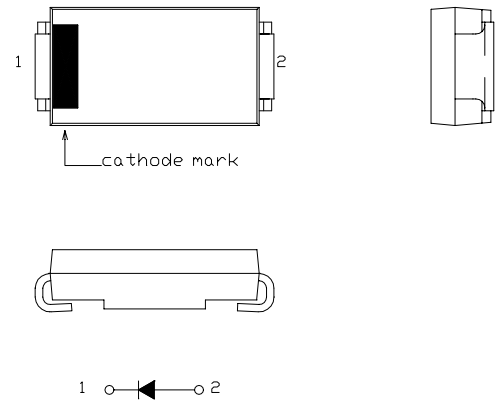


OUTLINE DRAWING

FRD Type : NSU03B60

FEATURES

- * **FLAT-PAK** Surface Mount Device
- * Ultra Fsat Recovery
- * Packaged in 16mm Tape and Reel
- * Not Rolling During Assembly
- * For Power Factor Improvement High Frequency Rectification



Maximum Ratings

Approx Net Weight:016g

| Rating | Symbol | NSU03B60 | | | Unit |
|-------------------------------------|---------------------|-------------|--|---------------------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 600 | | | V |
| Average Rectified Output Current | I _O | 0.76 | Ta=25 °C *1 | 50Hz Half Sine | A |
| | | 3.0 | T1=58 °C *2 | Wave Resistive Load | |
| RMS Forward Current | I _{F(RMS)} | 4.71 | | | A |
| Surge Forward Current | I _{FSM} | 35 | 50Hz Half Sine Wave,1cycle Non-repetitive | | A |
| Operating JunctionTemperature Range | T _{jw} | -40 to +150 | | | °C |
| Storage Temperature Range | T _{stg} | -40 to +150 | | | °C |

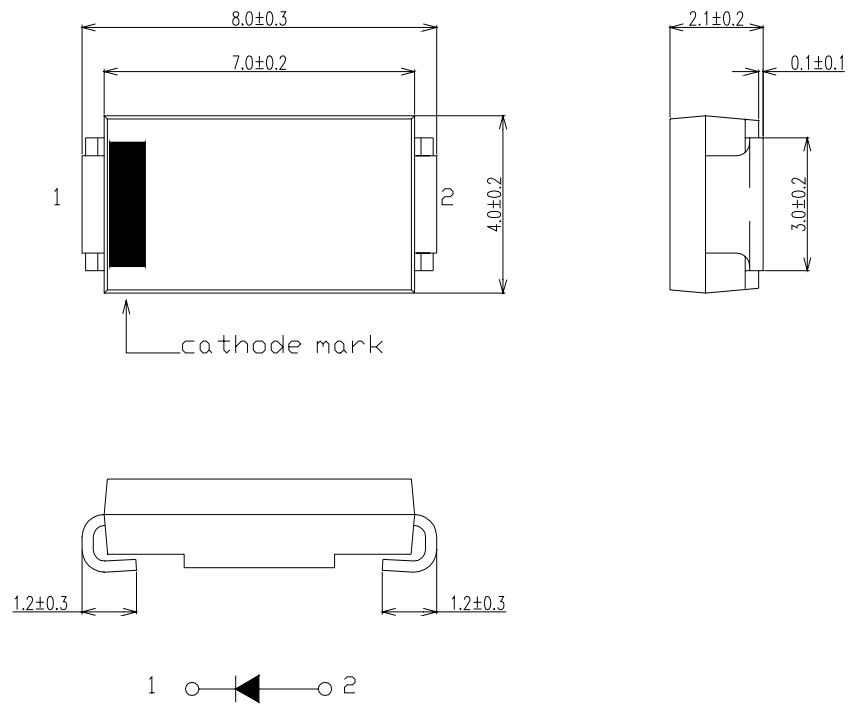
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|---------------|---|------|------|------|-----------------------------|
| Peak Reverse Current | I_{RM} | $T_j=25\text{ }^{\circ}\text{C}$, $V_{RM}=V_{RRM}$ | - | - | 20 | μA |
| Peak Forward Voltage | V_{FM} | $T_j=25\text{ }^{\circ}\text{C}$, $I_{FM}=3.0\text{A}$ | - | 2.2 | 2.7 | V |
| Reverse Recovery Time | t_{rr} | $T_a=25\text{ }^{\circ}\text{C}$, $I_{FM}=3\text{A}$ $-di/dt=50\text{A}/\mu\text{s}$ | - | 17 | 27 | ns |
| Thermal Resistance | $R_{th(j-a)}$ | Junction to Ambient *1 | - | - | 89 | $^{\circ}\text{C}/\text{W}$ |
| | $R_{th(j-l)}$ | Junction to Lead | - | - | 13 | |

