# HUS2MA
## High Efficient Rectifier Diode

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


**SMA**

### Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|---|---|---|---|
| HUS2MA | SMA | US2M | 2000 |

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

| Item | Symbol | Unit | Test Conditions | HUS2MA |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | | 1000 |
| Maximum RMS Voltage | $V_{RMS}$ | V | | 700 |
| Average Forward Current | $I_{F(AV)}$ | A | 60Hz Half-sine wave, Resistance load, FIG.1 | 2.0 |
| Surge(Non-repetitive)Forward Current | $I_{FSM}$ | A | 60Hz Half-sine wave, 1 cycle, Ta=25℃ | 60 |
| Junction Temperature | $T_J$ | ℃ | | -55 ~ +150 |
| Storage Temperature | $T_{STG}$ | ℃ | | -55 ~ +150 |

### Electrical Characteristics (Ta=25℃ unless otherwise specified)

| Item | Symbol | Unit | Test Condition | | HUS2MA |
|---|---|---|---|---|---|
| Peak Forward Voltage | $V_F$ | V | $I_F$=2.0A | | 1.85 |
| Maximum reverse recovery time | $T_{rr}$ | ns | $I_F$=0.5A, $I_R$=1.0A, $I_{rr}$=0.25A | | 75 |
| Peak Reverse Current | $I_{RRM1}$ | mA | $V_{RM}$=$V_{RRM}$ | Ta=25℃ | 0.05 |
| | $I_{RRM2}$ | | | Ta=100℃ | 0.15 |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | ℃/W | Between junction and ambient | | 65 |
| | $R_{\theta J-L}$ | | Between junction and terminal | | 20 |

### 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-TYPICAL FORWARD CHARACTERISTICS

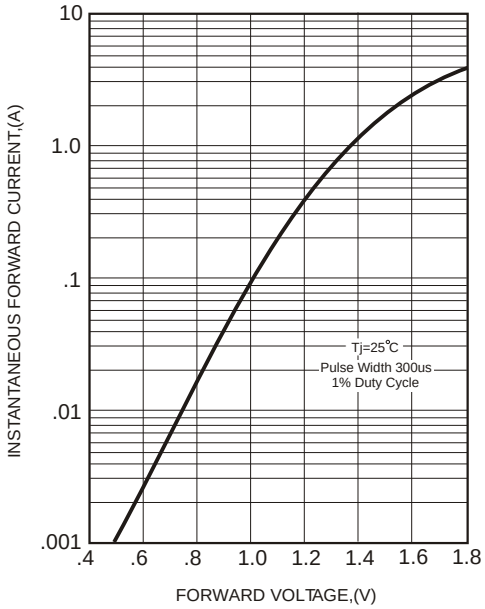



FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

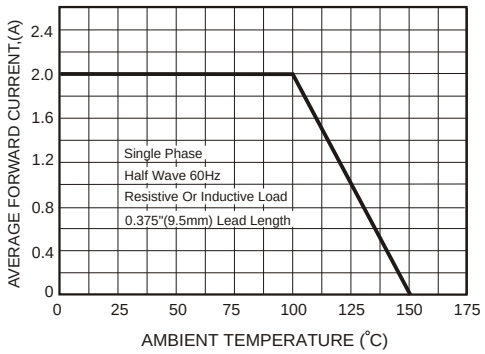
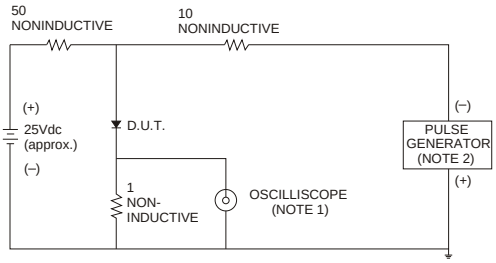
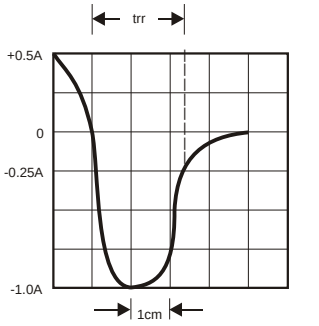



FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS




NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.




