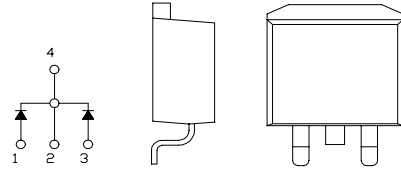


SBD Type : C20T06QH

OUTLINE DRAWING

FEATURES

- *SQUARE-PAK TO-263AB(SMD)
Packaged in 24mm Tape and Reel
- *Dual Diodes – Cathode Common
- *Low Forward Voltage Drop
- *High Surge Capability
- *T_j=150 °C operation



Maximum Ratings

Approx Net Weight: 1.4g

| Rating | Symbol | C20T06QH | | | Unit |
|---------------------------------------|---------------------|-----------------------------------|--|-------------------------------------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 60 | | | V |
| Repetitive Peak Surge Reverse Voltage | V _{RRSM} | 65(pulse width ≤ 1μs duty ≤ 1/50) | | | V |
| Average Rectified Output Current | I _O | 20 | T _c =124°C | 50 Hz Full Sine Wave Resistive Load | A |
| RMS Forward Current | I _{F(RMS)} | 22.2 | | | A |
| Surge Forward Current | I _{FSM} | 180 | 50Hz Full Sine Wave ,1cycle Non-repetitive | | A |
| Operating JunctionTemperature Range | T _{jw} | -40 to +150 | | | °C |
| Storage Temperature Range | T _{stg} | -40 to +150 | | | °C |

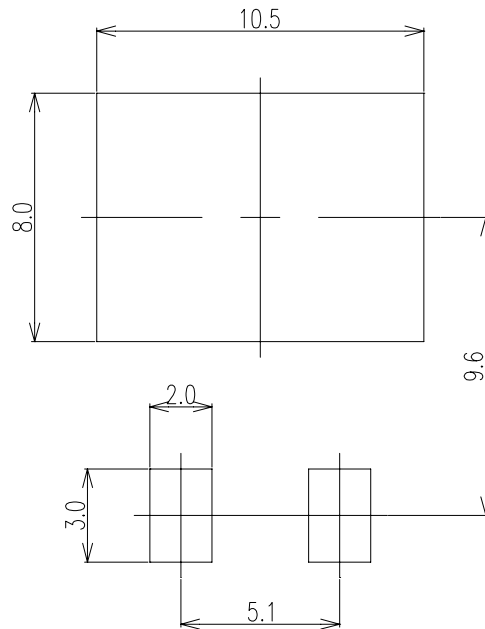
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|----------------------|----------------------|---|------|------|------|------|
| Peak Reverse Current | I _{RM} | T _j = 25°C, V _{RM} = V _{RRM} per arm | - | - | 1 | mA |
| Peak Forward Voltage | V _{FM} | T _j = 25°C, I _{FM} = 10 A per arm | - | - | 0.68 | V |
| Thermal Resistance | R _{th(j-c)} | Junction to Case | - | - | 1.5 | °C/W |

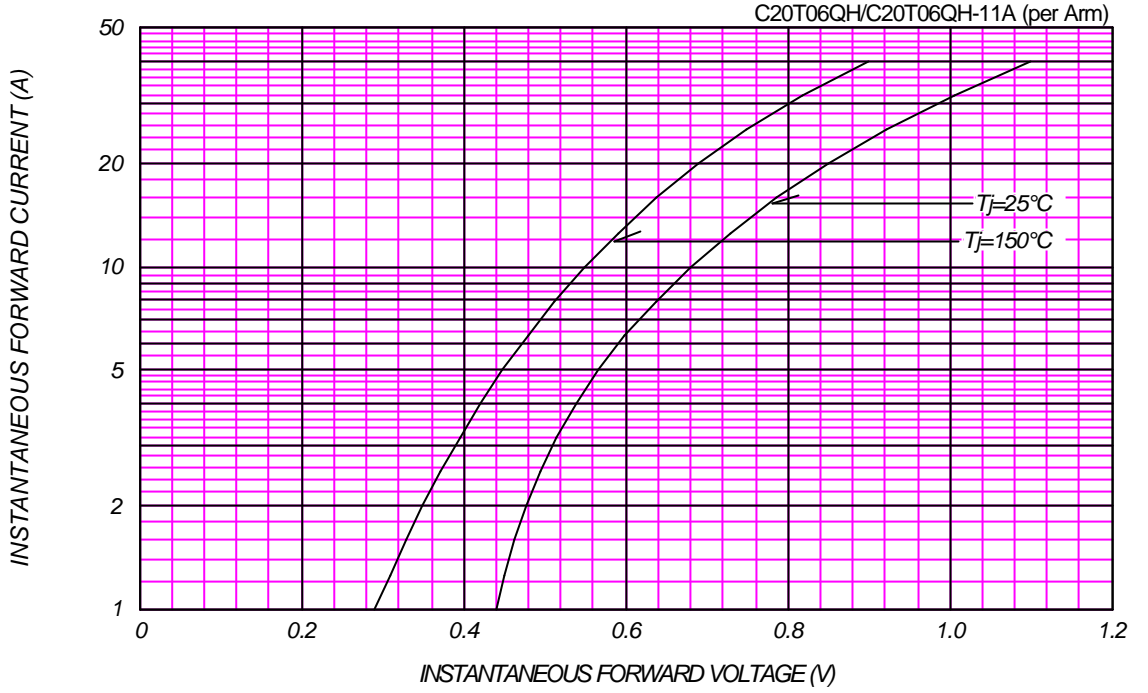
C_T_ OUTLINE DRAWING (Dimensions in mm)