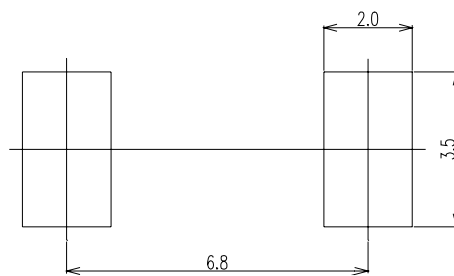
*1 Alumina Substrate Mounted (Soldering Lands=2x3.5mm, Both Sides)

*2 T_l = Lead Temperature

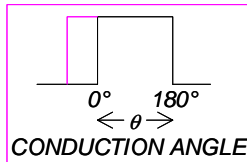
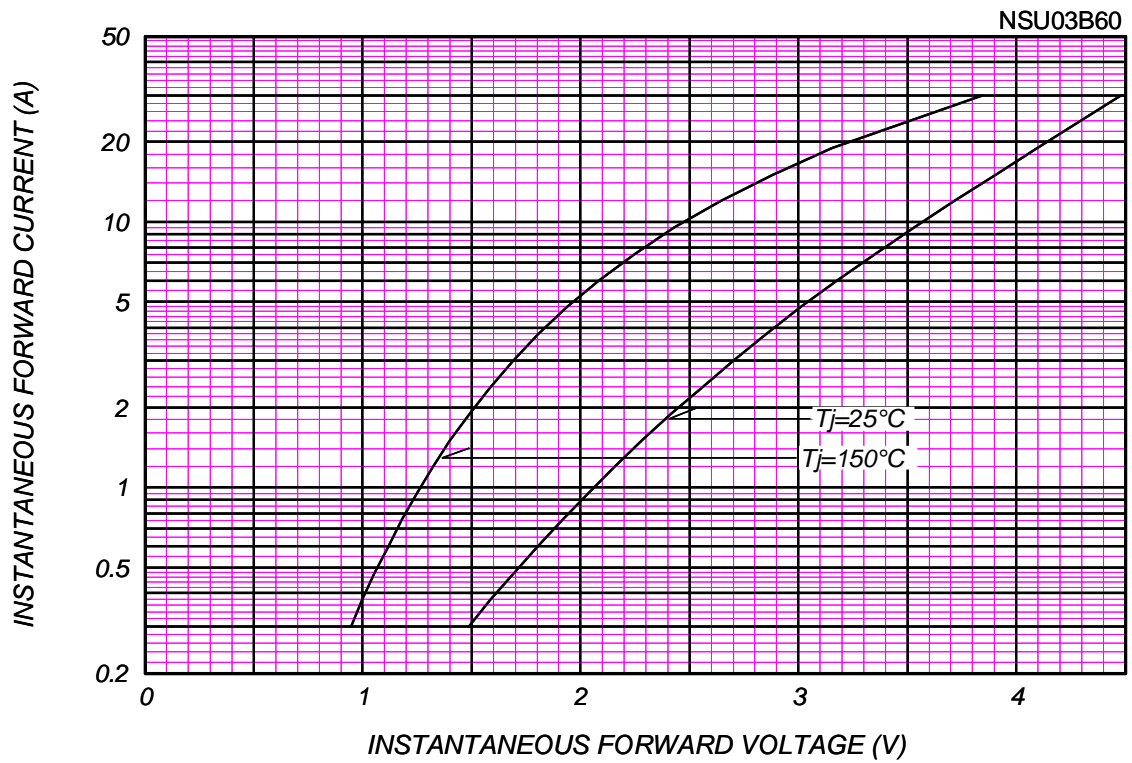
NSU03B60 OUTLINE DRAWING (Dimensions in mm)



