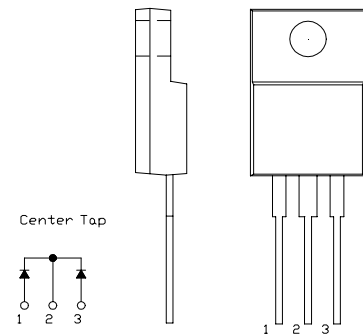


FRD Type : FCF10A20

OUTLINE DRAWING

FEATURES

- * Fully Molded Isolation
- * Dual Diodes – Cathode Common
- * Ultra – Fast Recovery
- * Low Forward Voltage Drop
- * High Surge Capability
- * 200 Volts thru 600 Volts Types Available



Maximum Ratings

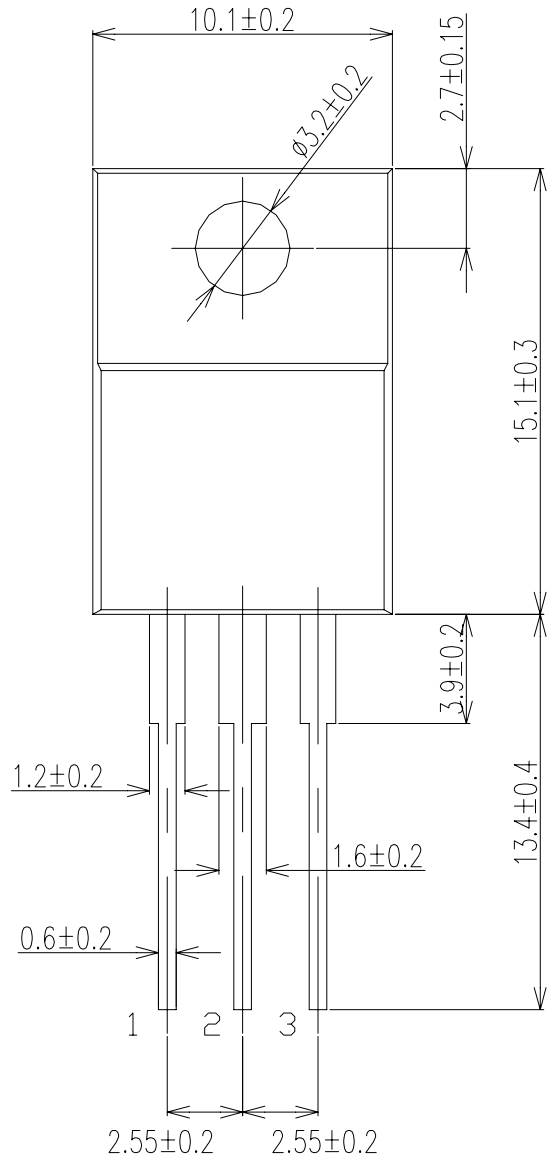
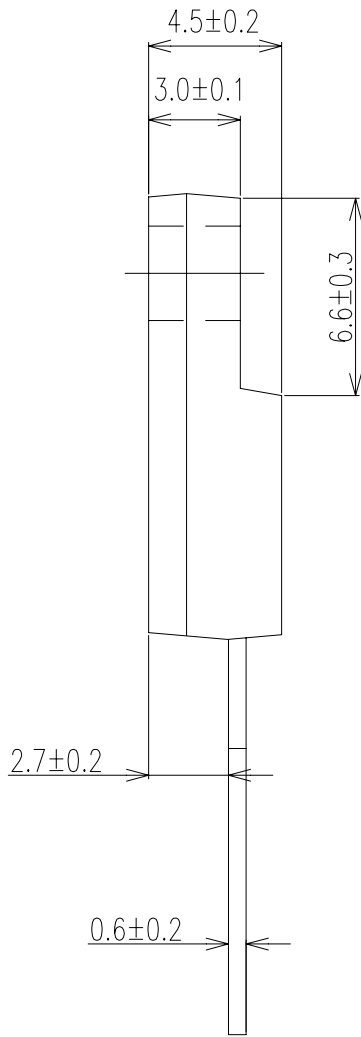
Approx Net Weight:1.75g

| Rating | Symbol | FCF10A20 | | Unit |
|--------------------------------------|--------------|---------------|--|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 200 | | V |
| Non-repetitive Peak Reverse Voltage | V_{RSM} | 220 | | V |
| Average Rectified Output Current | I_O | 10 | $T_c=117^\circ\text{C}$ 50 Hz, Full Sine Wave Resistive Load | A |
| RMS Forward Current | $I_{F(RMS)}$ | 11.1 | | A |
| Surge Forward Current | I_{FSM} | 80 | 50 Hz Full 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 |

