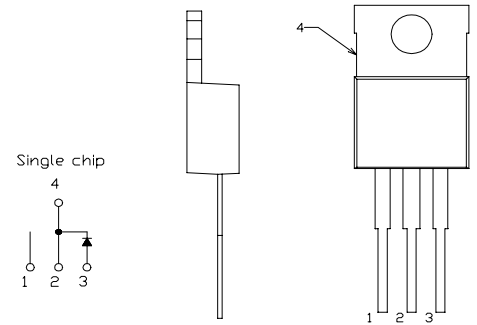


# FRD Type : GSF10A20B

## OUTLINE DRAWING

### FEATURES

- \* Similar to TO-220AB Case
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* 200 Volts thru 600 Volts Types Available



### Maximum Ratings

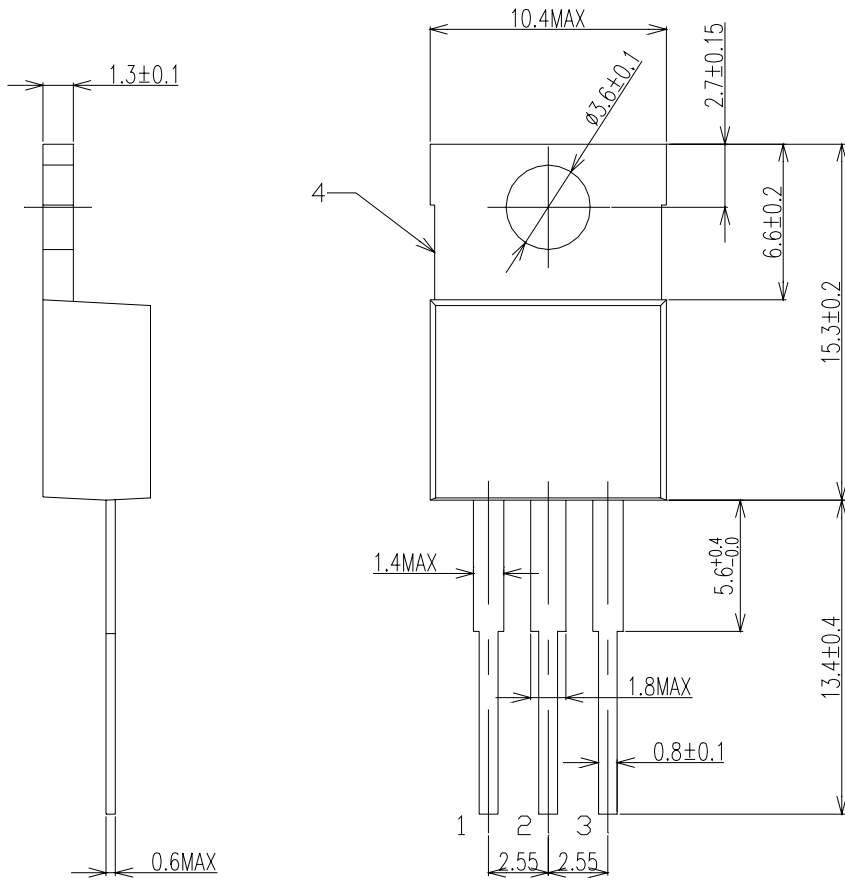
Approx Net Weight:1.9g

| Rating                               | Symbol       | GSF10A20B     |   | Unit             |
|--------------------------------------|--------------|---------------|---|------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 200           |   | V                |
| Non-repetitive Peak Reverse Voltage  | $V_{RSM}$    | 220           |   |                  |
| Average Rectified Output Current     | $I_O$        | 10            | $T_c=100^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load | A                |
| RMS Forward Current                  | $I_{F(RMS)}$ | 15.7          |   | A                |
| Surge Forward Current                | $I_{FSM}$    | 120           | 50 Hz Half Sine Wave, 1cycle 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  | $I_{RM}$      | $T_j = 25^\circ\text{C}$ , $V_{RM} = V_{RRM}$  | -    | -    | 25   | $\mu\text{A}$             |
| Peak Forward Voltage  | $V_{FM}$      | $T_j = 25^\circ\text{C}$ , $I_{FM} = 10\text{A}$   | -    | -    | 1.03 | V                         |
| Reverse Recovery Time | $t_{rr}$      | $I_{FM} = 10\text{A}$ ,<br>$-di/dt = 50\text{ A}/\mu\text{s}$ , $T_a = 25^\circ\text{C}$ | -    | -    | 35   | ns                        |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction to Case   | -    | -    | 4    | $^\circ\text{C}/\text{W}$ |

GSF10A20B OUTLINE DRAWING (Dimensions in mm)



Single chip

