



FEATURES

- Average Forward Current: $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SMA

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|------|---------|----------|
| US1A-US1M | SMA | US1* | 2000 |



*:FromA-M

MAXIMUM RATINGS (Ta=25 unless otherwise noted)

| Item | Symbol | Unit | Test Conditions | US1 | | | | | | |
|--|----------------|------------|---|------------|-----|-----|-----|-----|-----|------|
| | | | | A | B | D | G | J | K | M |
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage | V_{RMS} | V | | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| Average Forward Current | $I_{F(AV)}$ | A | 60Hz Half-sine wave, Resistance load, $T_L=75^\circ C$ | 1.0 | | | | | | |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ C$ | 30 | | | | | | |
| Operation Junction and Storage Temperature Range | T_J, T_{STG} | $^\circ C$ | | -55 ~ +150 | | | | | | |

ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

| Item | Symbol | Unit | Test Condition | US1 | | | | | | |
|-------------------------------|------------------|--------------|------------------------------------|-------------------|---|---|-----|-----|---|---|
| | | | | A | B | D | G | J | K | M |
| Peak Forward Voltage | V_F | V | $I_F=1.0A$ | 1.0 | | | 1.3 | 1.7 | | |
| Maximum reverse recovery time | t_{rr} | ns | $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$ | 50 | | | | 75 | | |
| Peak Reverse Current | I_{RRM1} | μA | $V_{RM}=V_{RRM}$ | $T_a=25^\circ C$ | | | | | | |
| | I_{RRM2} | | | $T_a=125^\circ C$ | | | | | | |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | $^\circ C/W$ | Between junction and ambient | 55 | | | | | | |
| | $R_{\theta J-L}$ | | Between junction and terminal | 25 | | | | | | |

