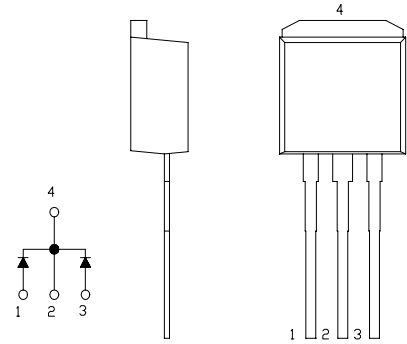


# FRD Type : C16T40F-11A

## OUTLINE DRAWING

### FEATURES

- \* **SQUARE-PAK** TO263AB Case (SMD)
- Packaged in 24mm Tape and Reel
- \* Dual Diodes – Cathode Common
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* High Surge Capability
- \* 200 Volts thru 600 Volts Types Available



### Maximum Ratings

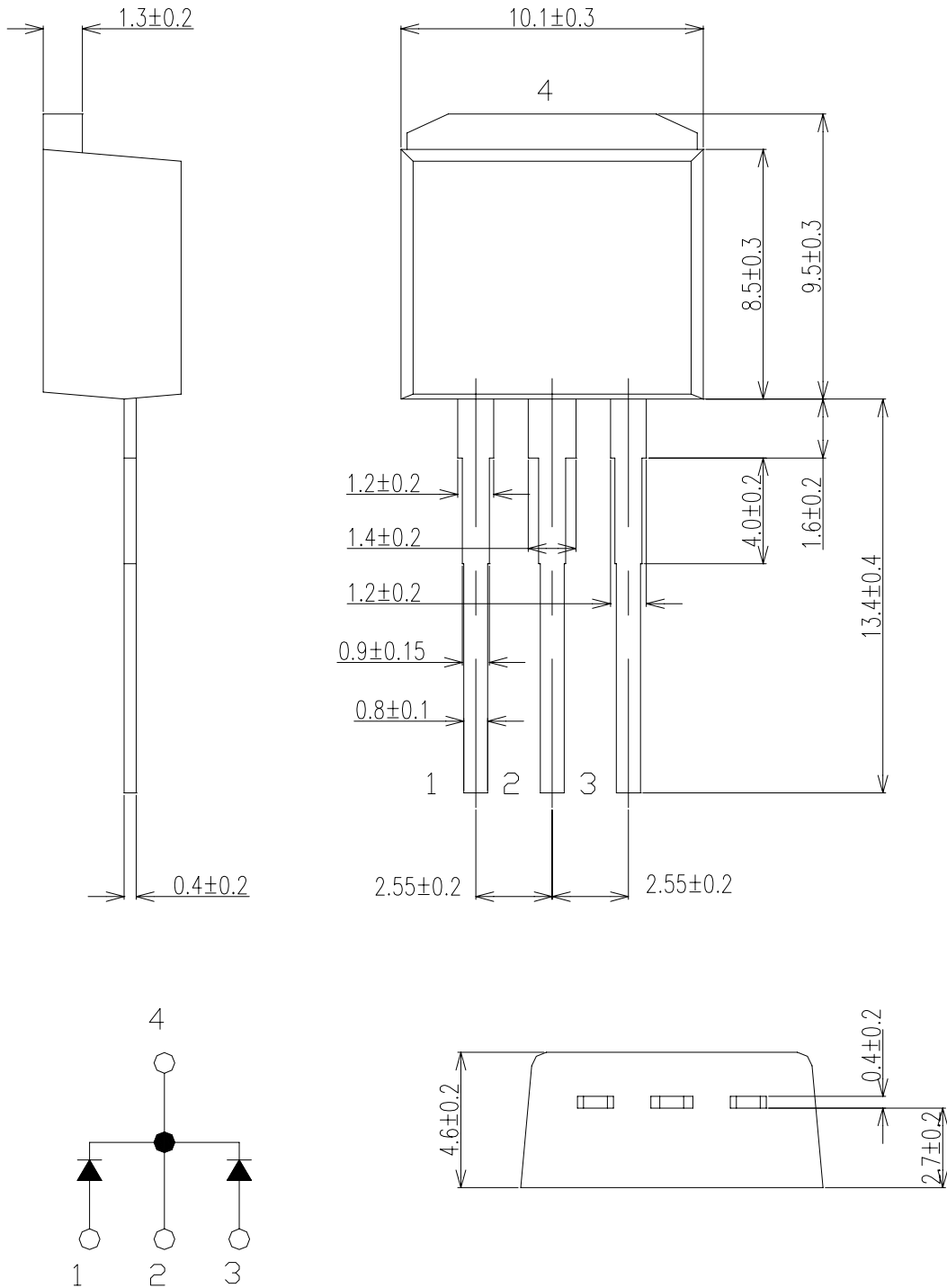
Approx Net Weight:1.4g

| Rating                               | Symbol       | C16T40F-11A   |  | Unit             |
|--------------------------------------|--------------|---------------|--|------------------|
| Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 400           |  | V                |
| Non-repetitive Peak Reverse Voltage  | $V_{RSM}$    | 440           |  | V                |
| Average Rectified Output Current     | $I_O$        | 16            | $T_c=109^\circ\text{C}$ 50 Hz, Full Sine Wave Resistive Load | A                |
| RMS Forward Current                  | $I_{F(RMS)}$ | 18            |  | A                |
| Surge Forward Current                | $I_{FSM}$    | 120           | 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 |  | $^\circ\text{C}$ |

