



Features

- Average Forward Current: $I_{F(AV)}=2A$
- Polarity: Color band denotes cathode



**SMB
(DO-214AA)**



Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|-------------------|---------|----------|
| STPS2H100U | SMB (DO-214AA) | S21FN | 3000 |

Maximum Ratings (Ta=25°C unless otherwise noted)

| Item | Symbol | Test Conditions | STPS2H100U | Unit |
|---------------------------------------|-------------|---|------------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 100 | V |
| Maximum RMS Voltage | V_{RMS} | | 70 | V |
| Average Forward Current | $I_{F(AV)}$ | 60Hz Half-sine wave, Resistance load, TL(Fig.1) | 2.0 | A |
| Surge(Non-repetitive) Forward Current | I_{FSM} | 60Hz Half-sine wave, 1 cycle, Ta=25°C | 50 | A |
| Junction Temperature | T_J | | -55~+150 | °C |
| Storage Temperature | T_{STG} | | -55 ~ +150 | °C |

Electrical Characteristics (Ta=25°C unless otherwise specified)

| Item | Symbol | Test Condition | STPS2H100U | Unit |
|-----------------------------|------------------|-------------------------------|------------|----------|
| Peak Forward Voltage | V_F | $I_F=2.0A$ | 0.85 | V |
| Peak Reverse Current | I_{RRM1} | $V_{RM}=V_{RRM}$ | Ta =25°C | 0.1 |
| | I_{RRM2} | | Ta =100°C | 5.0 |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | Between junction and ambient | 75 | °C/ W |
| | $R_{\theta J-L}$ | Between junction and terminal | 17 | |

