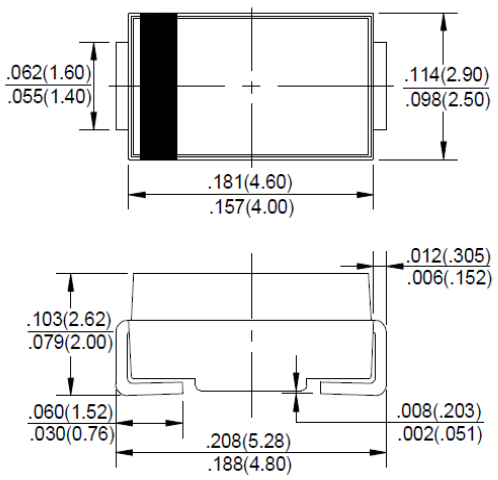
## FEATURES

- Low cost
- Diffused junction
- Low Leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon. Alcohol. Lsopropanol and similar solvents
- The plastic material carries U/L recognition 94V-O

## MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Axial leads. Solderable per MIL - STD - 750. Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.041 ounce. 1.15 grams
- Mounting position: Any

**SMA**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ℃ ambient temperature unless otherwise specified.

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

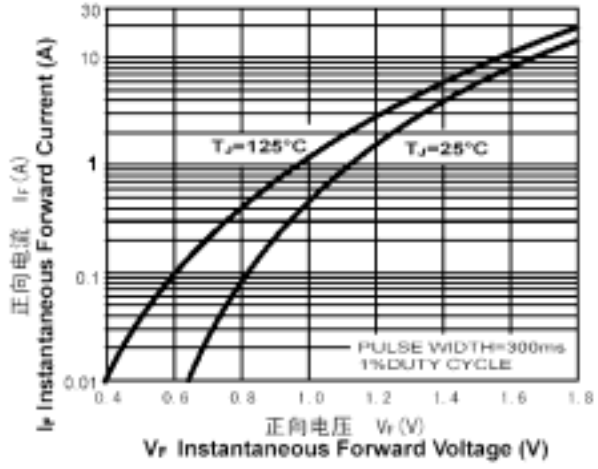
| | SYMBOL | RS1A | RS1B | RS1D | RS1G | RS1J | RS1K | RS1M | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current at $T_L$ = 110℃ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated $T_j$ = 125℃ | $I_{FSM}$ | 30 | | | | | | | A |
| Maximum Forward Voltage at 1.0A DC | $V_F$ | **1.3** | | | | | | | V |
| Maximum Reverse Current $T_A$ = 25℃ at Rated DC Blocking Voltage $T_A$ = 100℃ | $I_R$ | **10** **50** | | | | | | | μA |
| Maximum reverse recovery time（Note 1） | trr | **150** | | | | **250** | **500** | | **ns** |
| Typical Junction Capacitance ( Note 2 ) | $C_j$ | **15** | | | | | | | pF |
| Typical Thermal Resistance ( Note 3 ) | $R_{\theta JA}$ | **55** | | | | | | | ℃/W |
| Operating Junction Temperature Range | $T_j$ | — 55 to 150 | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | — 55 to 150 | | | | | | | ℃ |

NOTE: 1. Reverse revovery condition $I_F$=0.5A $I_R$=1.0A Irr=0.25A.

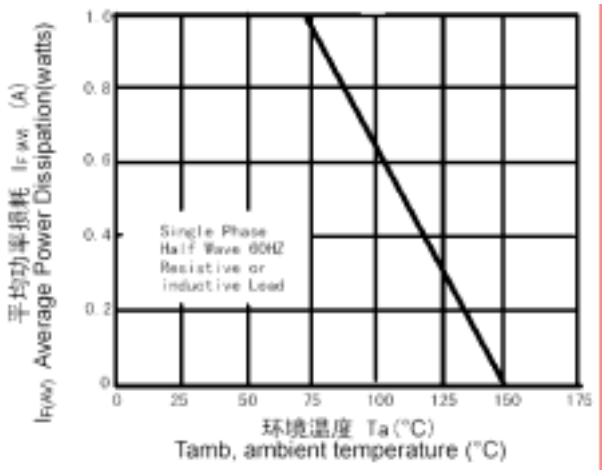
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Ambient.

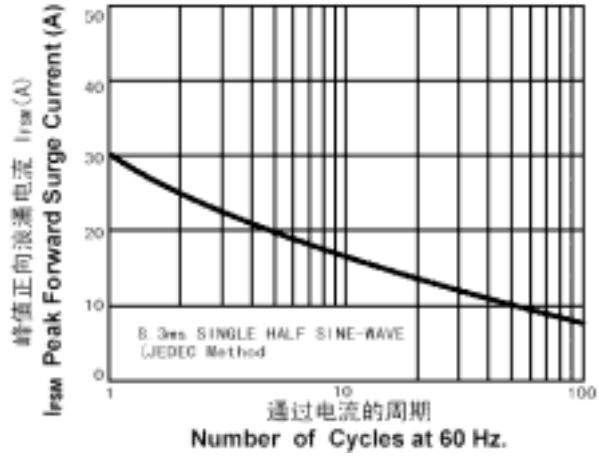
TYPICAL FORWARD CHARACTERISTIC



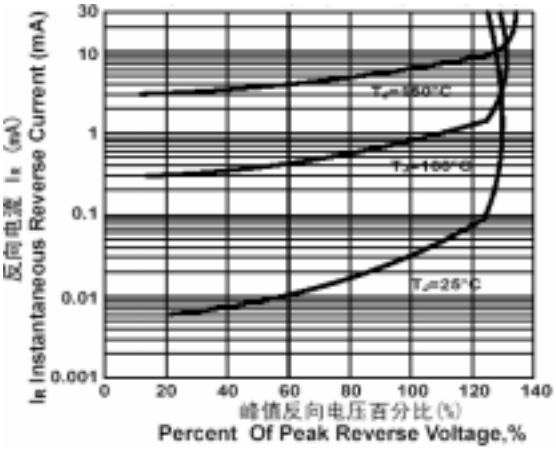

FORWARD CURRENT DERATING CURVE




MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT




TYPICAL REVERSE CHARACTERISTICS




TYPICAL JUNCTION CAPACITANCE