



## Features

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



**SMB  
(DO-214AA)**

## Package Marking and Ordering Information

| Product ID | Pack              | Marking | Qty(PCS) |
|------------|-------------------|---------|----------|
| NTE640     | SMB<br>(DO-214AA) | SS24    | 3000     |



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

| Item                                     | Symbol      | Unit | Test Conditions                                      | Limit      |
|------------------------------------------|-------------|------|------------------------------------------------------|------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$   | V    |                                                      | 40         |
| Maximum RMS Voltage                      | $V_{RMS}$   | V    |                                                      | 28         |
| Average Forward Current                  | $I_{F(AV)}$ | A    | 60Hz Half-sine wave ,<br>Resistance load , TL(Fig.1) | 2.0        |
| Surge(Non-repetitive)<br>Forward Current | $I_{FSM}$   | A    | 60Hz Half-sine wave ,<br>1 cycle, Ta=25°C            | 50         |
| Junction Temperature                     | $T_J$       | °C   |                                                      | -55~+125   |
| Storage Temperature                      | $T_{STG}$   | °C   |                                                      | -55 ~ +150 |

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

| Item                        | Symbol           | Unit     | Test Condition                |           | Limit |
|-----------------------------|------------------|----------|-------------------------------|-----------|-------|
| Peak Forward Voltage        | $V_F$            | V        | $I_F=2.0A$                    |           | 0.55  |
| Peak Reverse Current        | $I_{RRM1}$       | mA       | $V_{RM}=V_{RRM}$              | Ta =25°C  | 0.5   |
|                             | $I_{RRM2}$       |          |                               | Ta =100°C | 10    |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | °C/<br>W | Between junction and ambient  |           | 75    |
|                             | $R_{\theta J-L}$ |          | 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

