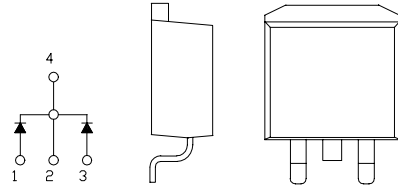


SBD Type : C30T03QL

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	C30T03QL		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30		V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	35(pulse width $\leq 1\mu s$ duty $\leq 1/50$)		V
Average Rectified Output Current	I_O	30	$T_c=105^\circ C$ 50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3		A
Surge Forward Current	I_{FSM}	250	50Hz Full Sine Wave ,1cycle Non-repetitive	A
Operating JunctionTemperature Range	T_{jw}	-40 to +150		$^\circ C$
Storage Temperature Range	T_{stg}	-40 to +150		$^\circ C$

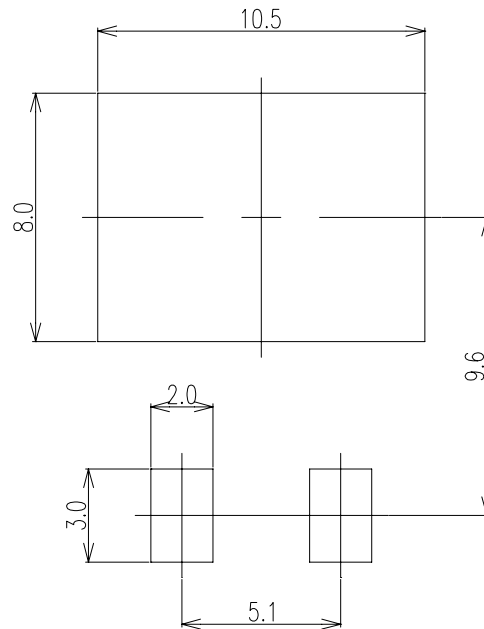
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ C, V_{RM}= V_{RRM}$ per arm	-	-	15	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ C, I_{FM}= 15A$ per arm	-	-	0.49	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^\circ C /W$

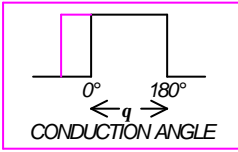
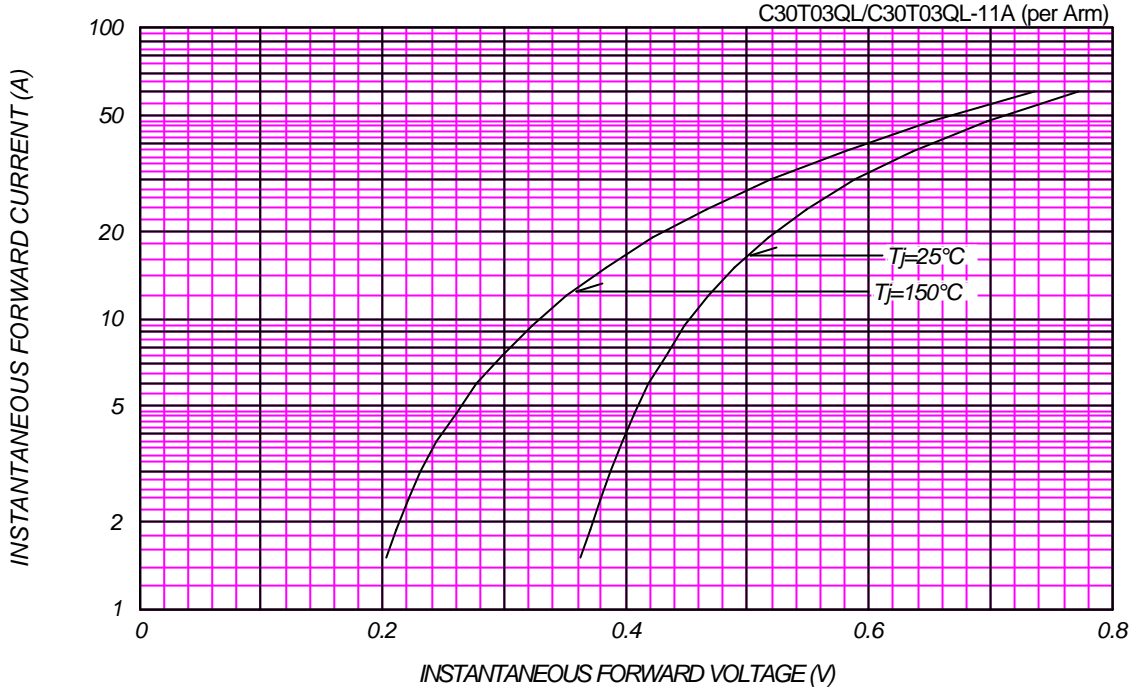
C_T_ OUTLINE DRAWING (Dimensions in mm)



