

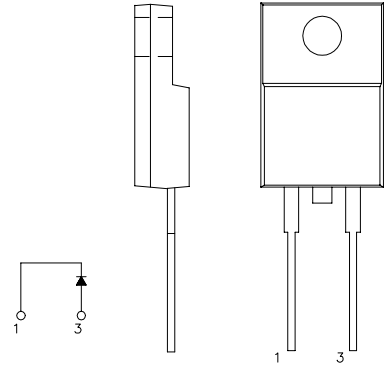
FRD Type : FSU20B60

OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

FEATURES

- * Fully Molded Isolation Case
- * Ultra – Fast Recovery
- * Low Forward Voltage Drop
- * Low Power Loss, High Efficiency
- * High Surge Capability



Maximum Ratings

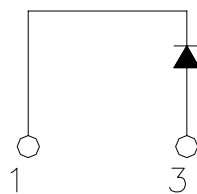
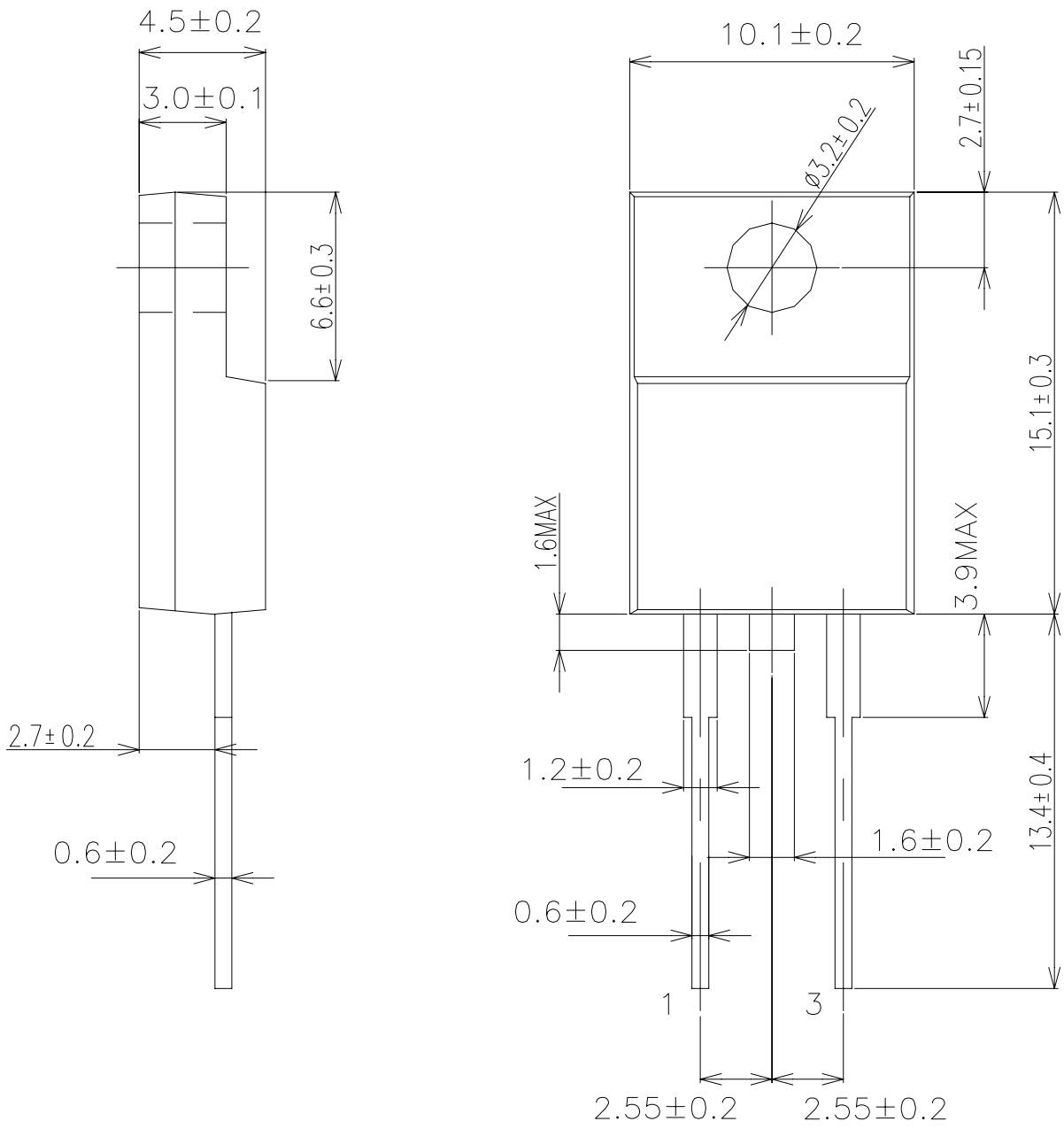
Approx Net Weight:1.7g