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

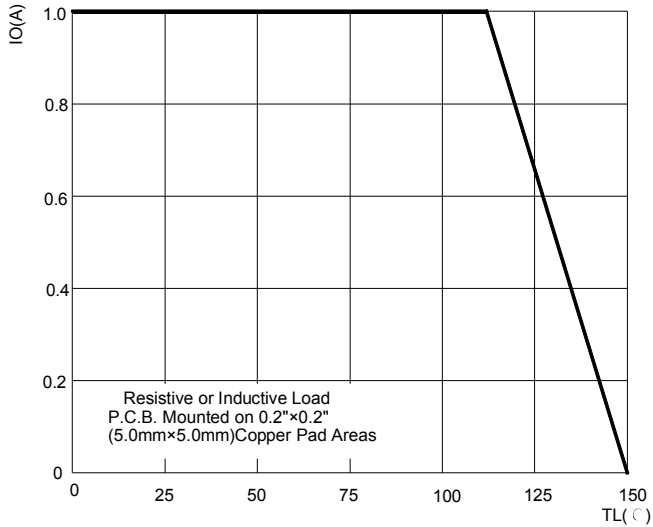


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

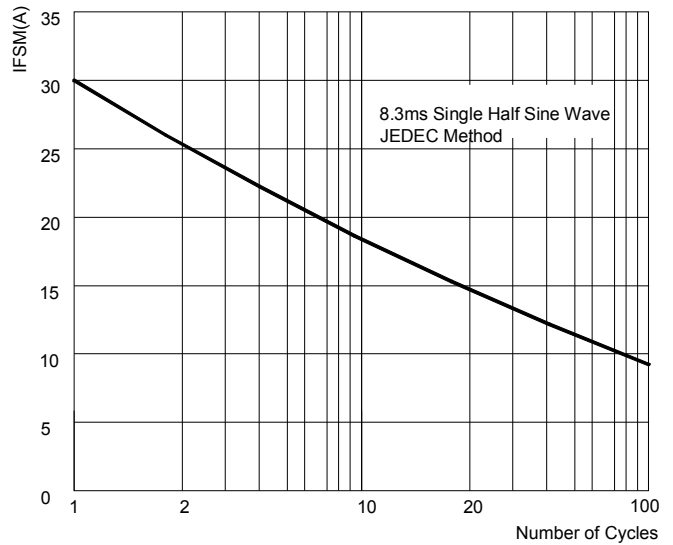


FIG.3: TYPICAL FORWARD CHARACTERISTICS

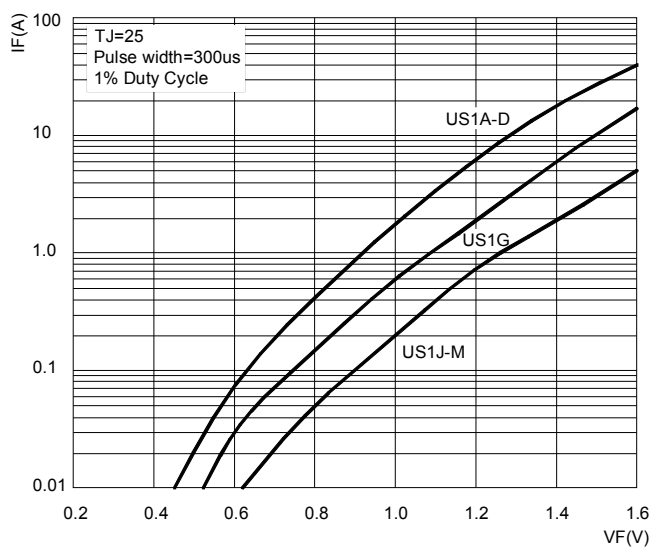


FIG.4: TYPICAL REVERSE CHARACTERISTICS

