TAYCHIPST SURFACE MOUNT SCHOTTKY BARRIER DIODE

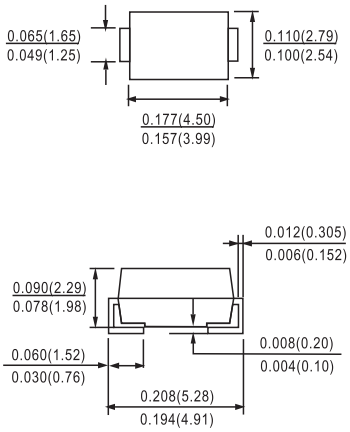
**RSX501L-20**

**20V 5.0A**

**FEATURES**

- Small power mold type
- Low forward voltage
- Low reverse current
- High reliability

DO-214AC(SMA)




Dimensions in inches and (millimeters)

## *MECHANICAL DATA*

- **Case:** SMA (DO-214AC), molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** Lead formed for surface mount
- **Polarity:** Color band denotes cathode end
- **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 current by 20%.

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RM}$ | 25 | V |
| Maximum Reverse Voltage | $V_R$ | 20 | V |
| Maximum Average Forward Current [1)] | $I_{F(AV)}$ | 5 | A |
| Maximum Peak Forward Surge Current (60 Hz, One Cycle) | $I_{FSM}$ | 70 | A |
| Maximum Forward Voltage at 3 A | $V_F$ | 0.39 | V |
| Maximum Reverse Current at 20 V | $I_R$ | 500 | μA |
| Junction Temperature | $T_J$ | 125 | °C |
| Storage Temperature Range | $T_S$ | - 40 to + 125 | °C |

[1)] $T_C$ = 90 °C max. mounted on epoxy board. 180 ° half sine wave.

## RATINGS AND CHARACTERISTIC CURVES RSX501L-20

FIG.1 - DERATING CURVE ($I_{F(AV)}$ - $T_C$)

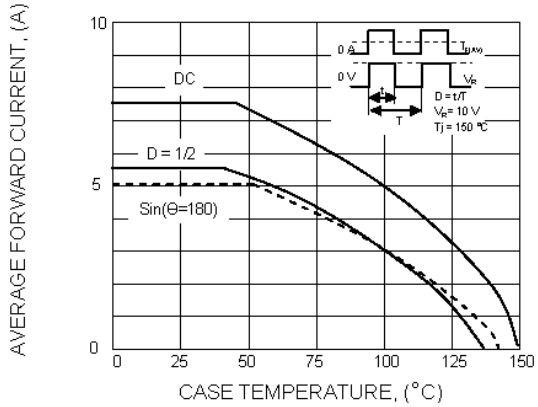



FIG.2 - $I_{FSM}$ - CYCLE CHARACTERISTICS

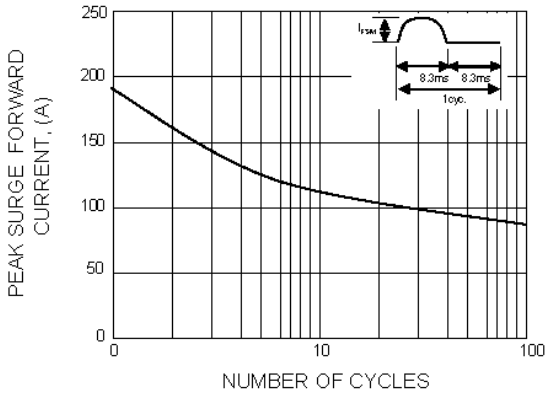



FIG.3 - $V_F$ - $I_F$ CHARACTERISTICS

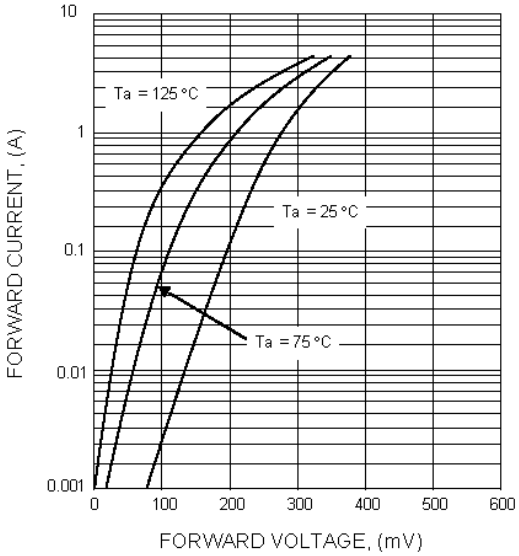



FIG.4 - $V_R$ - $I_R$ CHARACTERISTICS