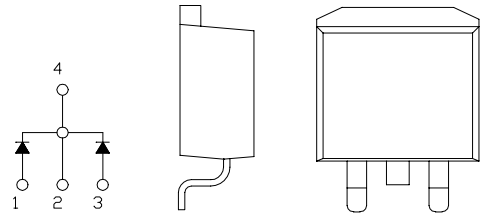


SBD Type : C10T03QL

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
- *Tj=150 °C operation



Maximum Ratings

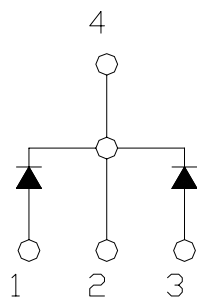
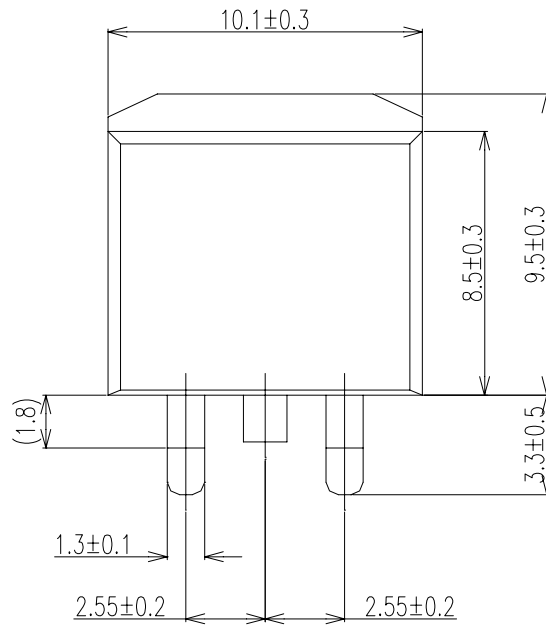
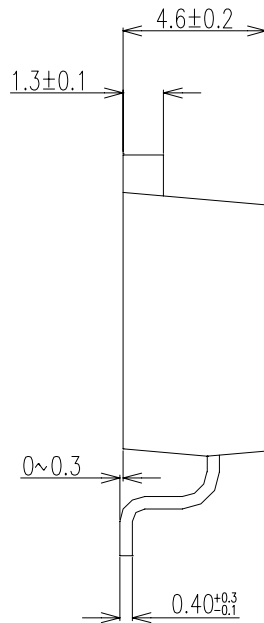
Approx Net Weight: 1.4g

Rating	Symbol	C10T03QL			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30			V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	35(pulse width ≤ 1μs duty ≤ 1/50)			V
Average Rectified Output Current	I _O	10	Tc=116℃	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	11.1			A
Surge Forward Current	I _{FSM}	120	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			℃
Storage Temperature Range	T _{stg}	-40 to +150			℃

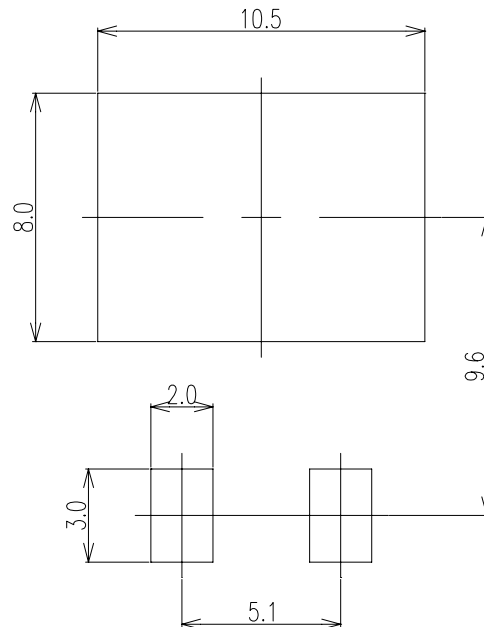
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ C$, $V_{RM}= V_{RRM}$ per arm	-	-	5	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ C$, $I_{FM}= 5 A$ per arm	-	-	0.47	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	°C /W