| Rating | Symbol | FSU20B60 | | Unit |
|--------------------------------------|--------------|---------------|--|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 600 | | V |
| Average Rectified Output Current | I_O | 15 | $T_c=51^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load | A |
| RMS Forward Current | $I_{F(RMS)}$ | 23.5 | | A |
| Surge Forward Current | I_{FSM} | 160 | 50 Hz Half Sine Wave, 1 cycle Non-repetitive | A |
| Operating Junction Temperature Range | T_{jw} | - 40 to + 150 | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 40 to + 150 | | $^\circ\text{C}$ |
| Mounting torque | | 0.5 | Recommended value | N.m |

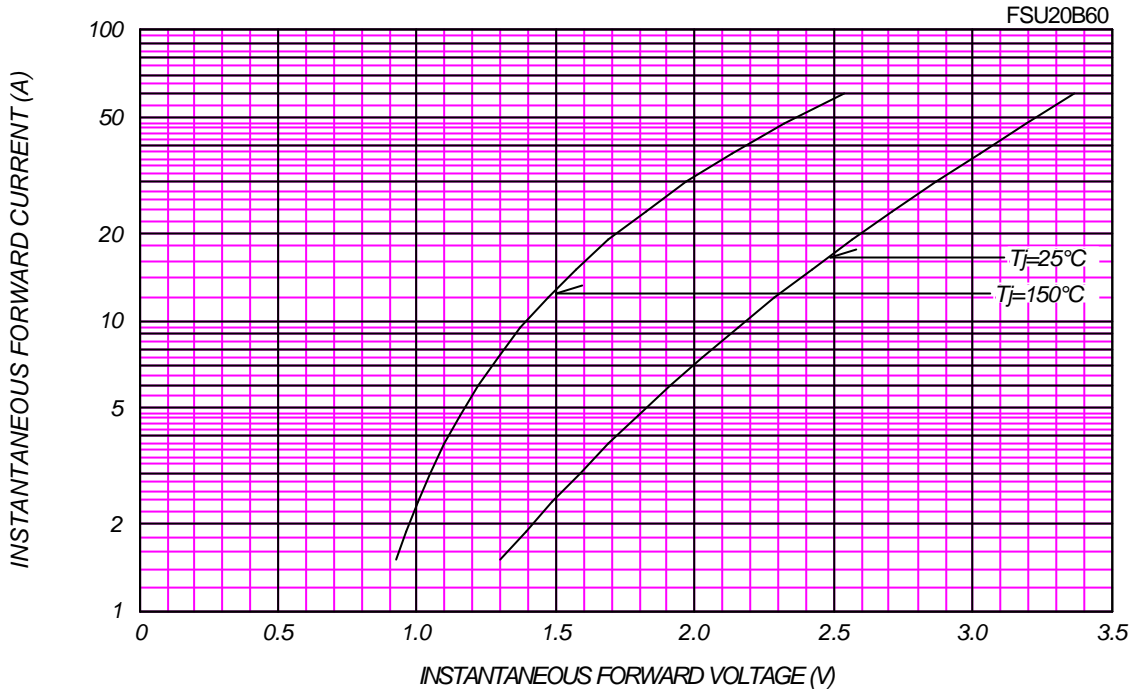
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|---------------|--|------|------|------|---------------------------|
| Peak Reverse Current | I_{RM} | $T_j = 25^\circ\text{C}, V_{RM} = V_{RRM}$ | - | - | 30 | μA |
| Peak Forward Voltage | V_{FM} | $T_j = 25^\circ\text{C}, I_{FM} = 15\text{A}$ | - | - | 2.42 | V |
| | | $T_j = 25^\circ\text{C}, I_{FM} = 20\text{A}$ | | | 2.60 | |
| Reverse Recovery Time | t_{rr} | $I_{FM} = 10\text{A}, -di/dt = 50 \text{ A}/\mu\text{s}, T_a = 25^\circ\text{C}$ | - | 34 | 50 | ns |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Case | - | - | 3 | $^\circ\text{C}/\text{W}$ |
| | $R_{th(c-f)}$ | Case to Fin | - | - | 1.5 | |