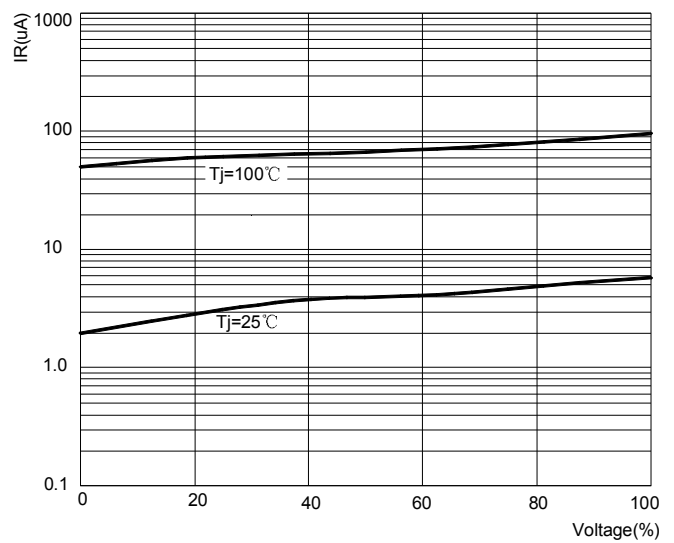
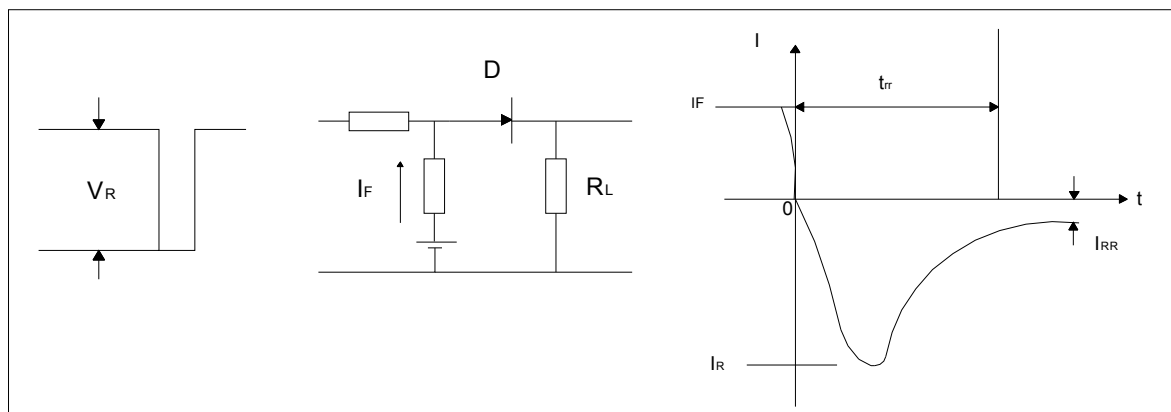
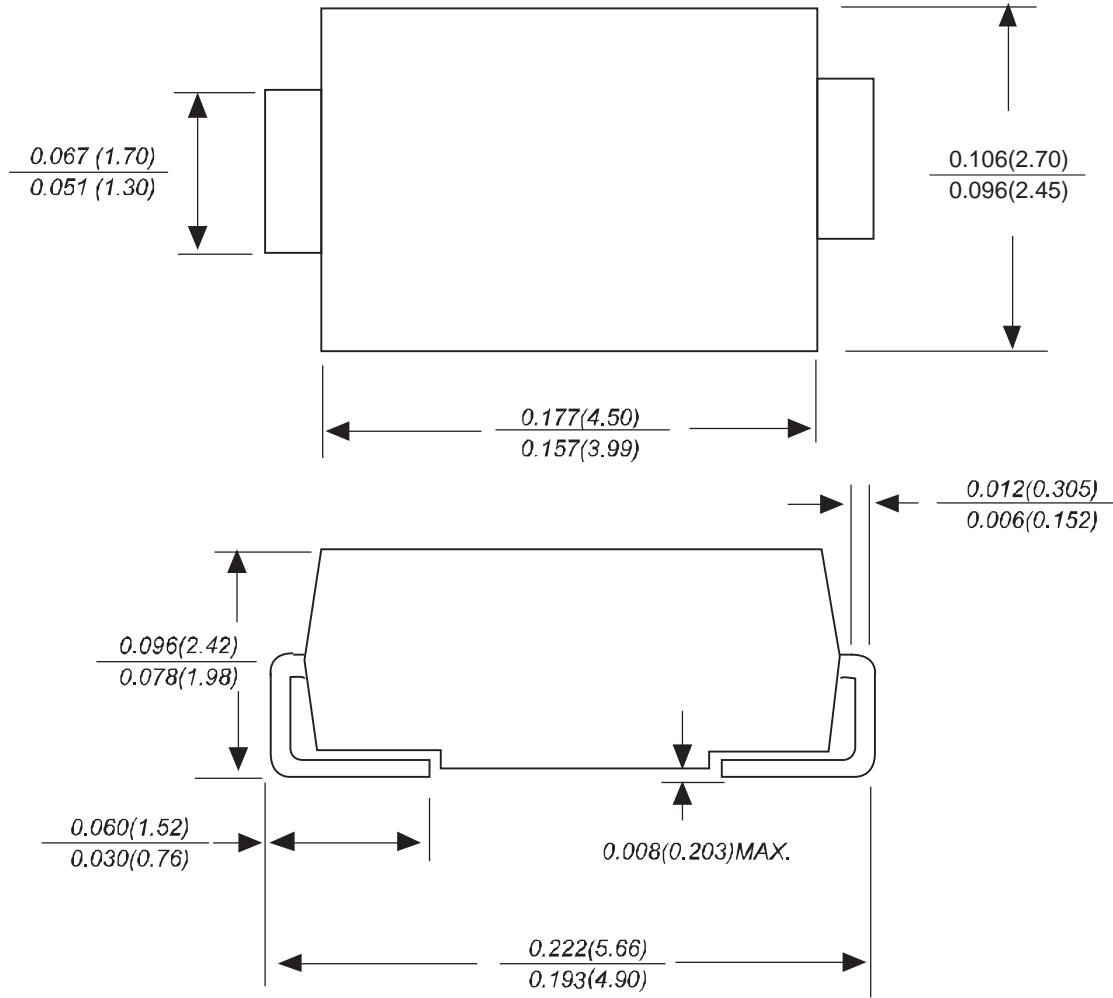


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





SMA Package Outline Dimensions



Dimensions in inches and (millimeters)



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