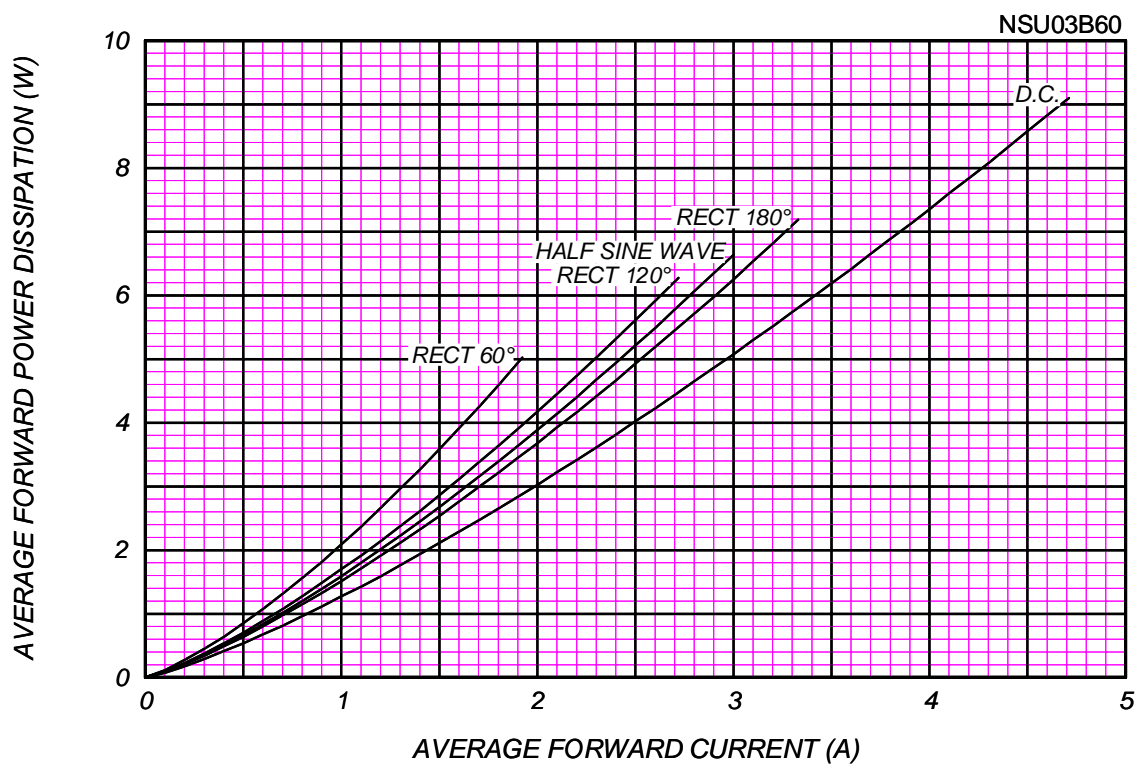
SOLDERING PAD

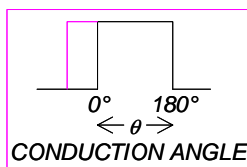


FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION

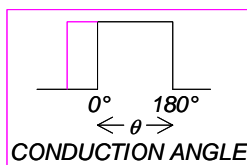
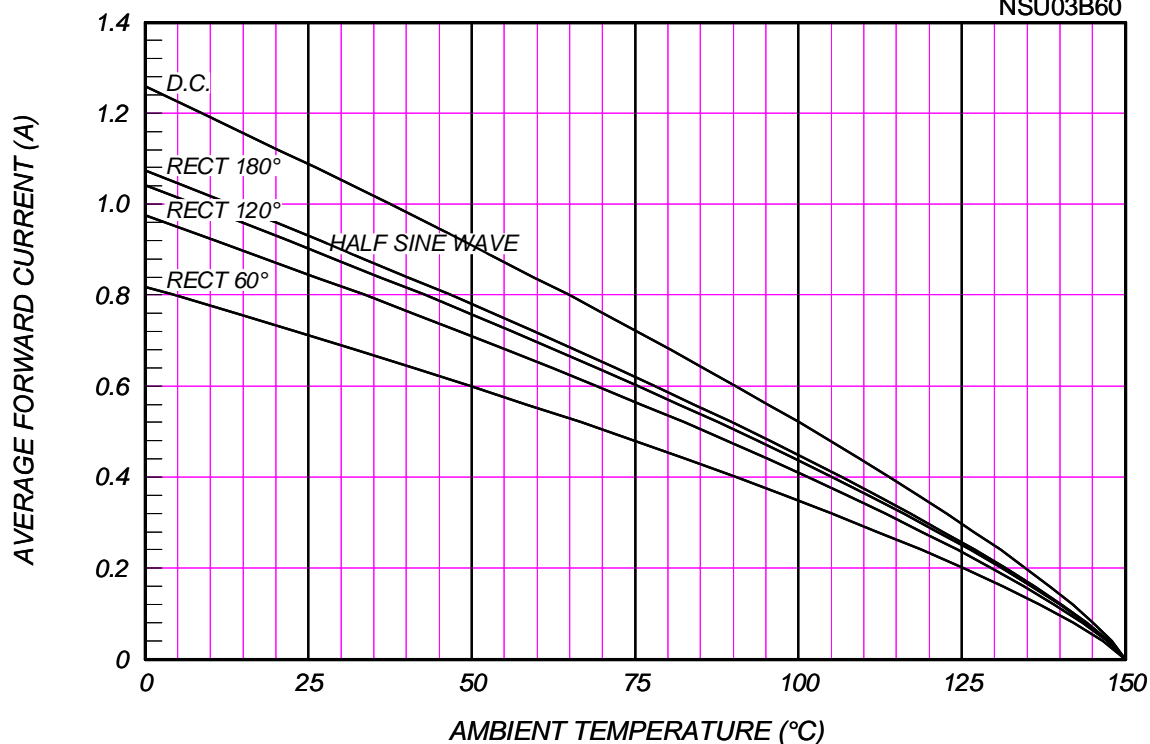




