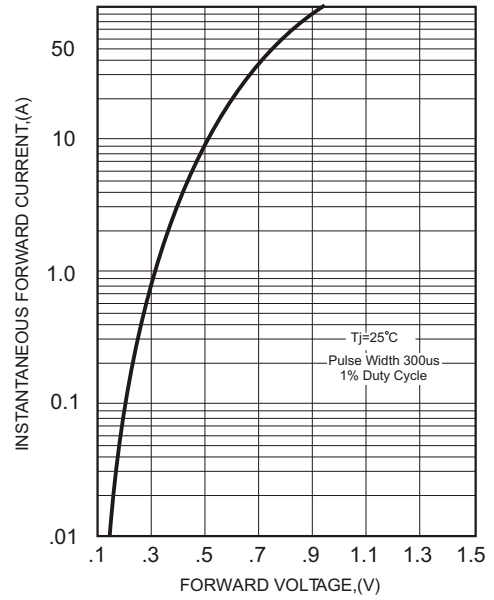


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

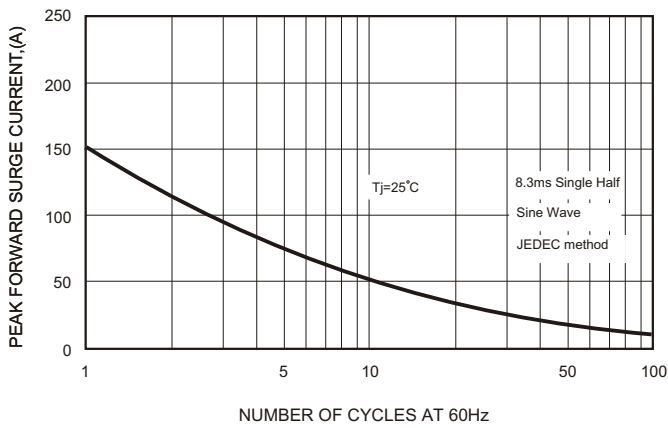


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

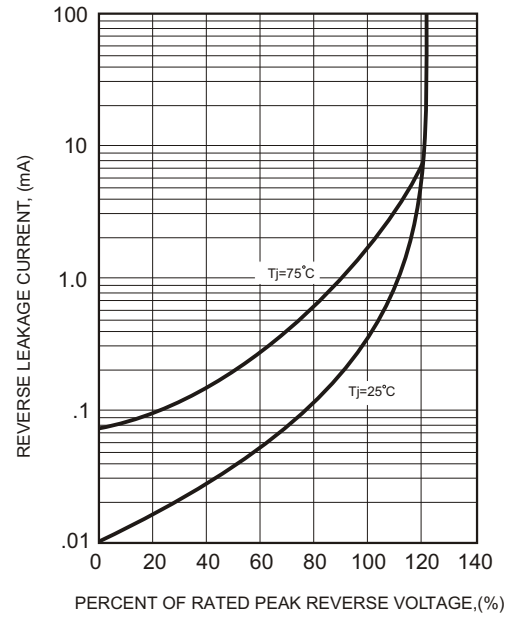


FIG.4-TYPICAL JUNCTION CAPACITANCE