### 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                                      | -    | -    | 30   | $\mu\text{A}$             |
| Peak Forward Voltage  | $V_{FM}$      | $T_j=25^\circ\text{C}, I_{FM}=8\text{A}$ per Arm                                    | -    | -    | 1.25 | V                         |
| Reverse Recovery Time | $t_{rr}$      | $I_{FM}= 8 \text{ A},$<br>$-di/dt= 50 \text{ A}/\mu\text{s}, T_a= 25^\circ\text{C}$ | -    | -    | 45   | ns                        |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction to Case  | -    | -    | 2    | $^\circ\text{C}/\text{W}$ |

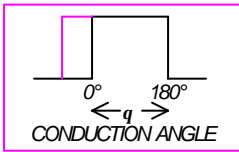
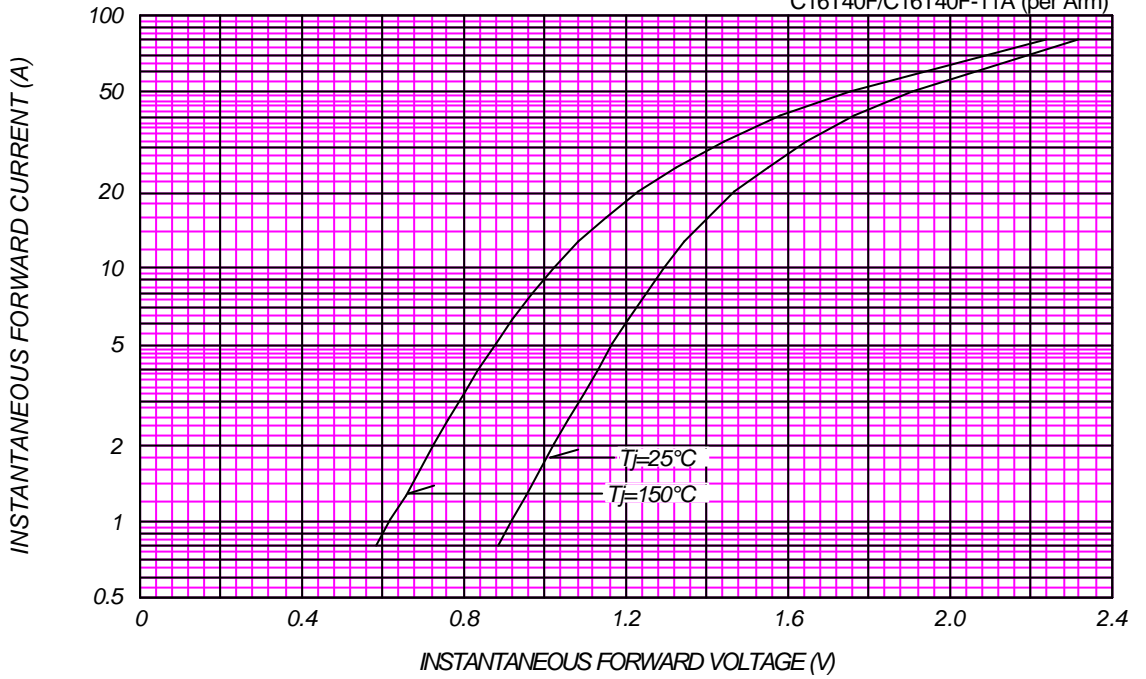
C\_T\_ 11A OUTLINE DRAWING (Dimensions in mm)