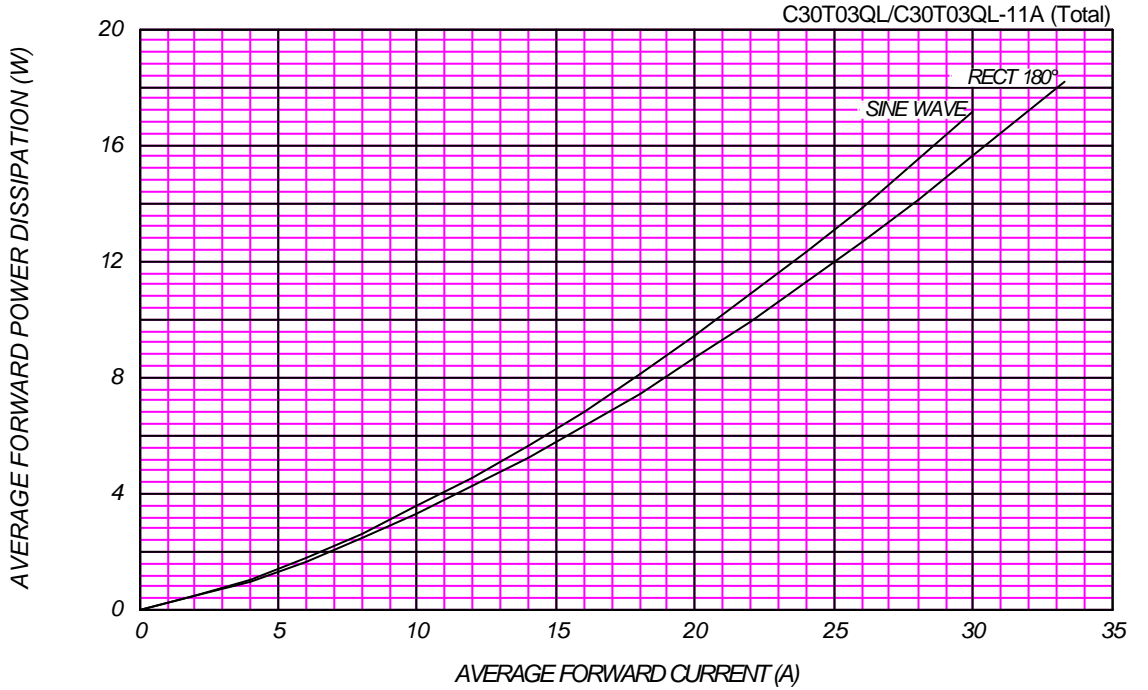
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