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

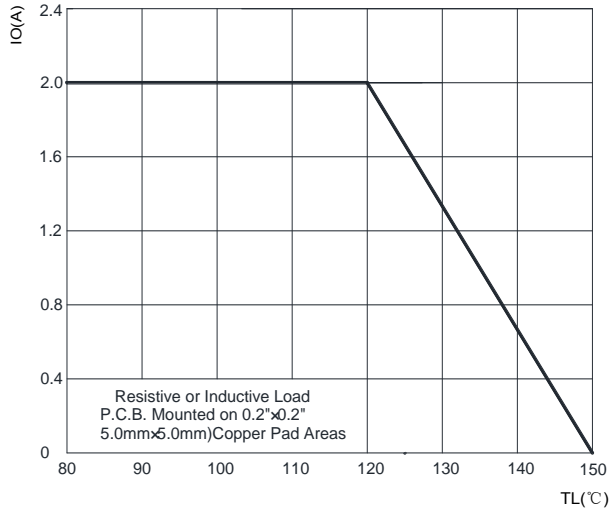


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

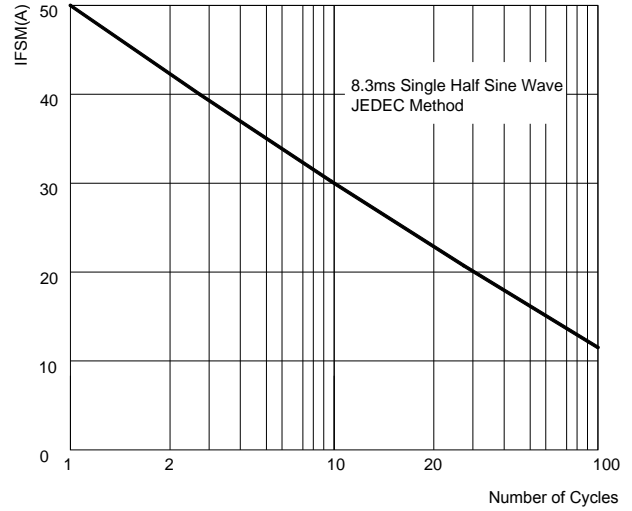


FIG.3: TYPICAL FORWARD CHARACTERISTICS

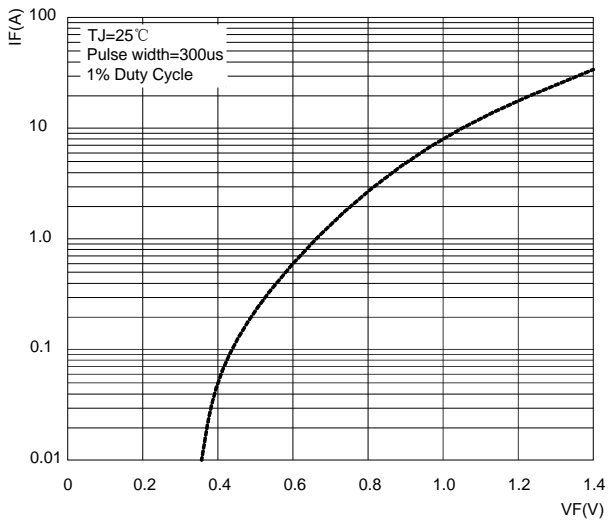
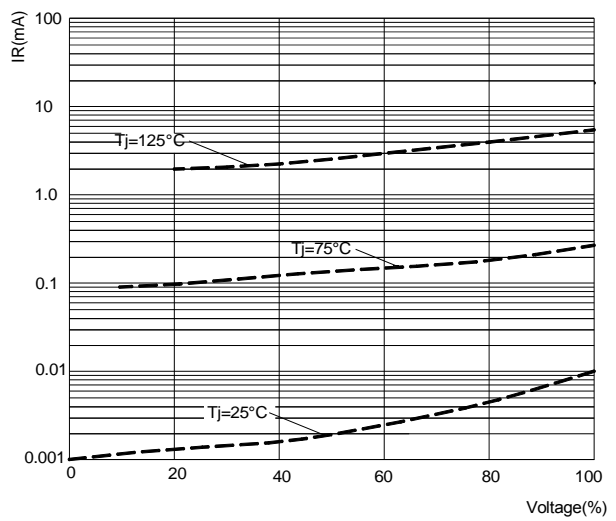
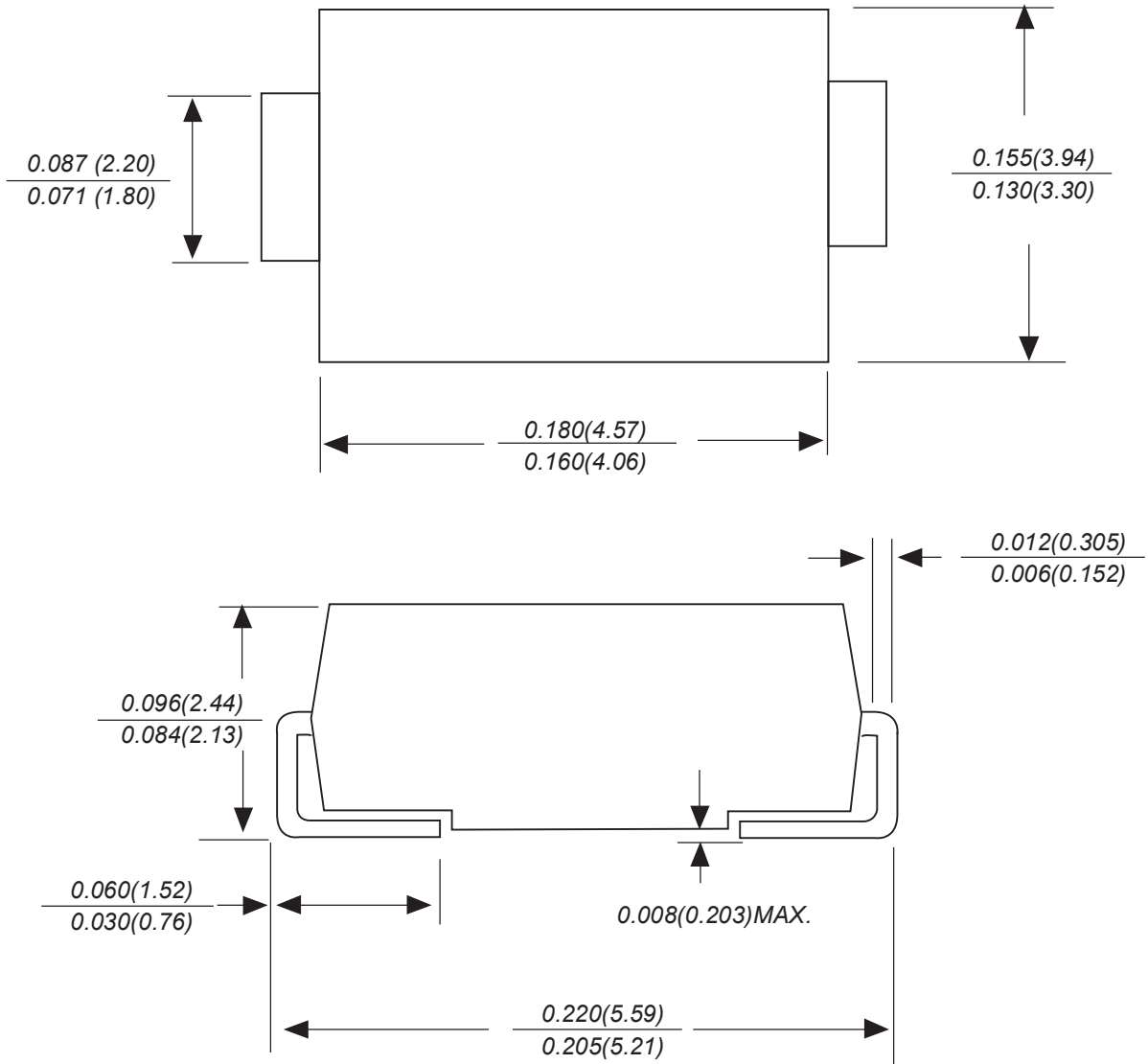


FIG.4: TYPICAL REVERSE CHARACTERISTICS





Package Outline Dimensions
SMB(DO-214AA)



Dimensions in inches and (millimeters)



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