### FORWARD CURRENT VS. VOLTAGE

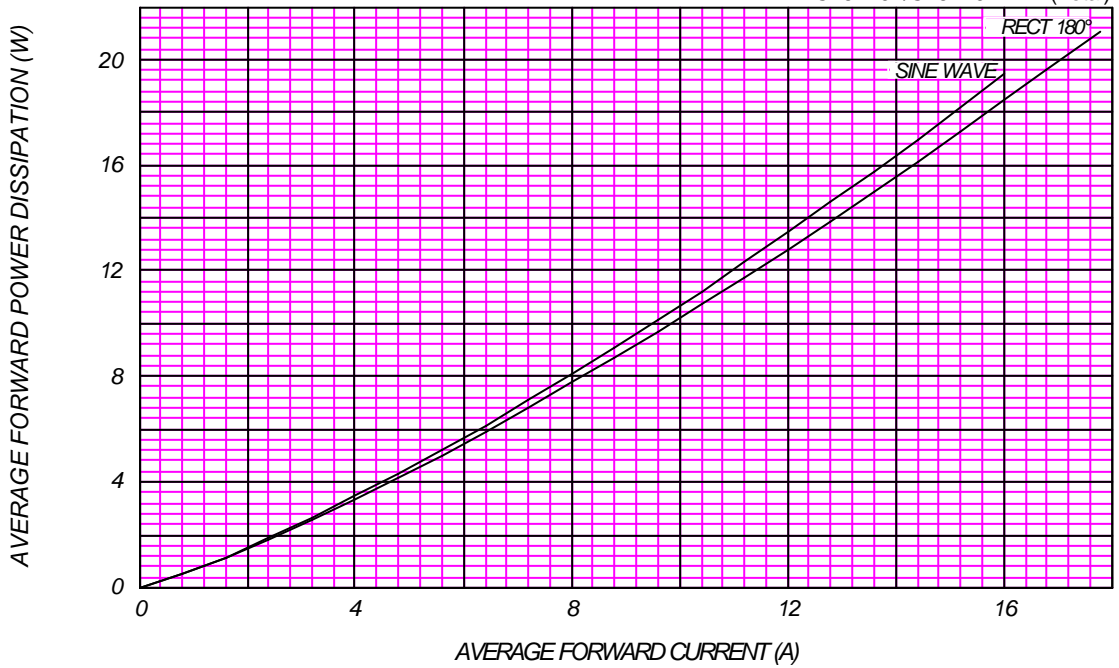
10ms Sine Wave Single Pulse

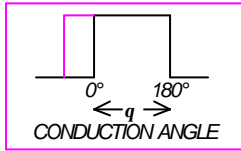
C16T40F/C16T40F-11A (per Arm)



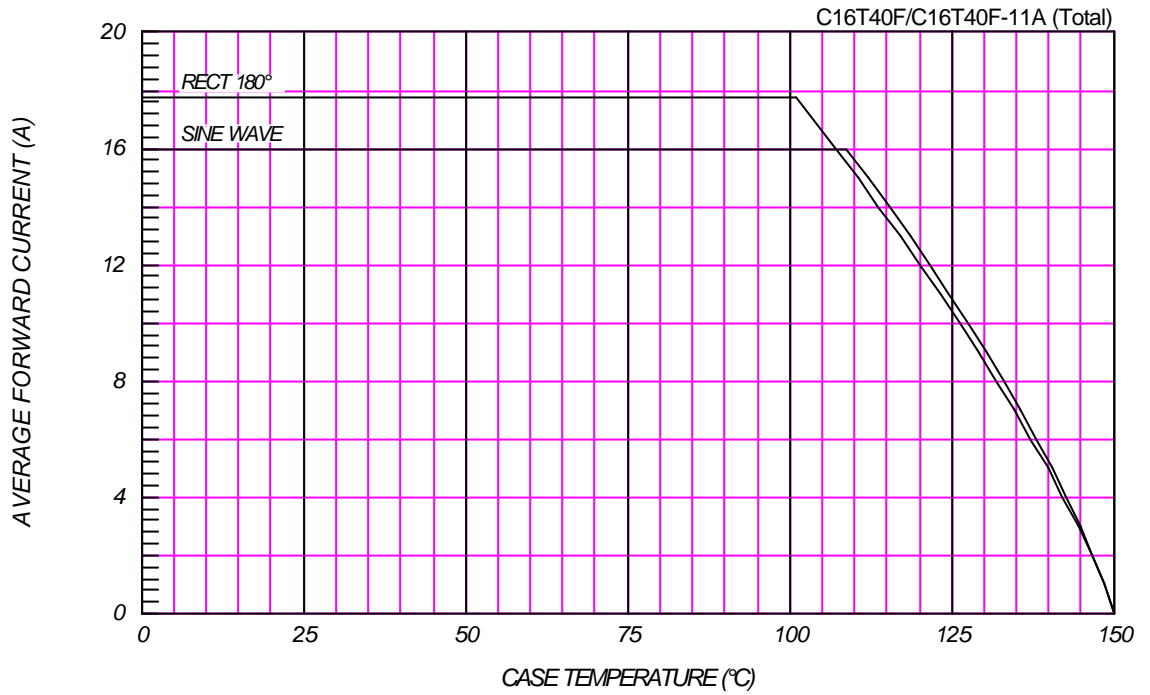
### AVERAGE FORWARD POWER DISSIPATION

C16T40F/C16T40F-11A (Total)





### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



### SURGE CURRENT RATINGS

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

