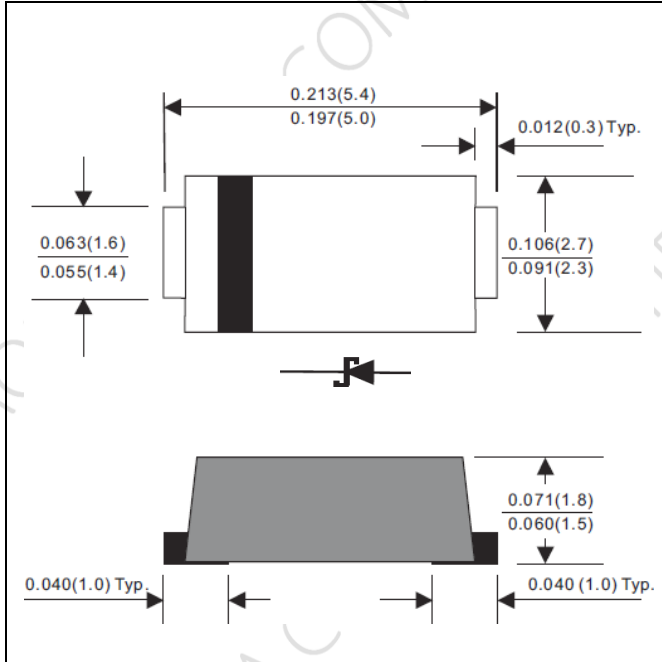


2A SMD SCHOTTKY BARRIER RECTIFIERS, 20V-200V



PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE
3. HIGH CURRENT CAPABILITY, LOW POWER LOSS
4. SILICON EPITAXIAL PLANAR CHIP, METAL SILICON JUNCTION
5. GUARDRING FOR OVERVOLTAGE PROTECTION
6. CASE: TRANSFER MOLDED, DO-214AC (SMA-S)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.05 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE
i.e. FM220-S-H: RoHS COMPLIANT/HALOGEN FREE

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

| RATING | SYMBOL | | UNITS |
|--|-----------------|--------------|---------------------------|
| MAXIMUM FORWARD RECTIFIED CURRENT | I_o | 2 | A |
| PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD | I_{FSM} | 50 | A |
| TYPICAL JUNCTION CAPACITANCE BETWEEN TERMINALS (NOTE 1) | C_J | 160 | pF |
| STORAGE TEMPERATURE RANGE | T_{STG} | - 65 TO +175 | $^\circ\text{C}$ |
| OPERATING JUNCTION TEMPERATURE RANGE (NOTE 2) | T_J | - 55 TO +150 | $^\circ\text{C}$ |
| MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 25^\circ\text{C}$ | I_R | 0.5 | mA |
| MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 100^\circ\text{C}$ | I_R | 10 | mA |
| TYPICAL THERMAL RESISTANCE | $R_{\theta JA}$ | 64 | $^\circ\text{C}/\text{W}$ |
| | $R_{\theta JC}$ | 32 | $^\circ\text{C}/\text{W}$ |

| PART NUMBER | MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V) | MAX V_{RMS} (V) | TYPICAL FORWARD VOLTAGE AT $I_F = 2A$ V_F (V) | MARKING |
|-------------|--|-------------------|---|---------|
| FM220-S | 20 | 14 | 0.50 | SK22 |
| FM230-S | 30 | 21 | 0.50 | SK23 |
| FM240-S | 40 | 28 | 0.50 | SK24 |
| FM250-S | 50 | 35 | 0.70 | SK25 |
| FM260-S | 60 | 42 | 0.70 | SK26 |
| FM280-S | 80 | 56 | 0.85 | SK28 |
| FM2100-S | 100 | 70 | 0.85 | S210 |
| FM2150-S | 150 | 105 | 0.90 | S215 |
| FM2200-S | 200 | 140 | 0.92 | S220 |

NOTE : 1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .

2. FOR THE FM220-S, FM230-S, AND FM240-S, THE OPERATING JUNCTION TEMPERATURE RANGE IS FROM -55 TO +125 $^\circ\text{C}$



3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

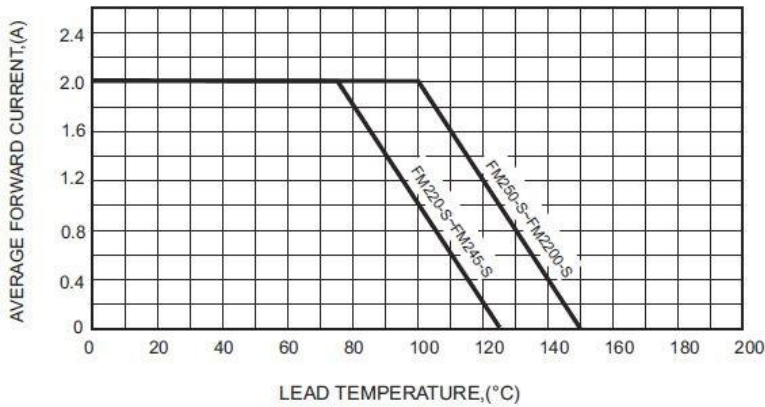


FIG.2-TYPICAL FORWARD CHARACTERISTICS

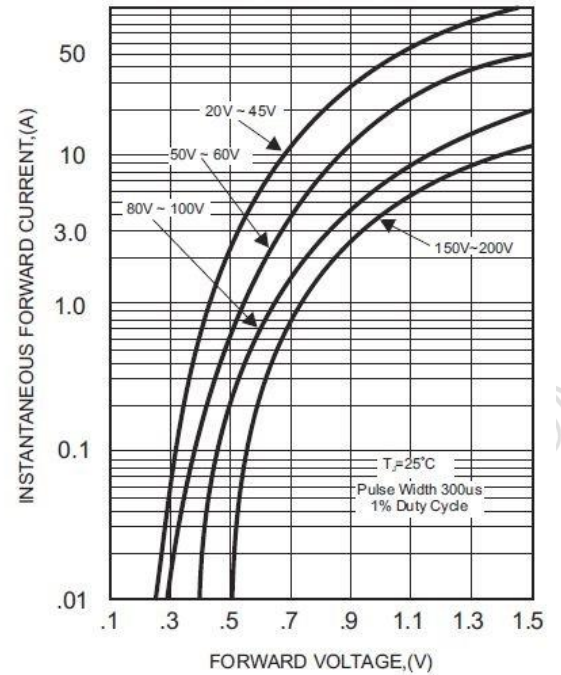


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

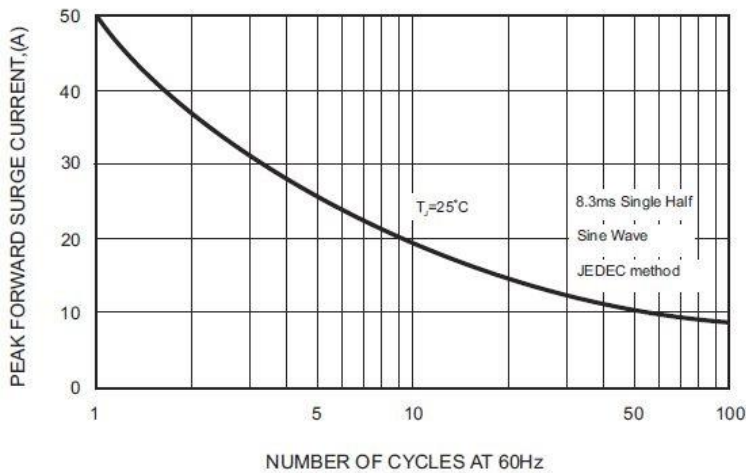


FIG.4-TYPICAL JUNCTION CAPACITANCE

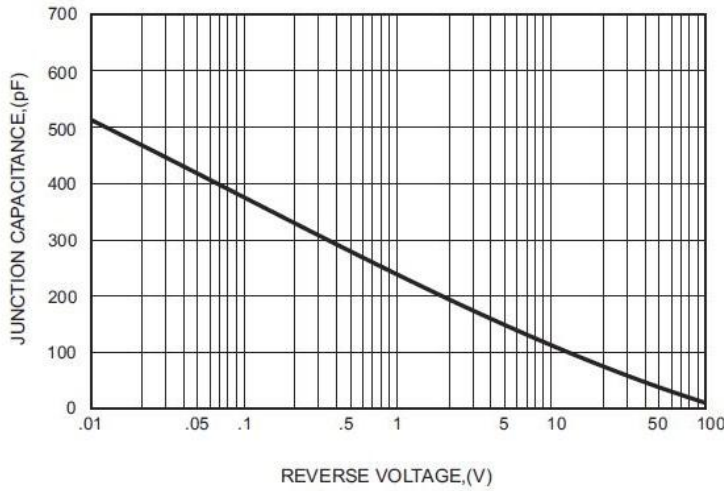
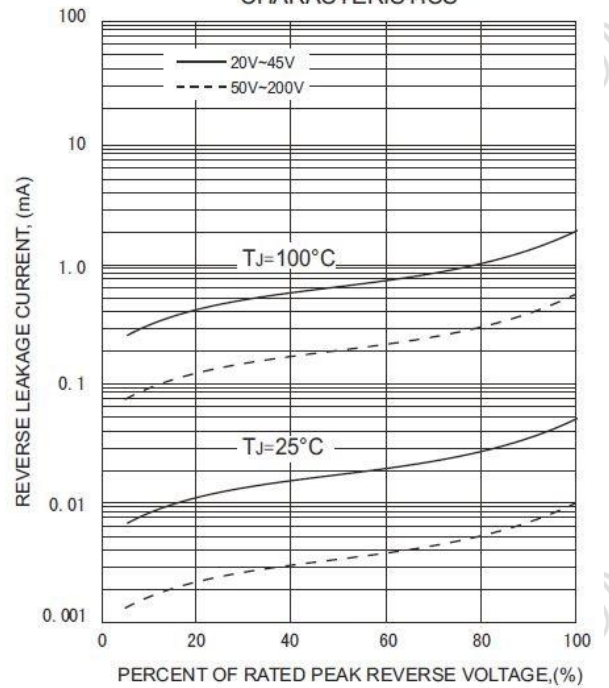
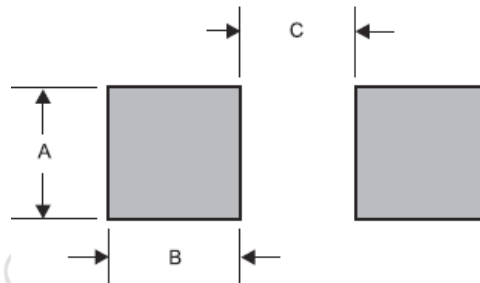


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



LAYOUT RECOMMENDATION



| PACKAGE | A | B | C |
|---------|--------------|--------------|--------------|
| SMA-S | 0.063 (1.60) | 0.059 (1.50) | 0.110 (2.80) |