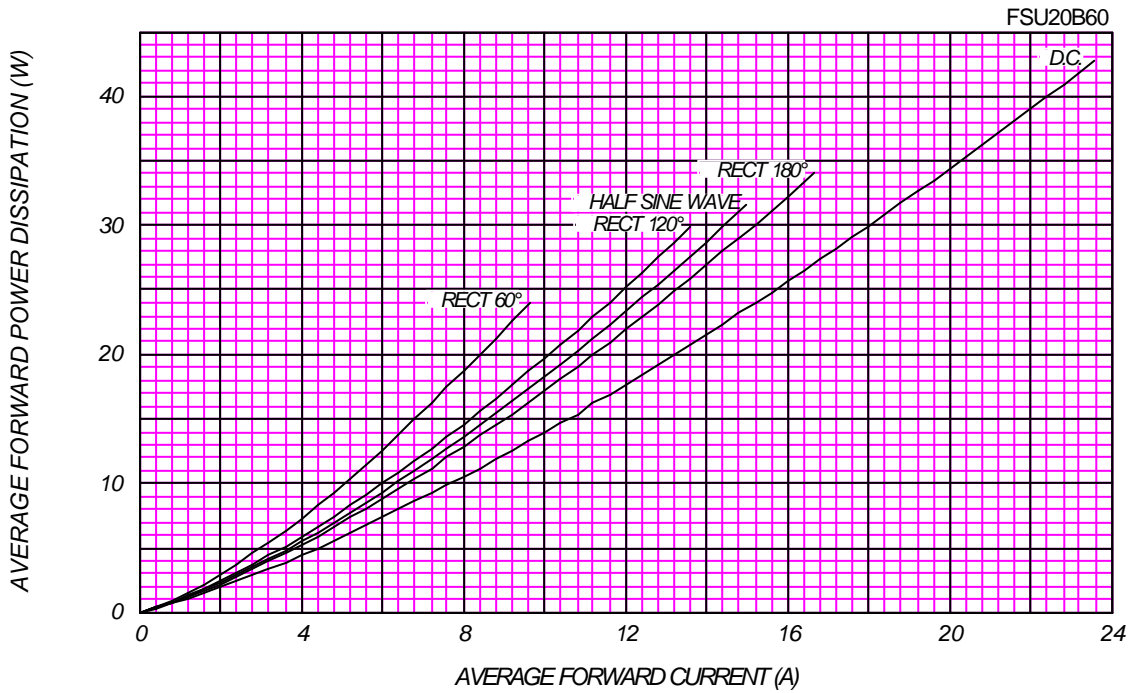
FSU_B_ OUTLINE DRAWING (Dimensions in mm)