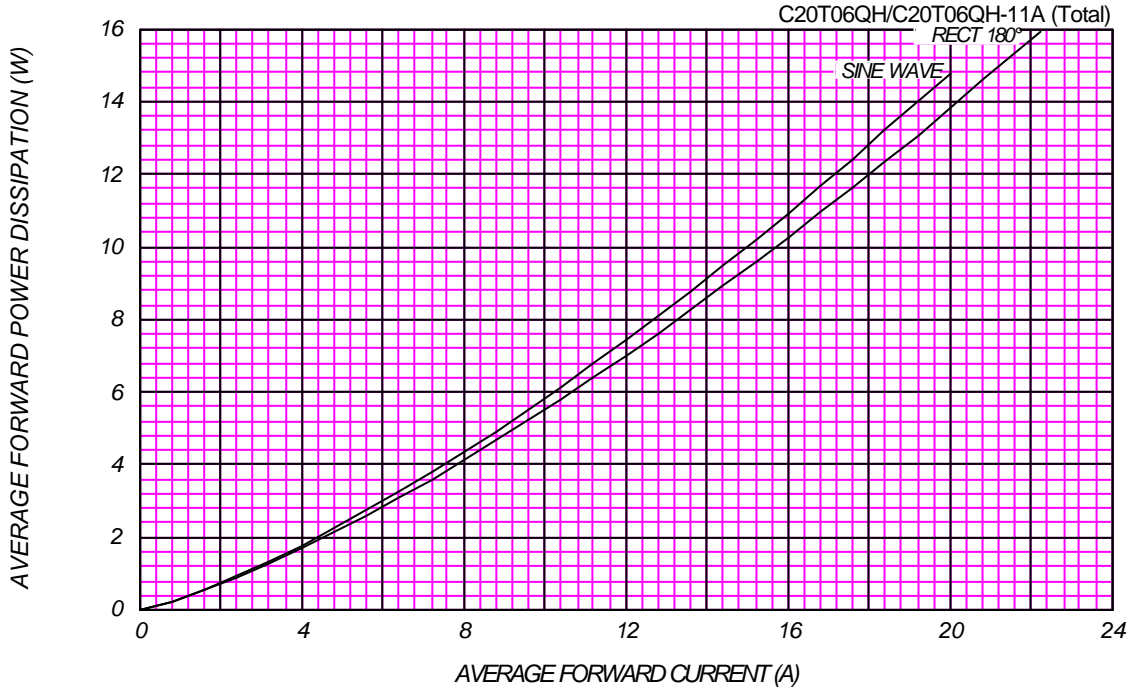
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



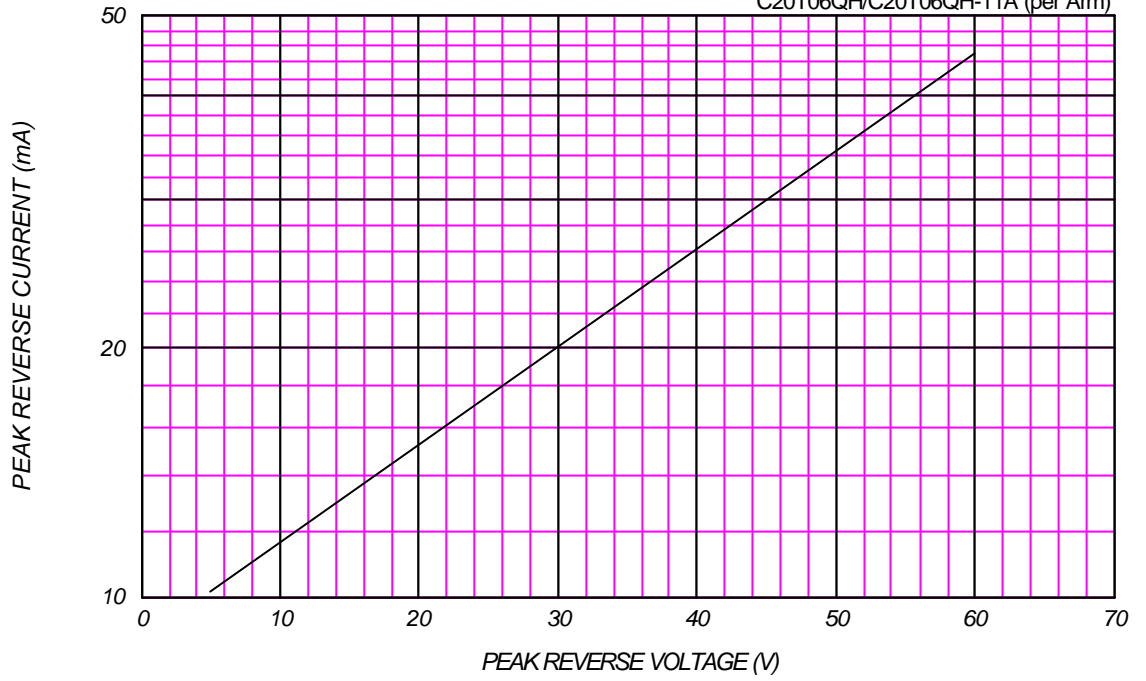
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

