

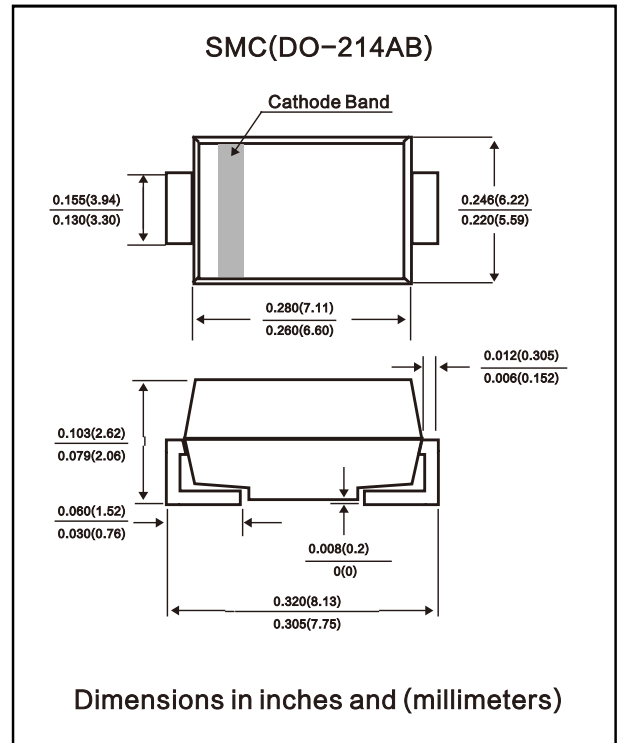
Surface Mount Rectifier

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: JEDEC DO-214AB, molded plastic
 Terminals: Solderable per MIL-STD-202, Method 208
 Polarity: Color band denotes cathode
 Weight: 0.003 ounces, 0.093 grams
 Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | UF3A | UF3B | UF3D | UF3G | UF3J | UF3K | UF3M | UNITS |
|-------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|------|------|------|------|------|------|--------------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current @ $T_L=90^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$ | I_{FSM} | 100 | | | | | | | A |
| Maximum instantaneous forward voltage at 3.0 A | V_F | 1.0 | | 1.4 | | 1.7 | | V | |
| Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$ | I_R | 10 500 | | | | | | | μA |
| Typical reverse recovery time (Note1) | t_{rr} | 50 | | | | 75 | | | ns |
| Typical junction capacitance (Note2) | C_J | 15 | | | | 12 | | | pF |
| Typical thermal resistance (Note3) | $R_{\theta JA}$ | 15 | | | | | | | $^\circ\text{C/W}$ |
| Operating junction temperature range | T_J | - 55 ---- + 150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | - 55 ---- + 150 | | | | | | | $^\circ\text{C}$ |

NOTE: 1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG. 1 – FORWARD CURRENT DERATING CURVE

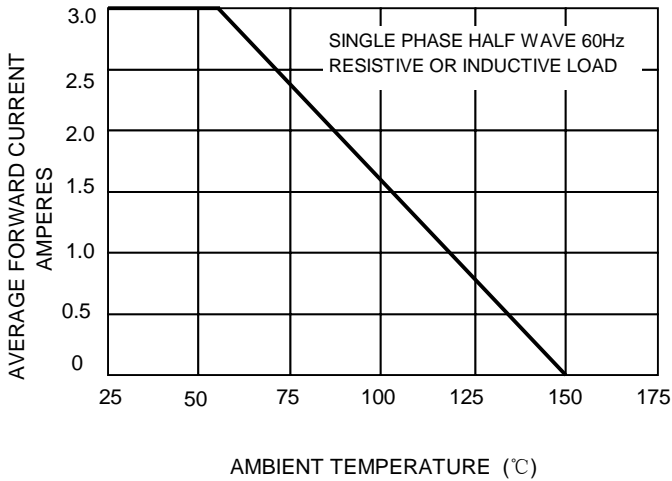


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

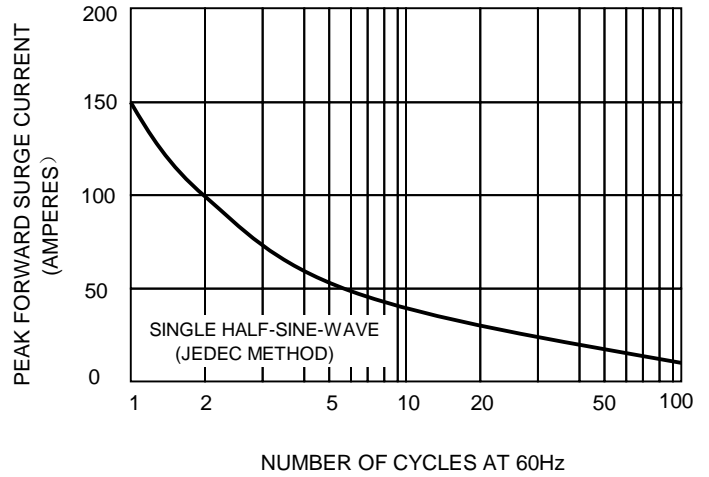


FIG.3 – TYPICAL JUNCTION CAPACITANCE

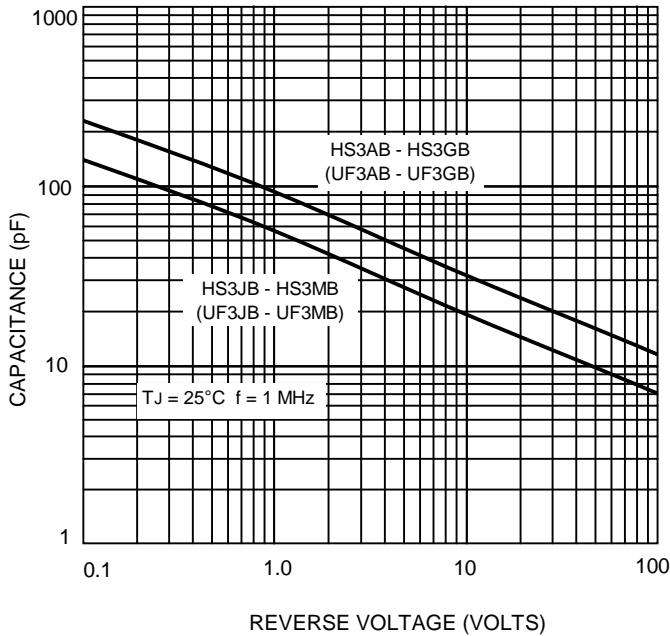


FIG.4-TYPICAL FORWARD CHARACTERISTICS