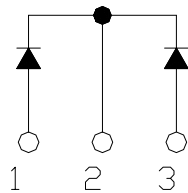
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|---------------|--|------|------|------|---------------------------|
| Peak Reverse Current | I_{RM} | $T_j=25^\circ\text{C}$, $V_{RM}=V_{RRM}$ per Arm | - | - | 20 | μA |
| Peak Forward Voltage | V_{FM} | $T_j=25^\circ\text{C}$, $I_{FM}=5\text{A}$ per Arm | - | - | 0.98 | V |
| Reverse Recovery Time | t_{rr} | $I_{FM}=5\text{A}$, $-di/dt=50\text{A}/\mu\text{s}$, $T_a=25^\circ\text{C}$ | - | - | 35 | 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 | |

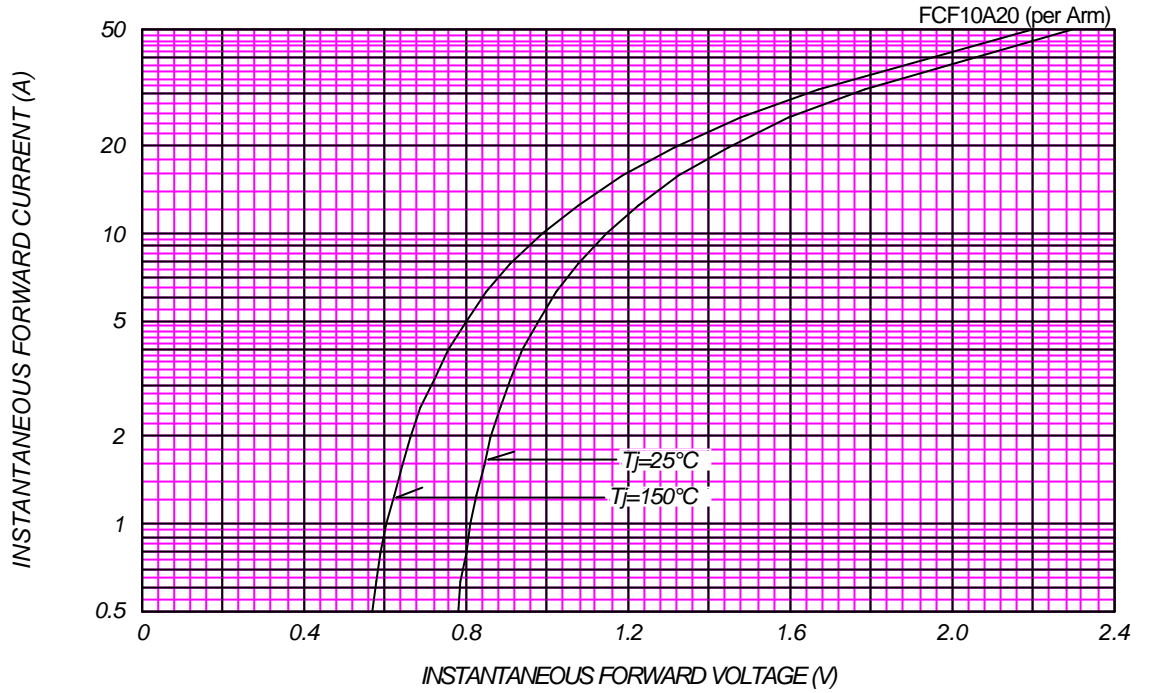
FCF_A_ OUTLINE DRAWING (Dimensions in mm)