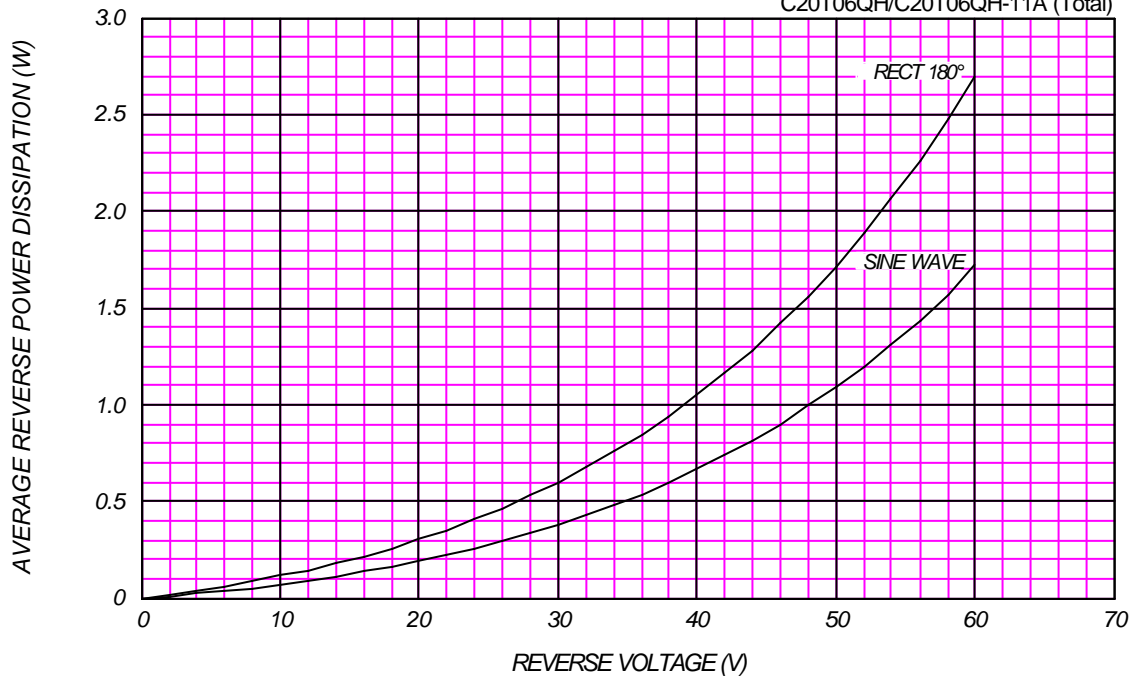
T_j = 150 °C

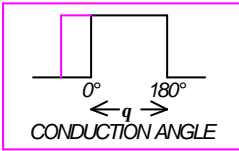
C20T06QH/C20T06QH-11A (per Arm)



AVERAGE REVERSE POWER DISSIPATION

C20T06QH/C20T06QH-11A (Total)