SET TIME BASE FOR
50 / 10ns / cm

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

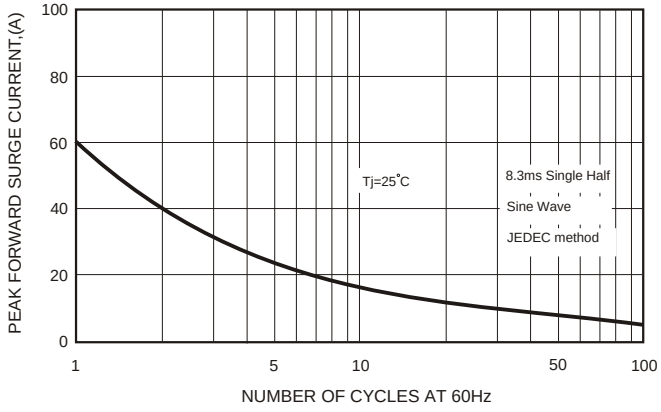
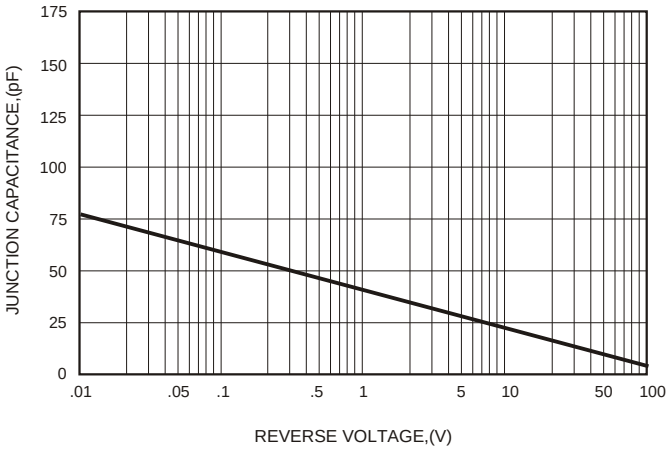
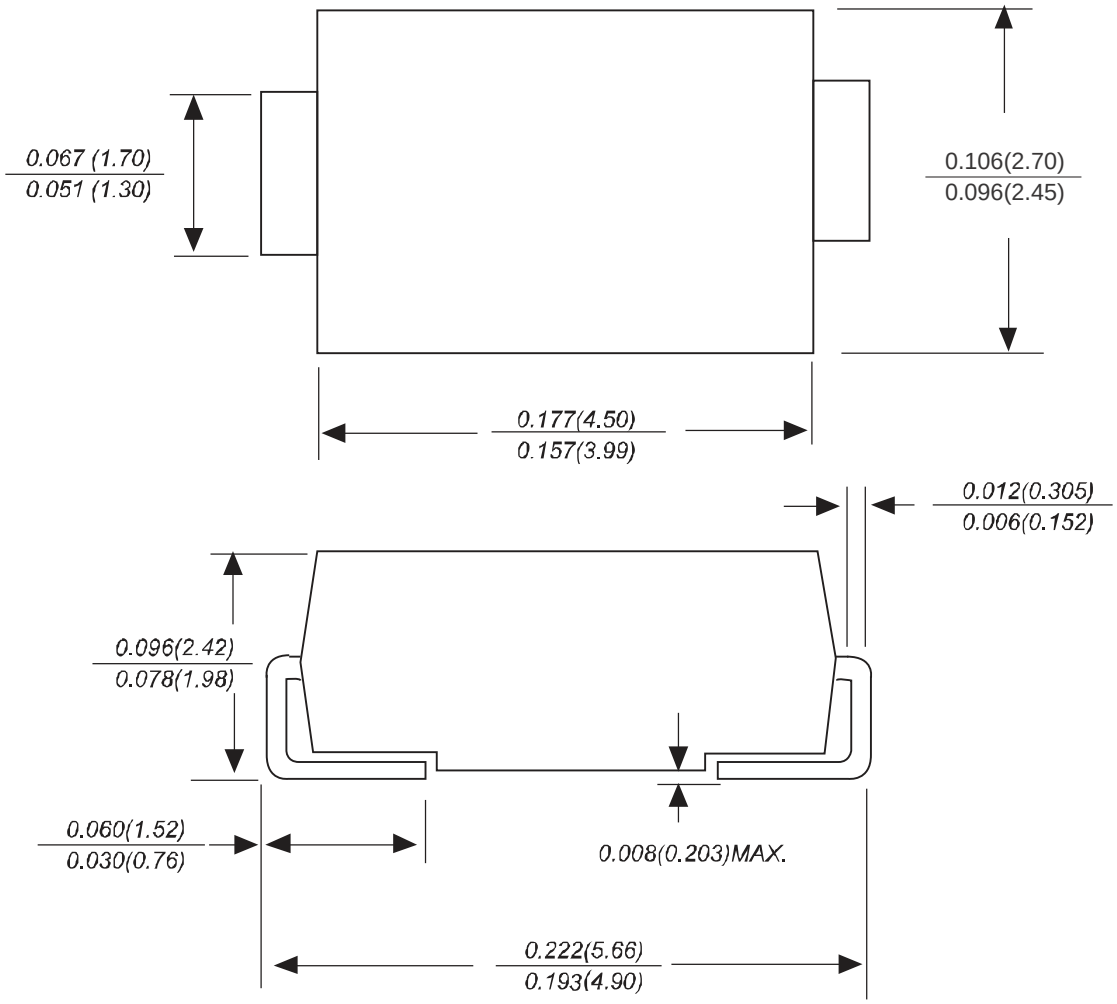



FIG.5-TYPICAL JUNCTION CAPACITANCE



## Package Outline Dimensions

SMA(DO-214AC)




*Dimensions in inches and (millimeters)*

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