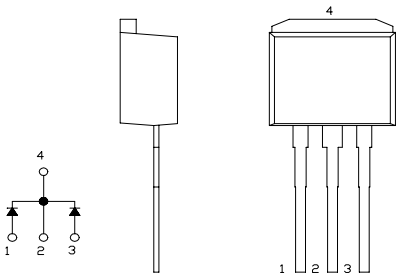


**SBD**    T y p e : **C10T06Q-11A**

OUTLINE DRAWING

**FEATURES**

- \*Tabless TO-220
- \*Dual Diodes – Cathode Common
- \*Low Forward Voltage Drop
- \*High Surge Capability
- \*Tj=150 °C operation



Maximum Ratings

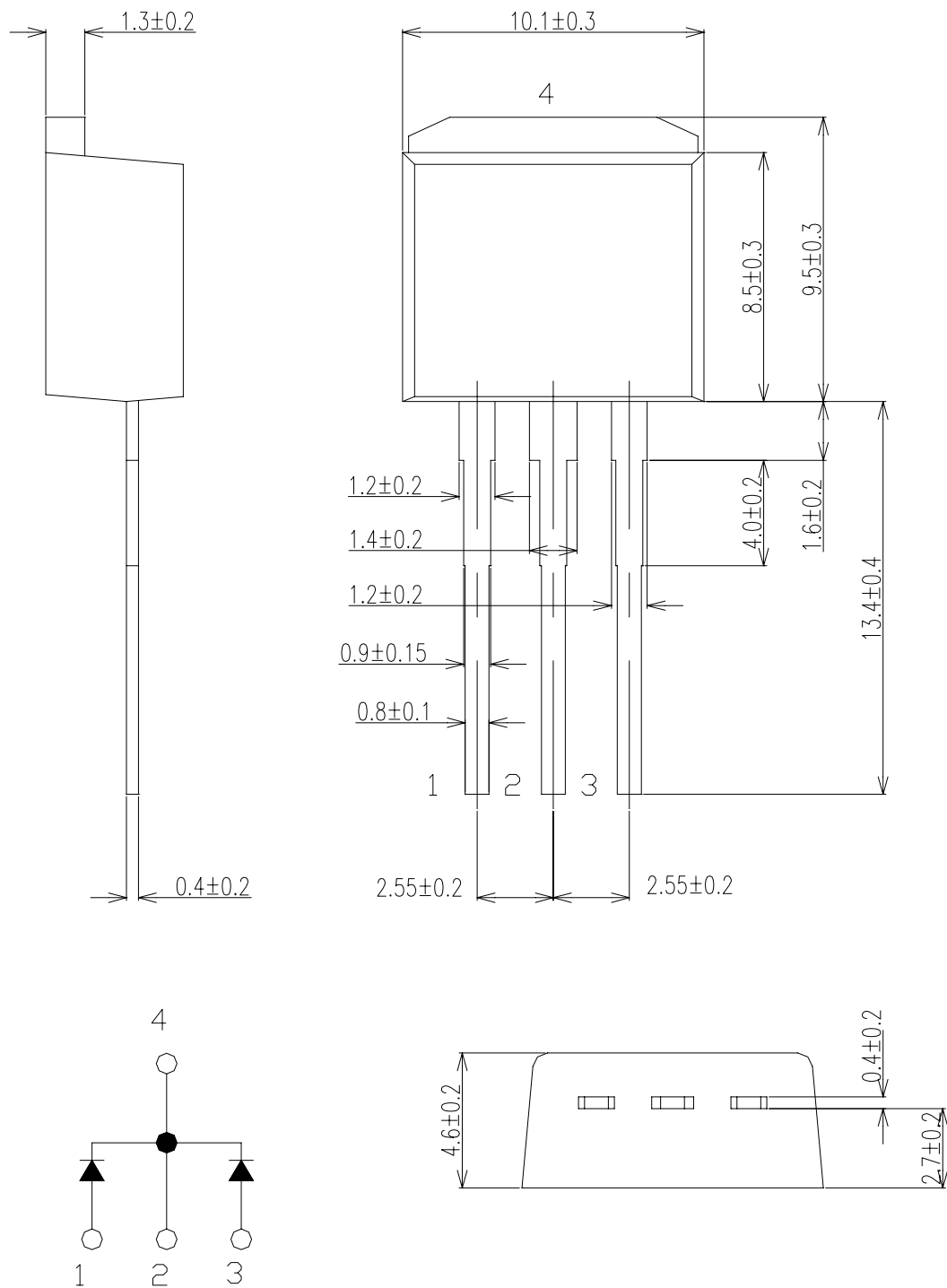
Approx Net Weight: 1.45g

| Rating                              | Symbol              | C10T06Q-11A |                                               |                                        | Unit |
|-------------------------------------|---------------------|-------------|-----------------------------------------------|----------------------------------------|------|
| Repetitive Peak Reverse Voltage     | V <sub>RRM</sub>    | 60          |                                               |                                        | V    |
| Non-repetitive Peak Reverse Voltage | V <sub>RSM</sub>    | 65          |                                               |                                        | V    |
| Average Rectified Output Current    | I <sub>O</sub>      | 10          | Tc=108℃                                       | 50 Hz Full Sine Wave<br>Resistive Load | A    |
| RMS Forward Current                 | I <sub>F(RMS)</sub> | 11.1        |                                               |                                        | A    |