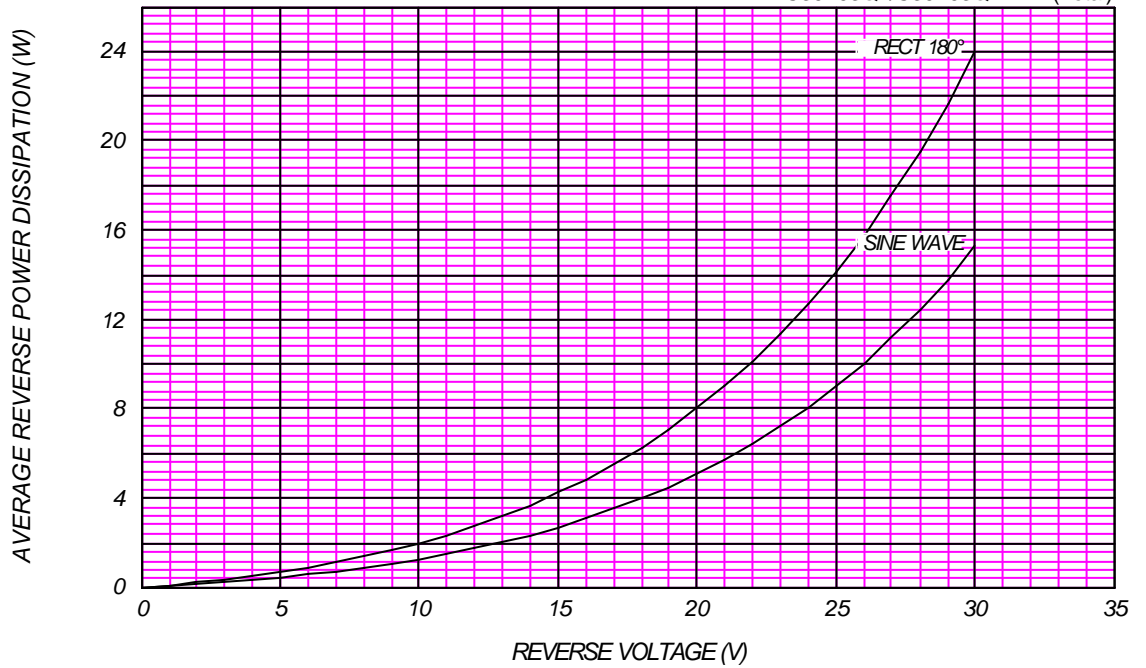
$T_j = 150\text{ }^\circ\text{C}$

C30T03QL/C30T03QL-11A (per Arm)



AVERAGE REVERSE POWER DISSIPATION

C30T03QL/C30T03QL-11A (Total)