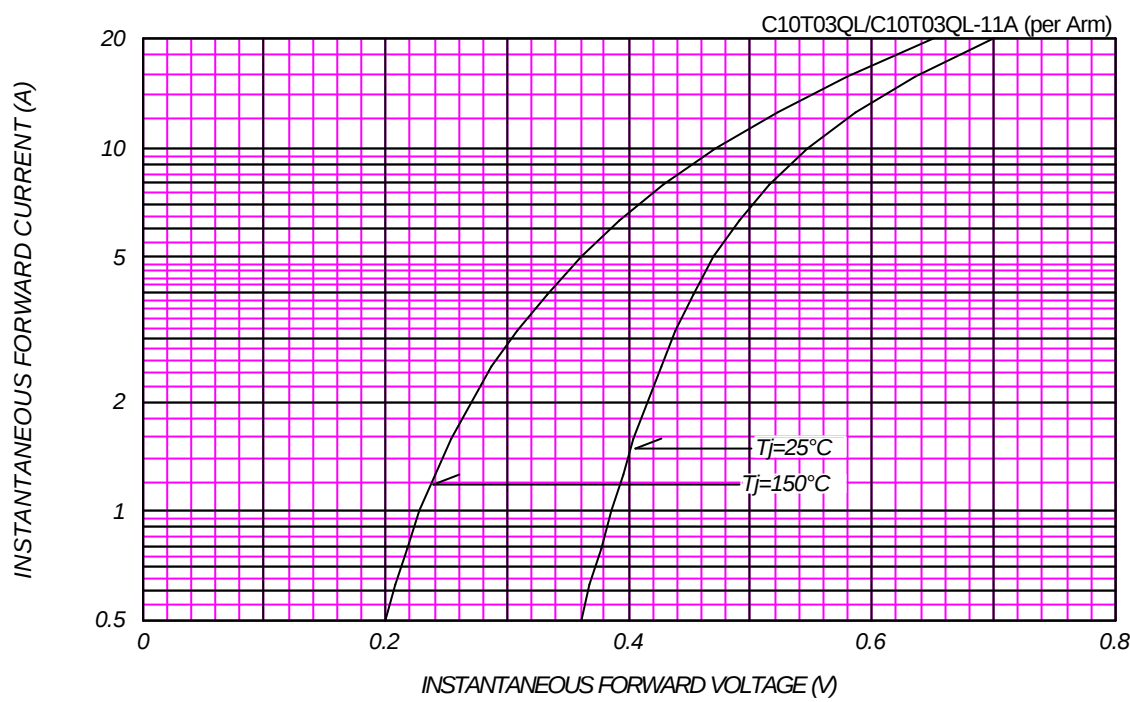
C_T_ OUTLINE DRAWING (Dimensions in mm)