| Surge Forward Current               | I <sub>FSM</sub>    | 110         | 50Hz Full Sine Wave ,1cycle<br>Non-repetitive |                                        | A    |
| Operating JunctionTemperature Range | T <sub>jw</sub>     | -40 to +150 |                                               |                                        | ℃    |
| Storage Temperature Range           | T <sub>stg</sub>    | -40 to +150 |                                               |                                        | ℃    |

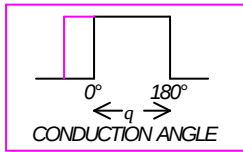
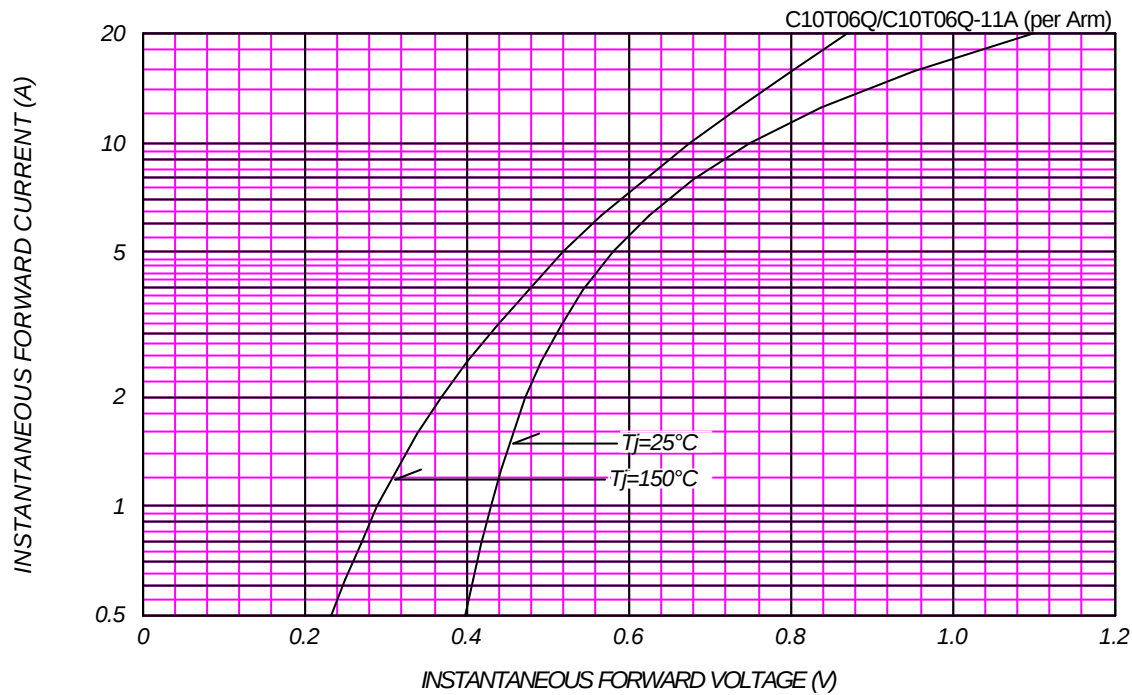
Electrical • Thermal Characteristics

| Characteristics      | Symbol          | Conditions                                              | Min. | Typ. | Max. | Unit  |
|----------------------|-----------------|---------------------------------------------------------|------|------|------|-------|
| Peak Reverse Current | I <sub>RM</sub> | Tj= 25°C, V <sub>RM</sub> = V <sub>RRM</sub><br>per arm | -    | -    | 5    | mA    |
| Peak Forward Voltage | V <sub>FM</sub> | Tj= 25°C, I <sub>FM</sub> = 5 A<br>per arm              | -    | -    | 0.58 | V     |
| Thermal Resistance   | Rth(j-c)        | Junction to Case                                        | -    | -    | 3    | °C /W |