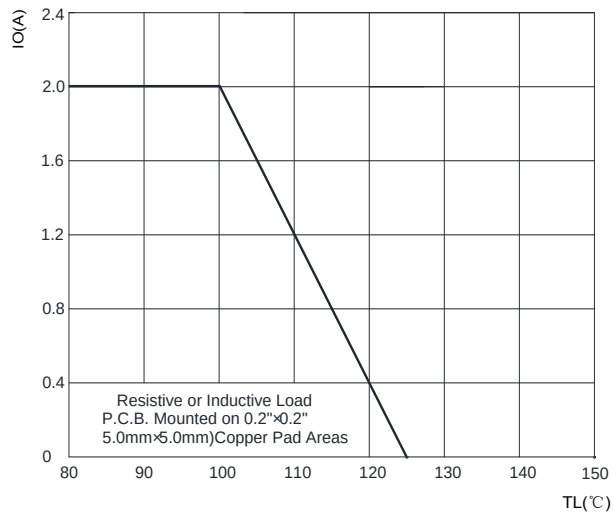


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

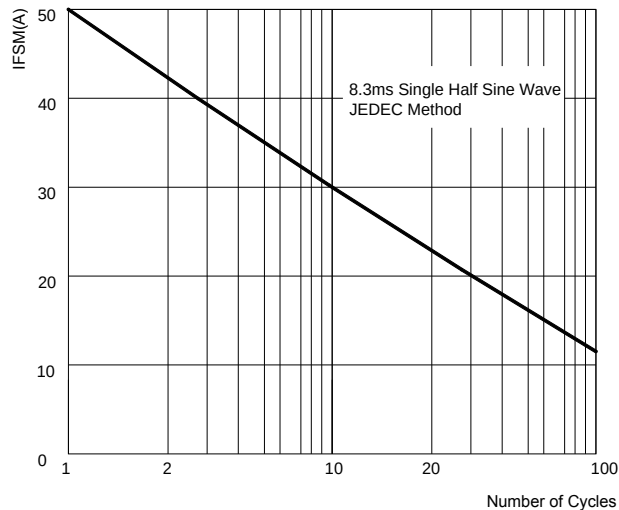


FIG.3: TYPICAL FORWARD CHARACTERISTICS

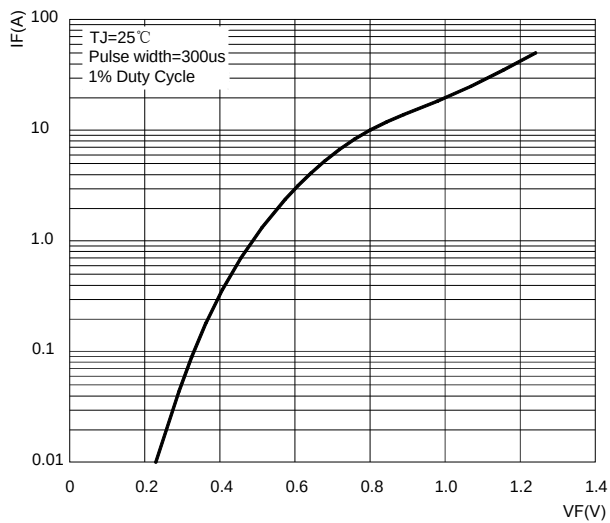
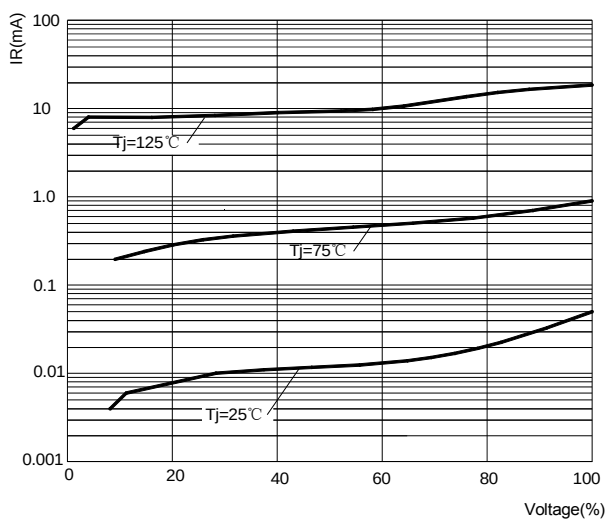
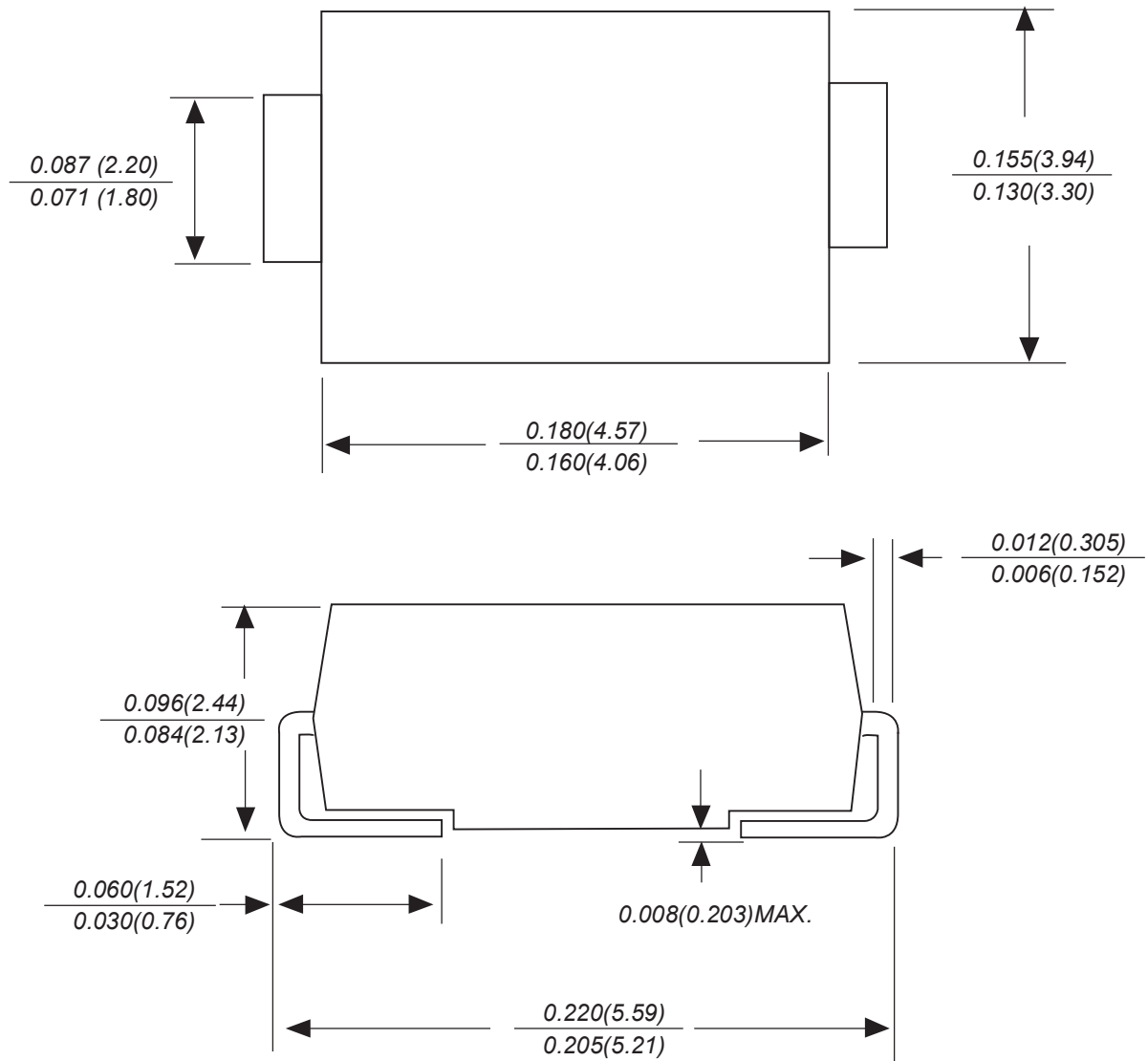


FIG.4: TYPICAL REVERSE CHARACTERISTICS





**Package Outline Dimensions**  
**SMB(DO-214AA)**



*Dimensions in inches and (millimeters)*



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