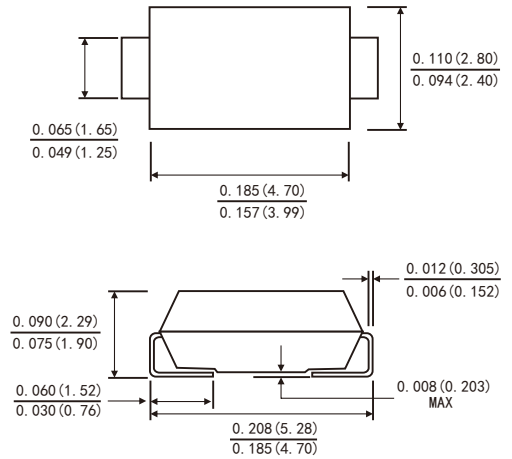


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- built-in strain relief ,ideal for automated placement
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



### SMA(DO-214AC)



### MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| Parameter                                                                                              | Symbols         | Value      | Units         |
|--------------------------------------------------------------------------------------------------------|-----------------|------------|---------------|
| Maximum repetitive peak reverse voltage                                                                | $V_{RRM}$       | 40         | Volts         |
| Maximum RMS voltage                                                                                    | $V_{RMS}$       | 28         | Volts         |
| Maximum DC blocking voltage                                                                            | $V_{DC}$        | 40         | Volts         |
| Maximum average forward rectified current<br>0.375"(9.5mm) lead length (See Fig.1)                     | $I_{(AV)}$      | 3.0        | Amps          |
| Peak forward surge current 8.3ms single half<br>sine-wave superimposed on rated load<br>(JEDEC method) | $I_{FSM}$       | 50.0       | Amps          |
| Maximum instantaneous forward voltage<br>at 3.0 A(Note 1 )                                             | $V_F$           | 0.62       | Volts         |
| Maximum instantaneous reverse<br>current at rated DC blocking<br>voltage(Note 1)                       | $I_R$           | 5          | $\mu A$       |
|                                                                                                        |                 | 1          | mA            |
| Typical junction capacitance(Note 3)                                                                   | $C_J$           | 80         | pF            |
| Typical thermal resistance (Note 2)                                                                    | $R_{\theta JA}$ | 88.0       | $^{\circ}C/W$ |
|                                                                                                        | $R_{\theta JL}$ | 28.0       | $^{\circ}C/W$ |
| Operating junction temperature range                                                                   | $T_J$           | -55 to+150 | $^{\circ}C$   |
| Storage temperature range                                                                              | $T_{STG}$       | -55 to+150 | $^{\circ}C$   |

- Notes: 1. Pulse test: 300  $\mu s$  pulse width,1% duty cycle  
2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm)copper pad areas  
3. Measured at 1MHz and reverse voltage of 4.0volts

FIG.1-FORWARD CURRENT DERATING CURVE

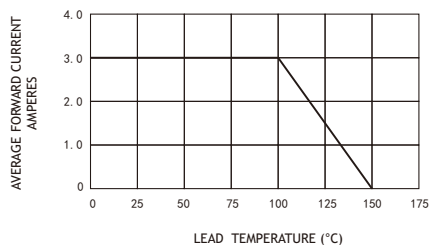


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

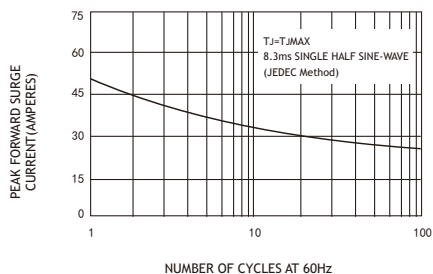


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

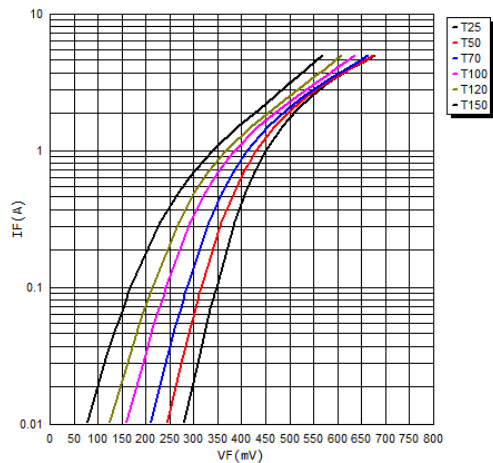


FIG.4-TYPICAL REVERSE CHARACTERISTICS

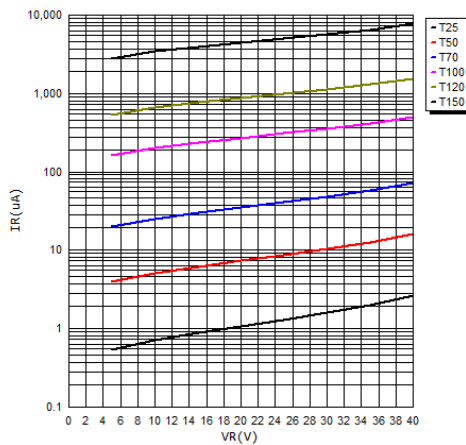
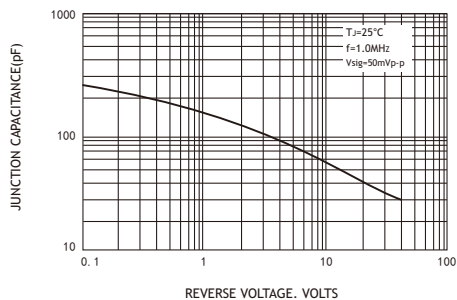


FIG.5-TYPICAL JUNCTION CAPACITANCE



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