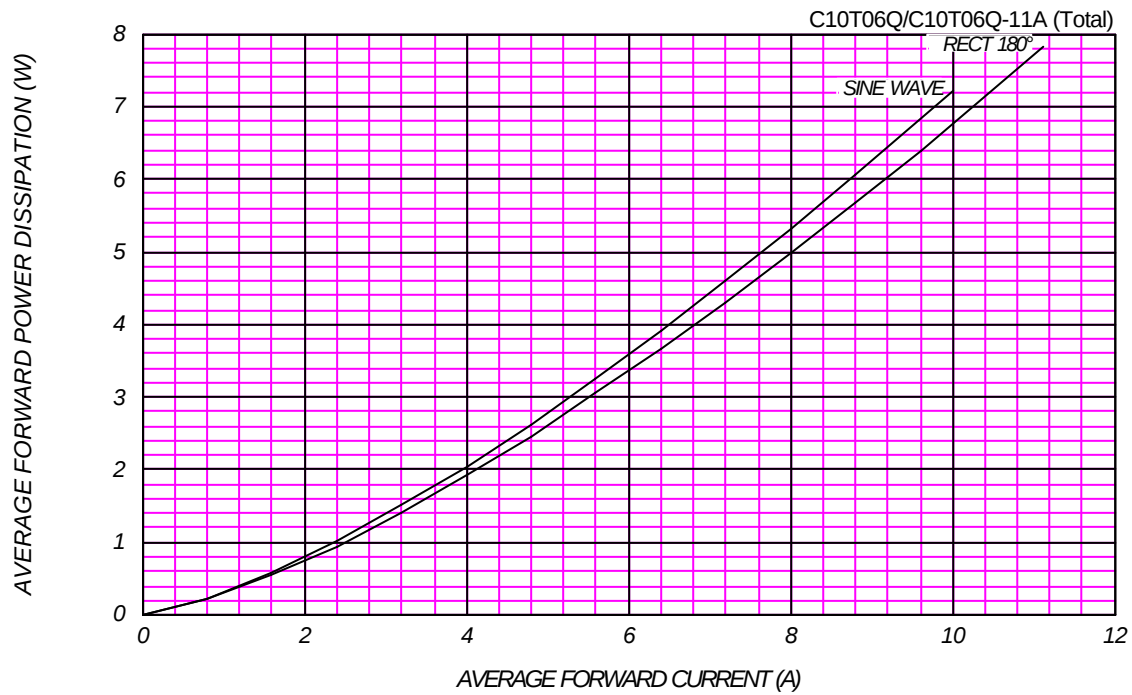
C\_T\_ 11A OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



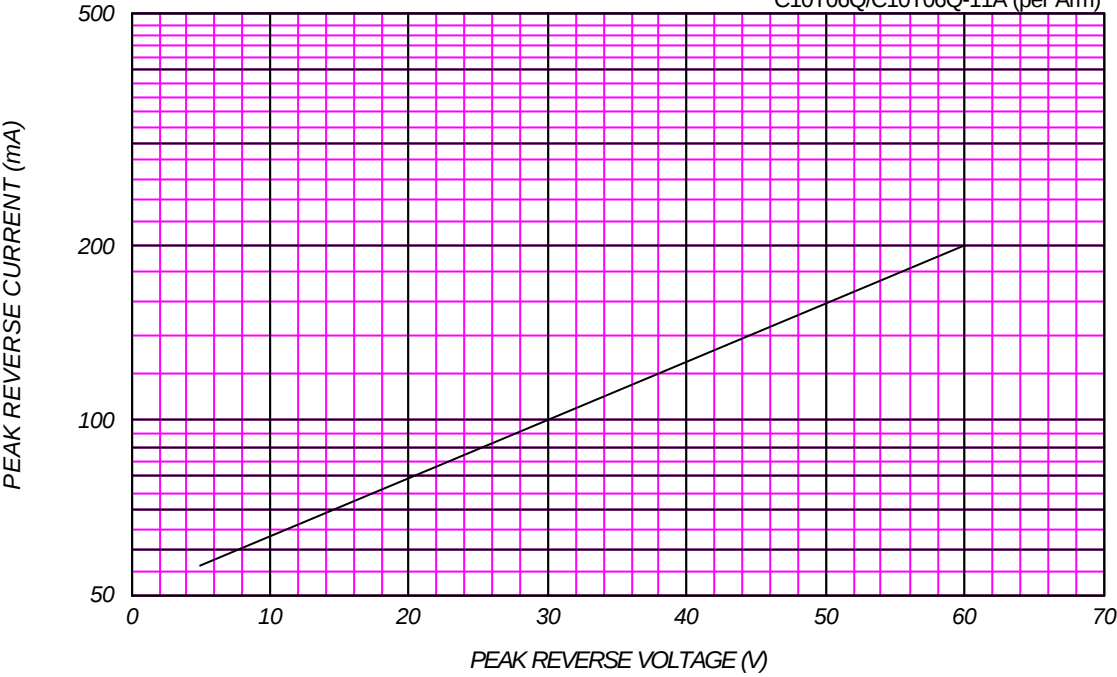
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