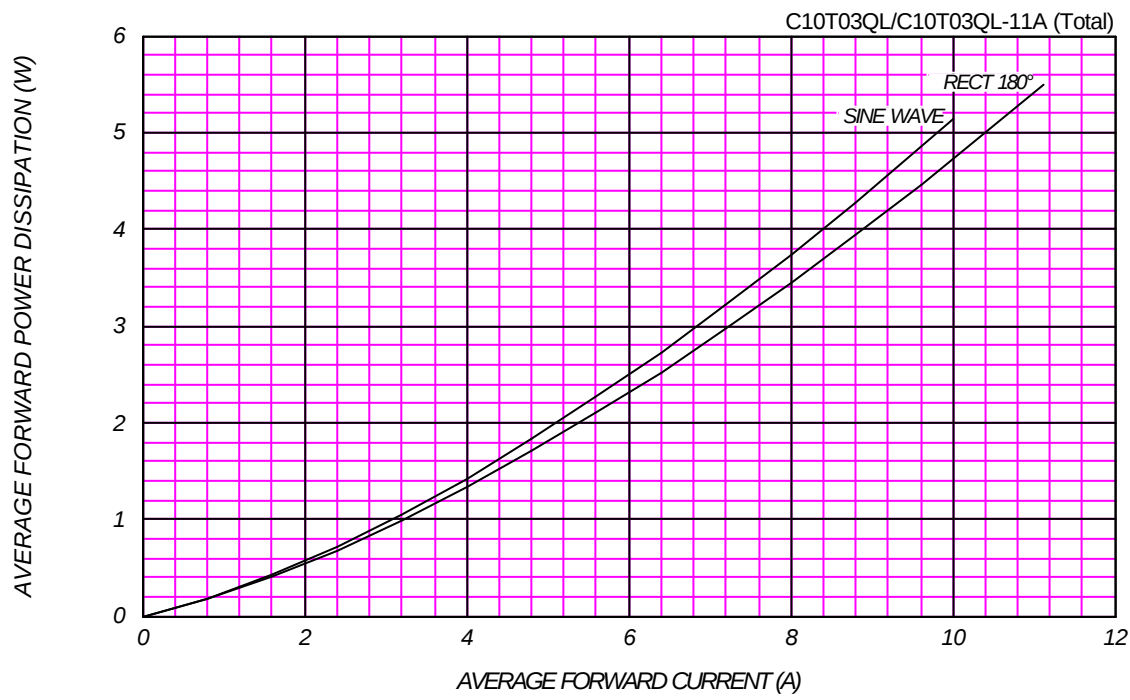
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



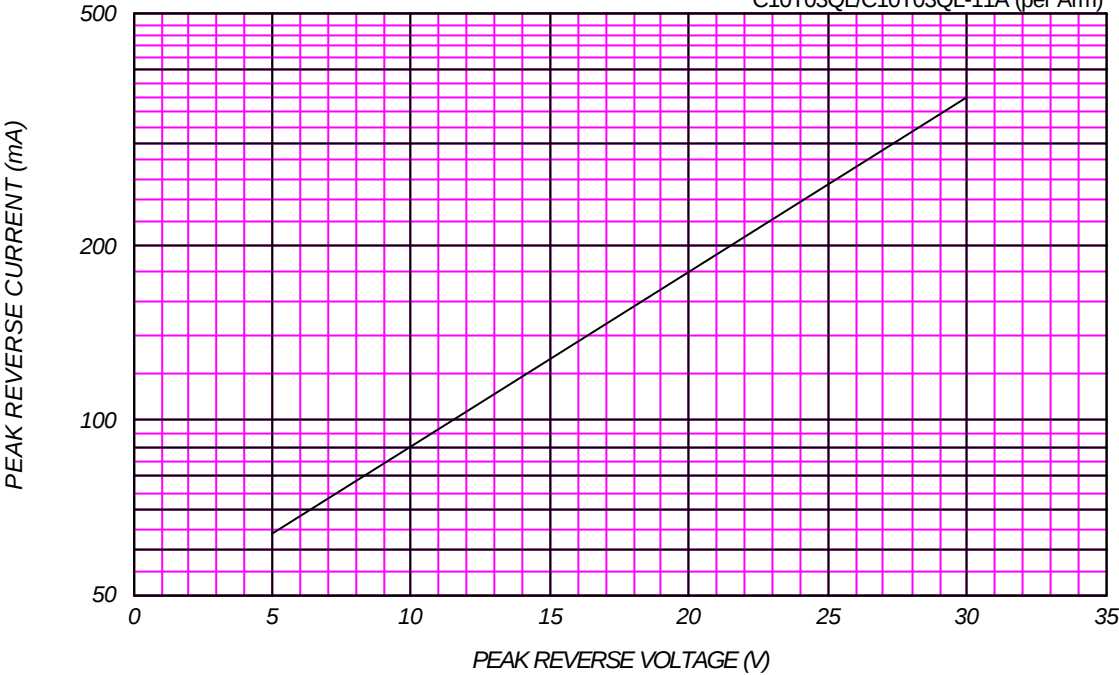
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