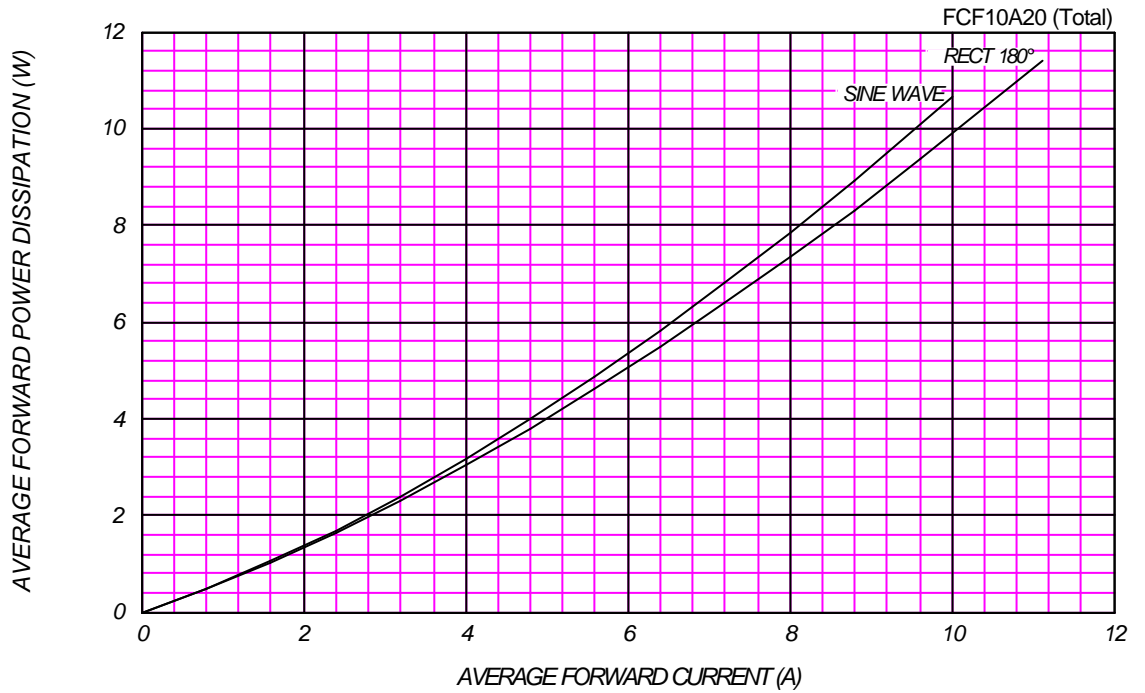
Center Tap



FORWARD CURRENT VS. VOLTAGE

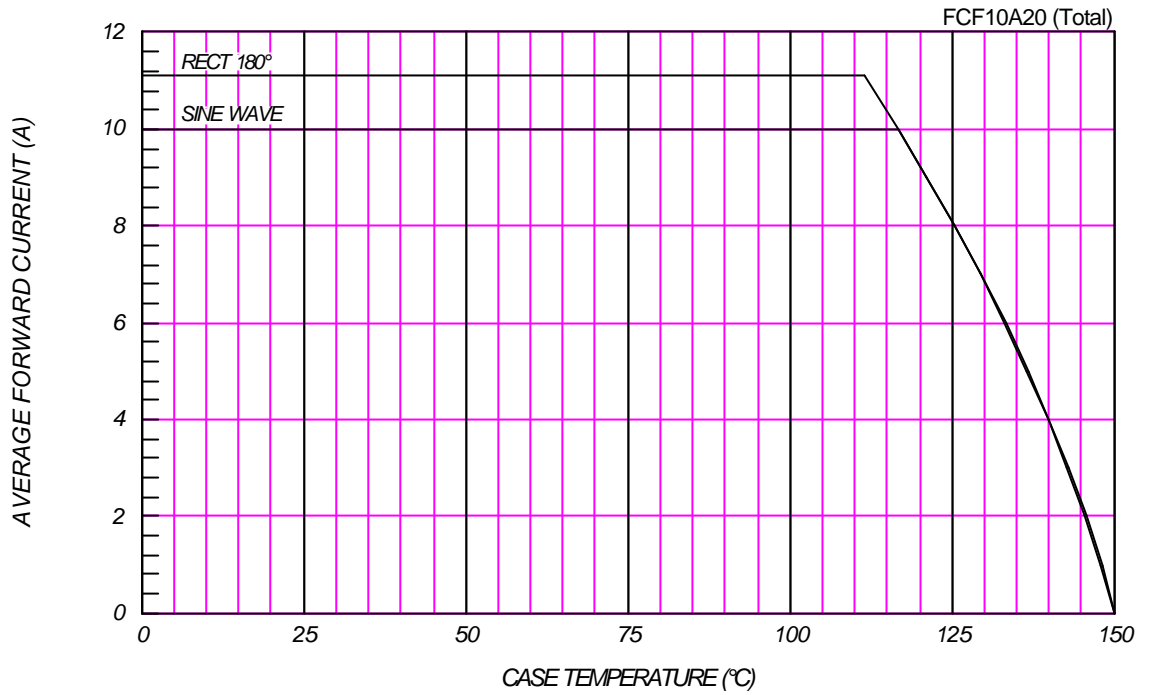


AVERAGE FORWARD POWER DISSIPATION





AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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