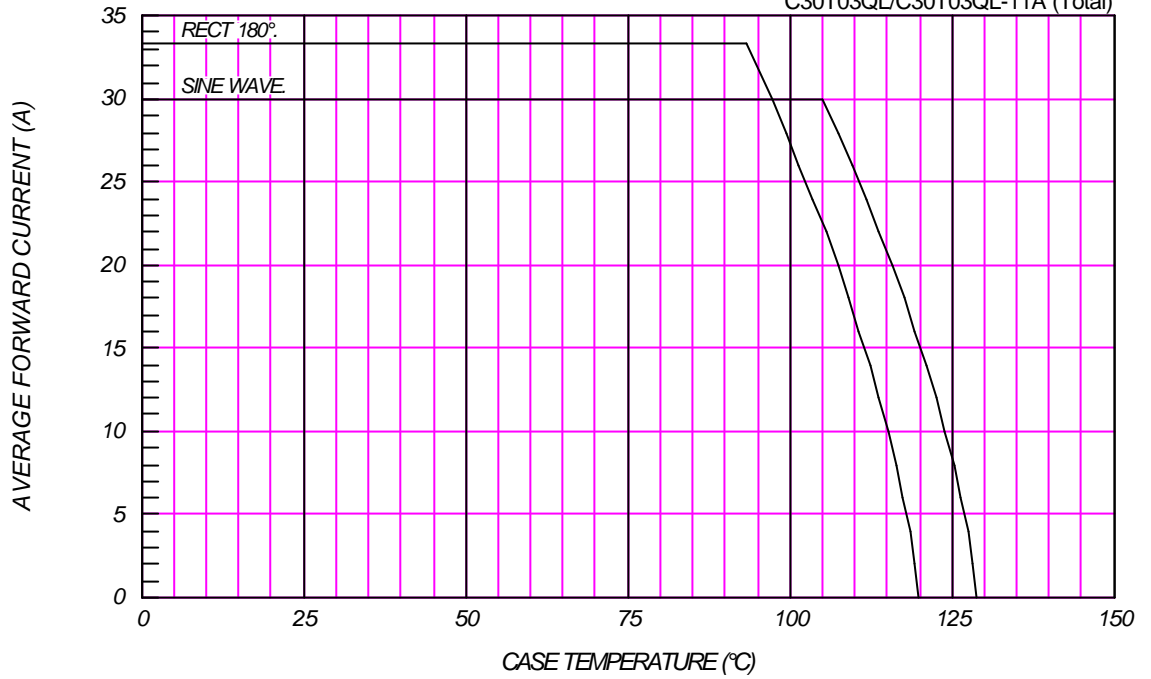




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

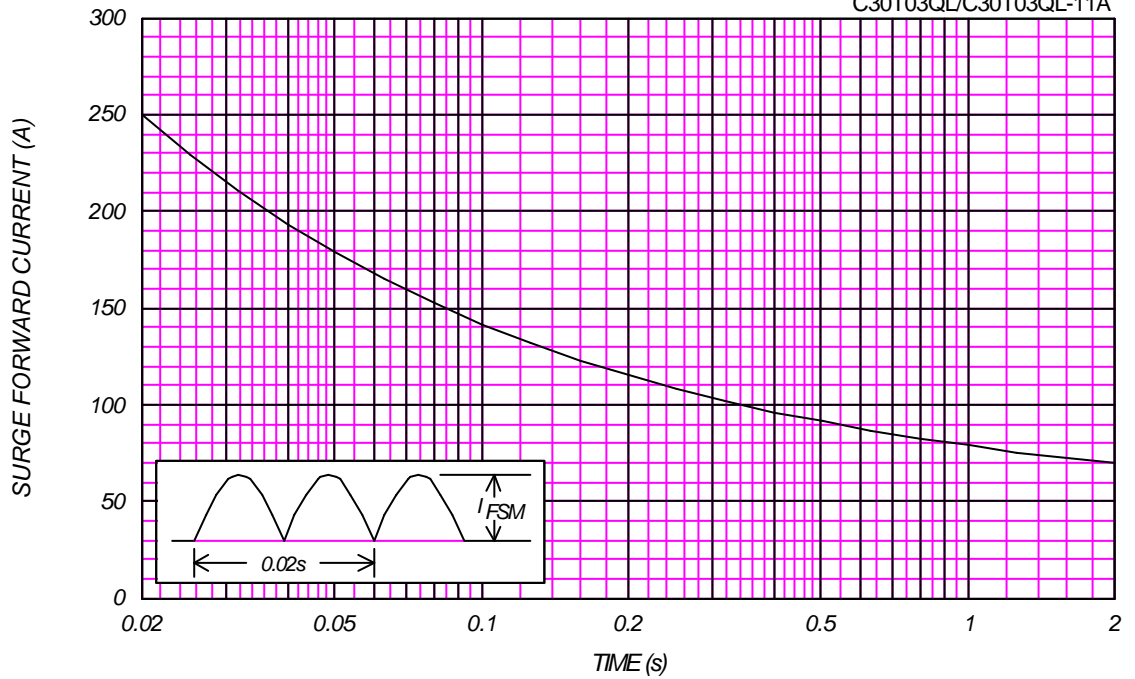
C30T03QL/C30T03QL-11A (Total)



SURGE CURRENT RATINGS

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

C30T03QL/C30T03QL-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

C30T03QL/C30T03QL-11A (per Arm)