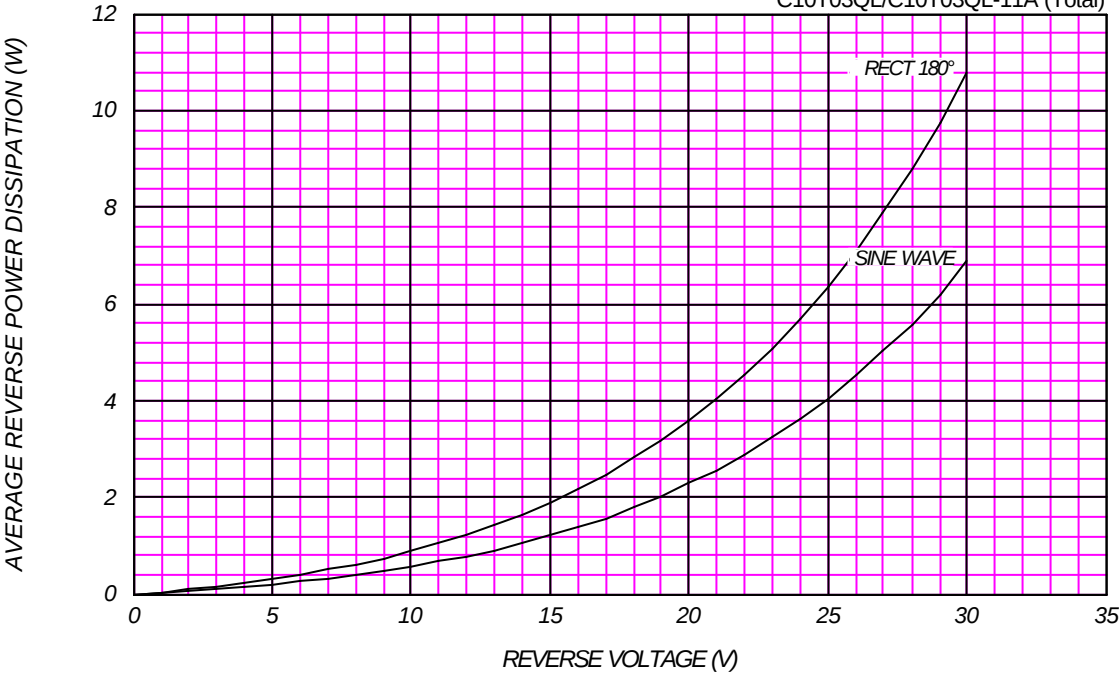
T_j = 150 °C

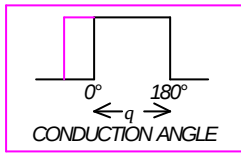
C10T03QL/C10T03QL-11A (per Arm)



AVERAGE REVERSE POWER DISSIPATION

C10T03QL/C10T03QL-11A (Total)