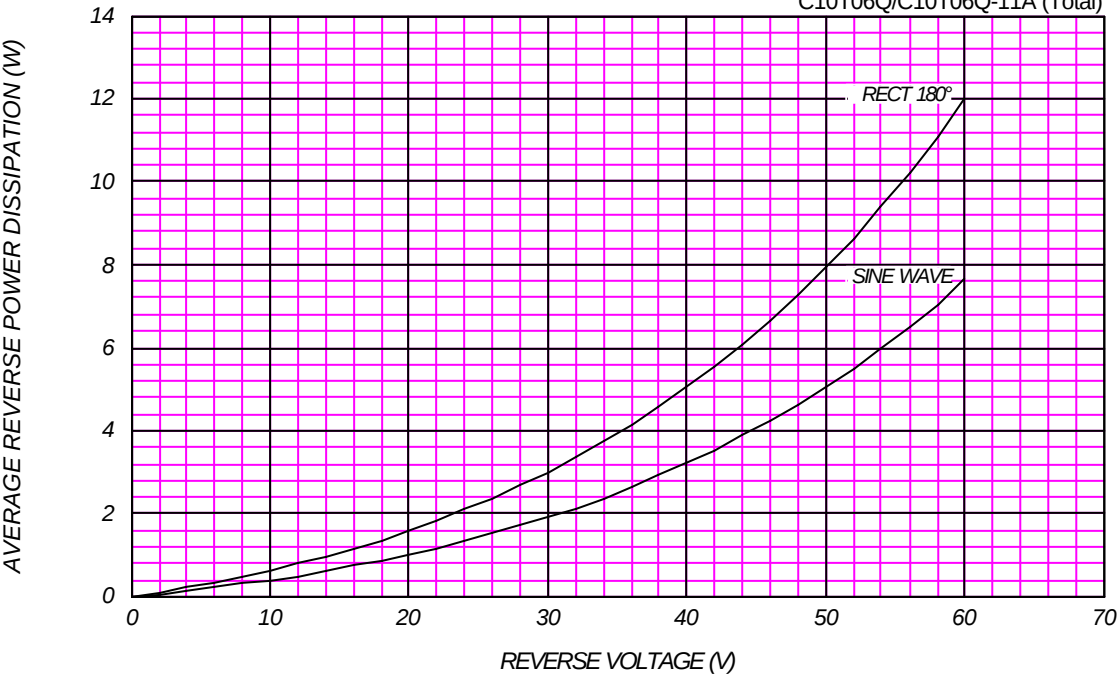
Tj= 150 °C

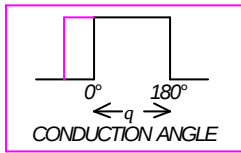
C10T06Q/C10T06Q-11A (per Arm)