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

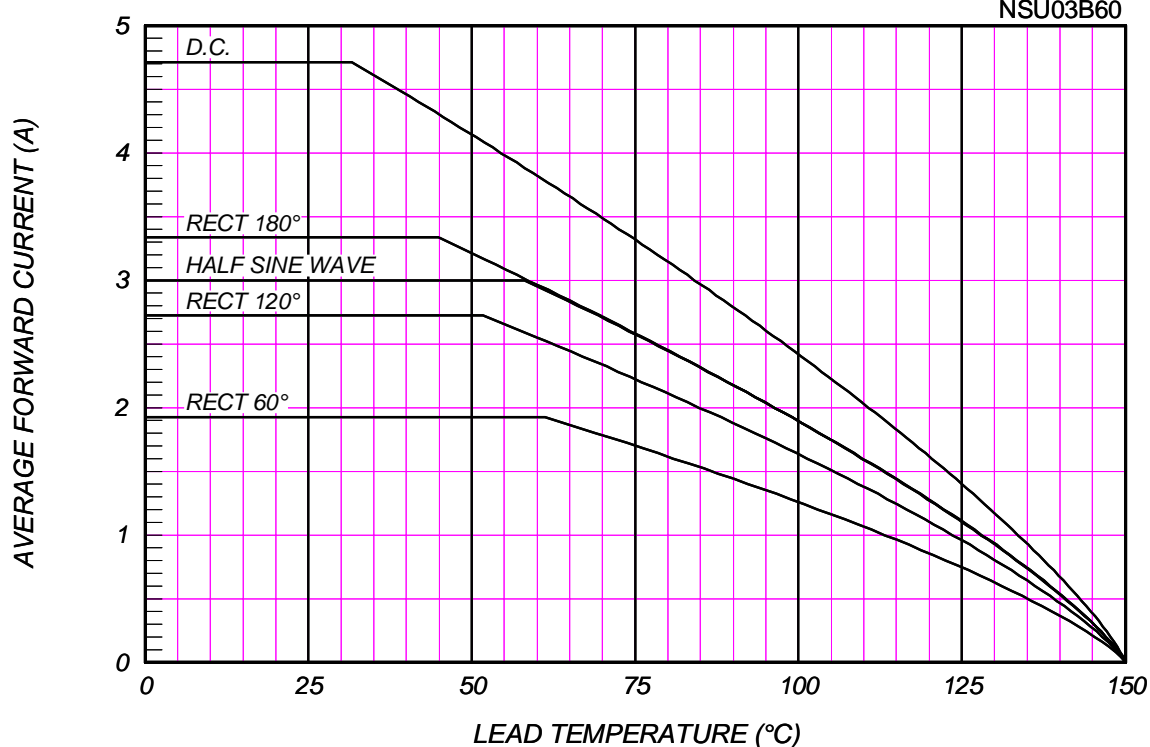
Alumina Substrate Mounted (Soldering Land=2x3.5mm)

NSU03B60



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

NSU03B60



SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load

NSU03B60