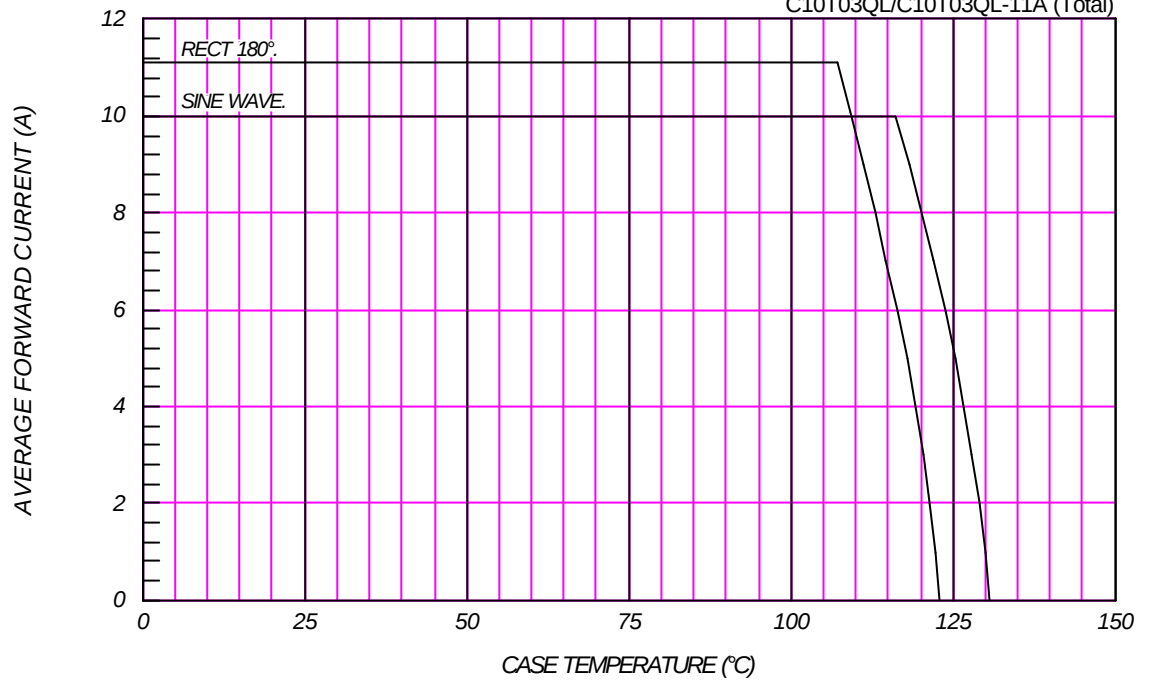




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

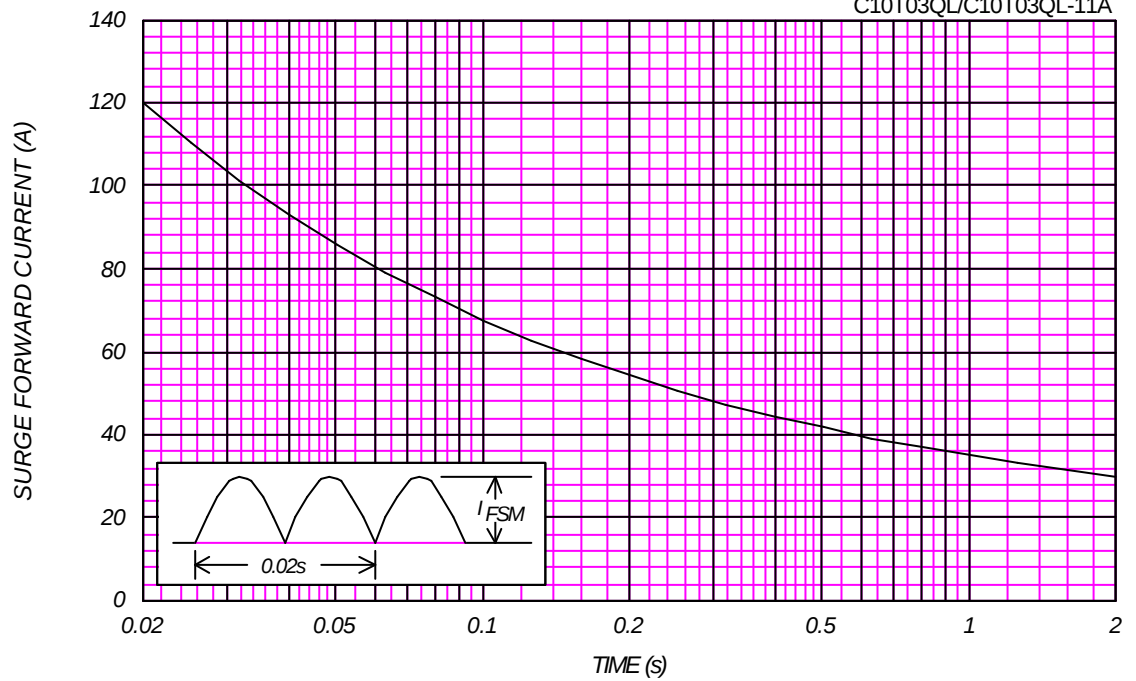
C10T03QL/C10T03QL-11A (Total)



SURGE CURRENT RATINGS

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

C10T03QL/C10T03QL-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

C10T03QL/C10T03QL-11A (per Arm)