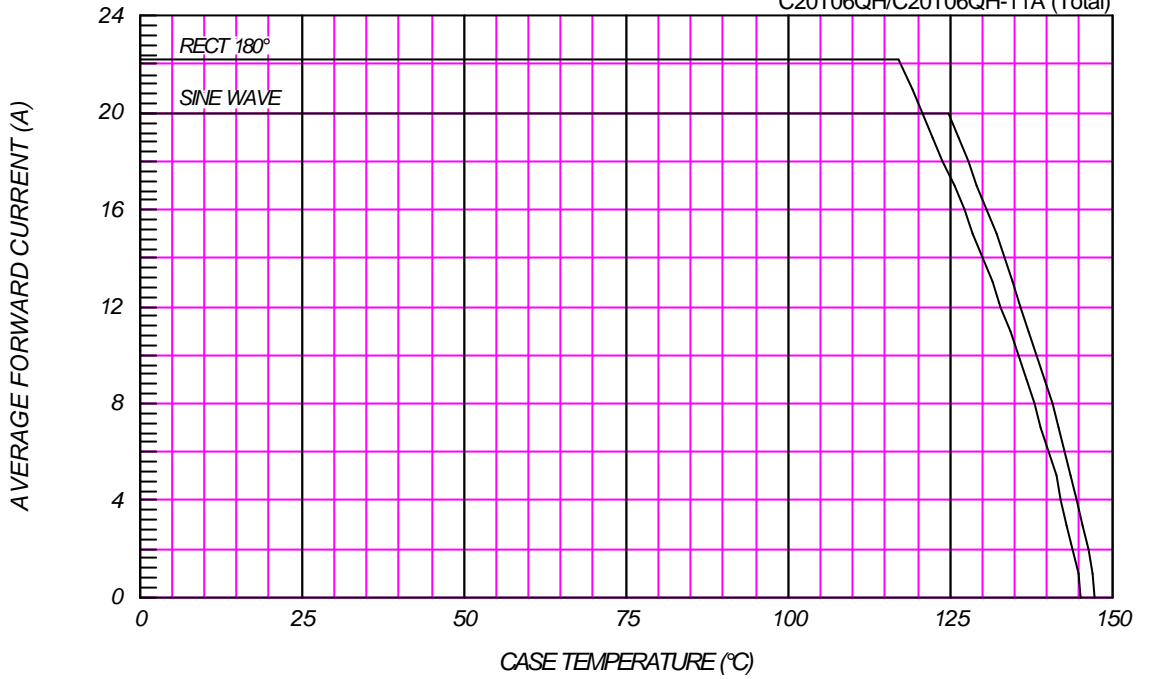




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$

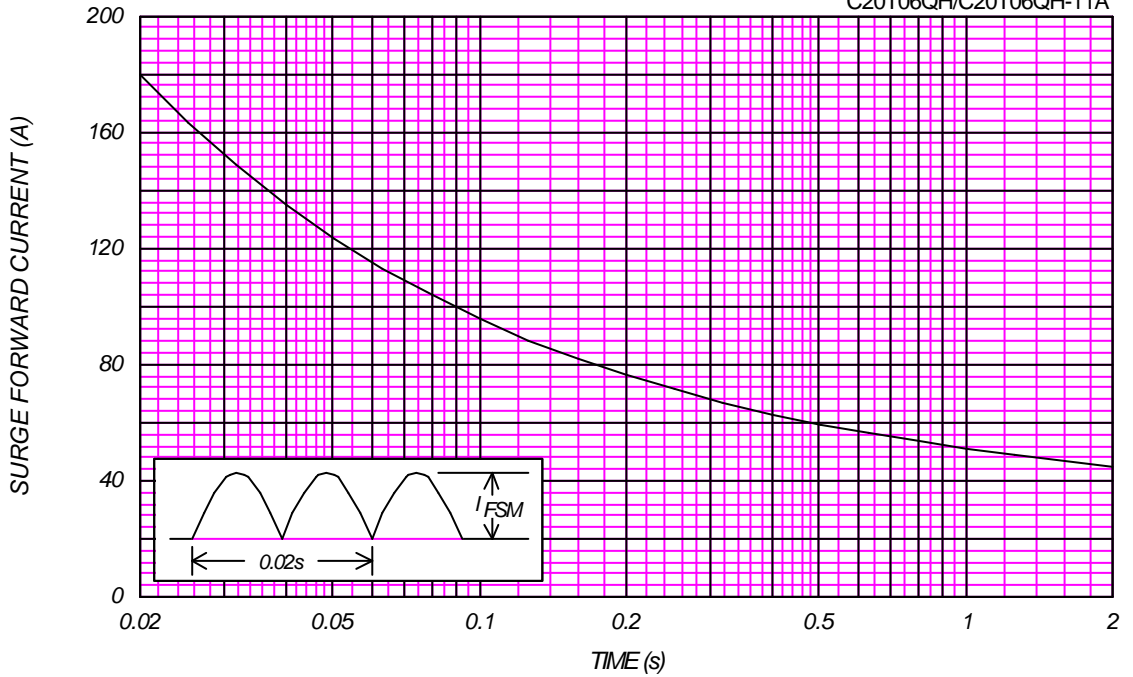
C20T06QH/C20T06QH-11A (Total)



SURGE CURRENT RATINGS

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

C20T06QH/C20T06QH-11A



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

C20T06QH/C20T06QH-11A (per Arm)