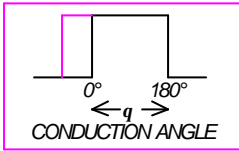


FORWARD CURRENT VS. VOLTAGE

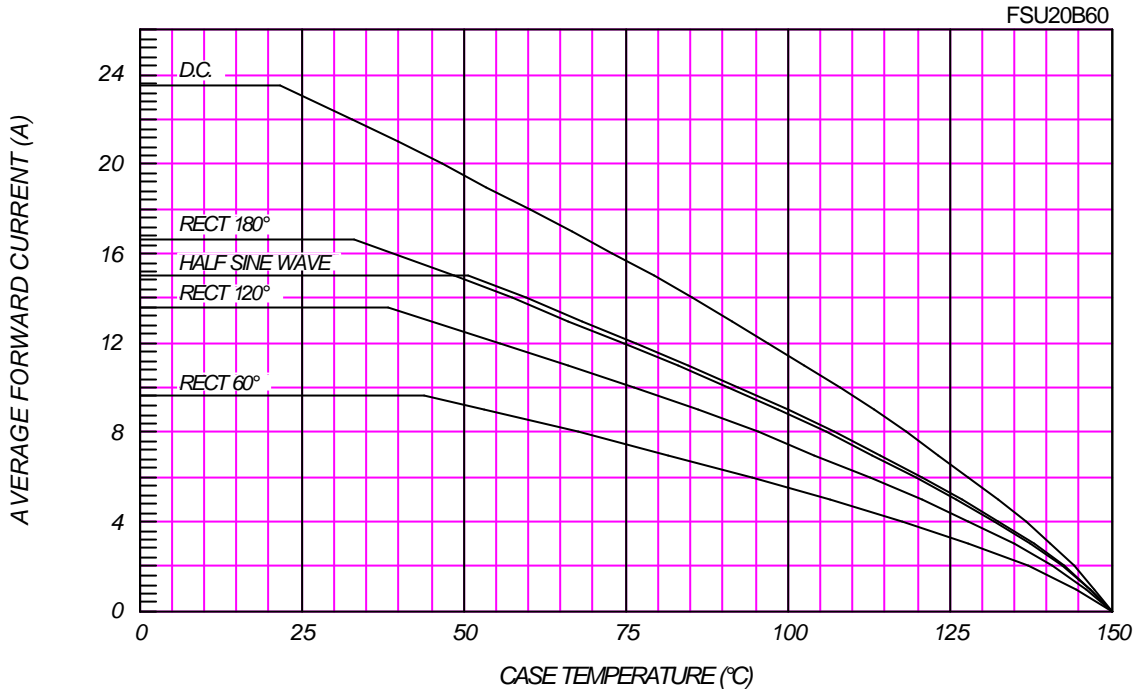


AVERAGE FORWARD POWER DISSIPATION



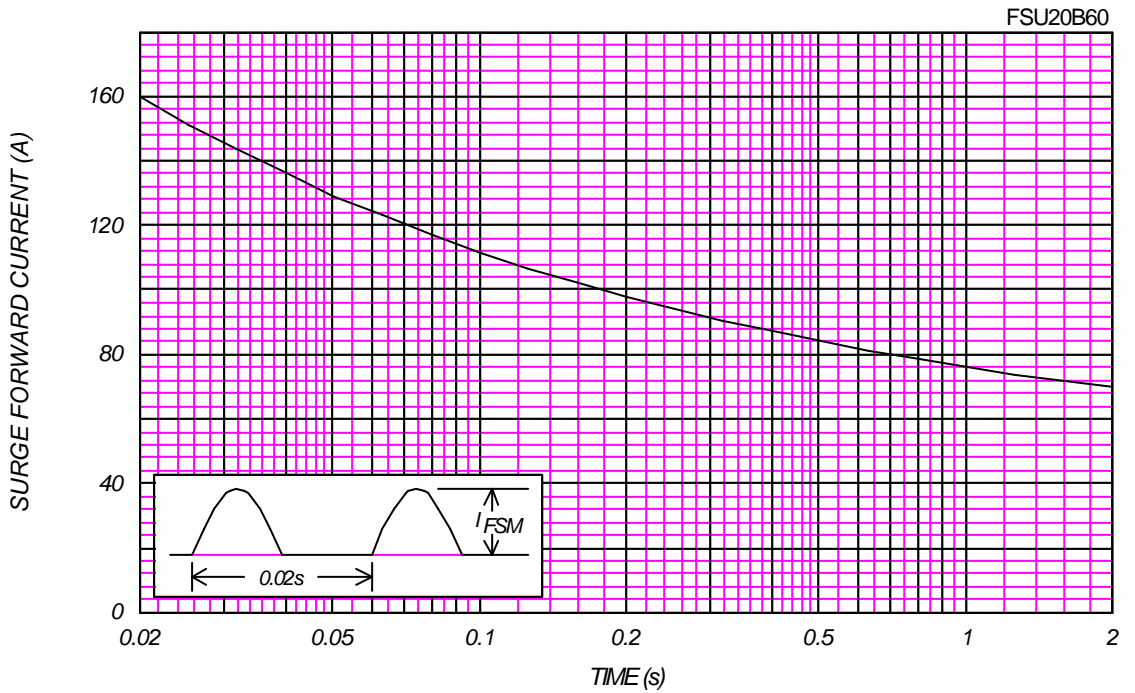


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

FSU20B60

