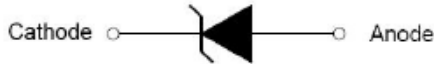


SMC

Features

Low forward voltage drop
 Guarding protection
 Glass passivated junction
 High current capability
 High efficiency operation
 Extremely low thermal resistance
 Halogen free and RoHS compliant

Mechanical Data

CASE: SMCJ(DO-214AB) Molded Plastic
 Polarity: Color band denotes cathode end
 Mounting position: ANY
 Weight: 0.009 ounces, 0.25 gram

Maximum Ratings & Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.)

| CHARACTERISTICS | SYMBOL | SS34C | SS36C | SS310C | SS320C | UNITS |
|--|-----------------|---------------|-------|------------|--------|--------------------|
| | Marking | SS34 | SS36 | SS310 | SS320 | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | 60 | 100 | 200 | V |
| Maximum RMS voltage | V_{RWS} | 28 | 42 | 70 | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | 60 | 100 | 200 | V |
| Maximum average forward rectified current at $T_L=90^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave | I_{FSM} | 80 | | | | A |
| Maximum instantaneous forward voltage at $I_{FM}=3.0\text{A}$ (NOTE1) | V_F | 0.55 | 0.7 | 0.85 | 0.95 | V |
| Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$ | I_R | 0.2 50 | | 0.1 5.0 | | m A |
| Maximum thermal resistance | $R_{\theta JL}$ | 50 | | | | $^\circ\text{C/W}$ |
| Operating temperature range | T_J | -55 ---- +125 | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 ---- +150 | | | | $^\circ\text{C}$ |

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SMC | Tape/Reel, 13" reel | 3000 | EIA-481-1 |

Ratings and Characteristic Curves

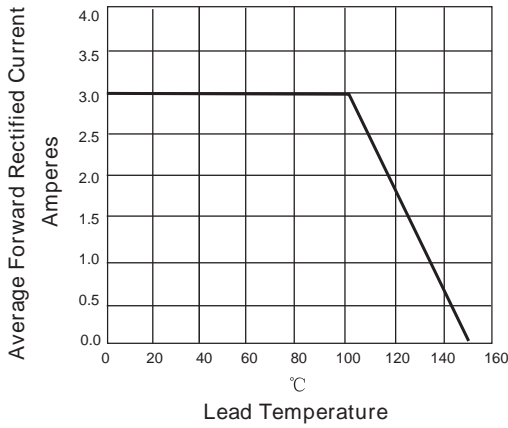


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

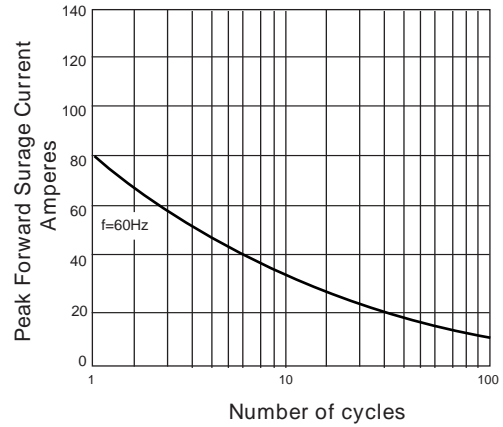


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

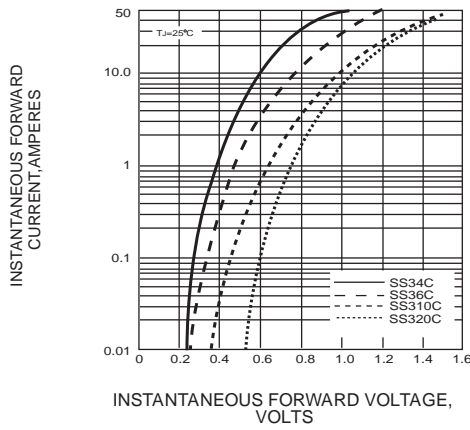


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

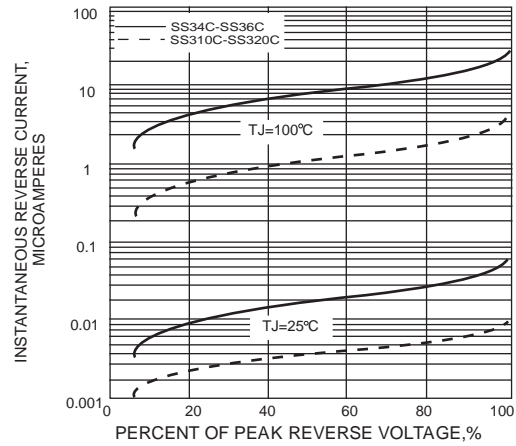


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Package Outline Dimensions: SMC(DO-214AB)

| Dim | Millimeters | | Inches | |
|-----|-------------|------|--------|-------|
| | Min | Max | Min | Max |
| L | 6.75 | 6.95 | 0.265 | 0.274 |
| D | 5.75 | 5.95 | 0.226 | 0.234 |
| D1 | 2.9 | 3.1 | 0.114 | 0.122 |
| T | 7.9 | 8.1 | 0.311 | 0.319 |
| T1 | 1.0 | 1.4 | 0.039 | 0.055 |
| d | - | 0.2 | - | 0.008 |
| H | 2.45 | 2.65 | 0.096 | 0.104 |
| H1 | 2.3 | 2.5 | 0.09 | 0.098 |