AVERAGE REVERSE POWER DISSIPATION

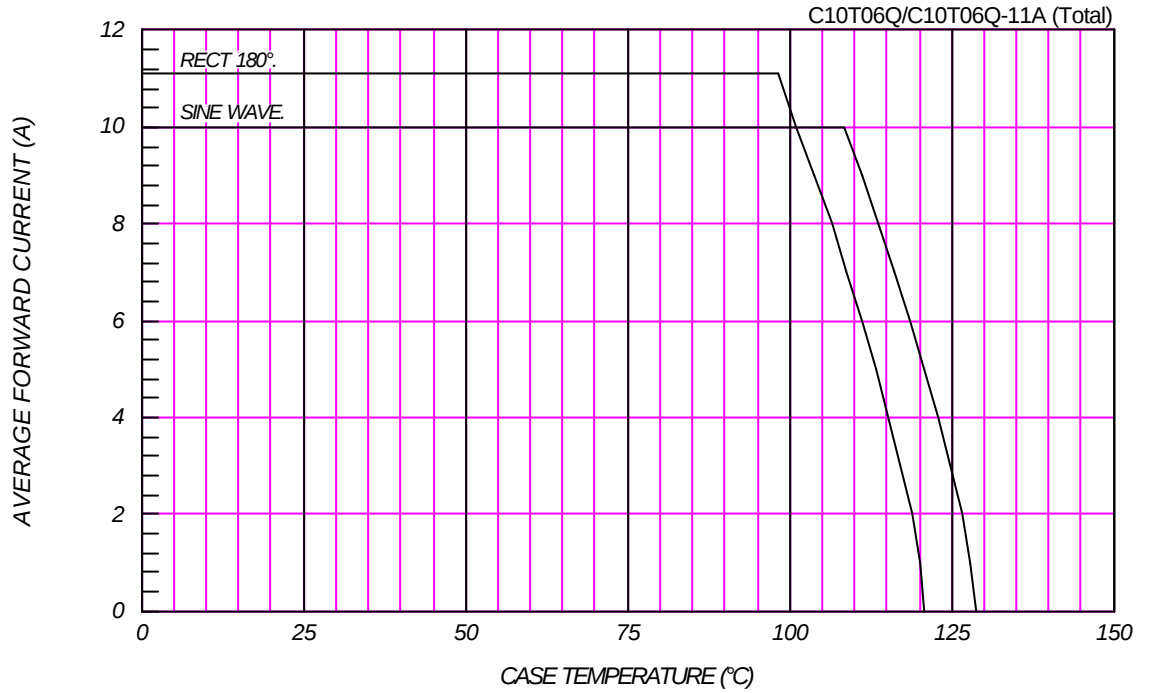
C10T06Q/C10T06Q-11A (Total)





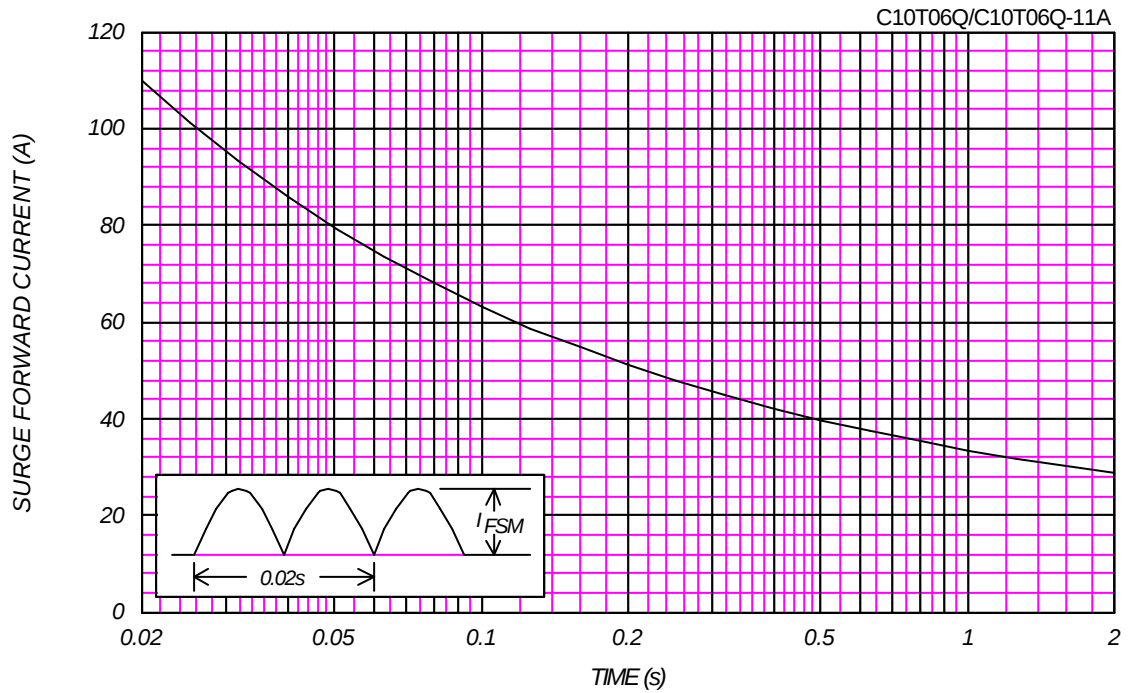
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$



### SURGE CURRENT RATINGS

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



# JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^{\circ}\text{C}$ ,  $V_m=20\text{mV}_{\text{RMS}}$ ,  $f=100\text{kHz}$ , Typical Value

C10T06Q/C10T06Q-11A (per Arm)

