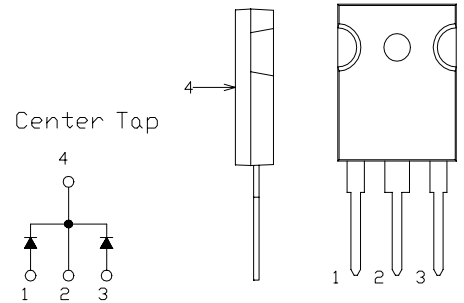


SBD Type : KCQ20A03L

OUTLINE DRAWING

FEATURES

- * Similar to TO-247AC(TO-3P)Case
- * Dual Diodes – Cathode Common
- * Extremely Low Forward Voltage Drop
- * Low Power Loss,High Efficiency
- * High Surge Current Capability
- * 30 Volts thru 60 Volts Types Available



Maximum Ratings

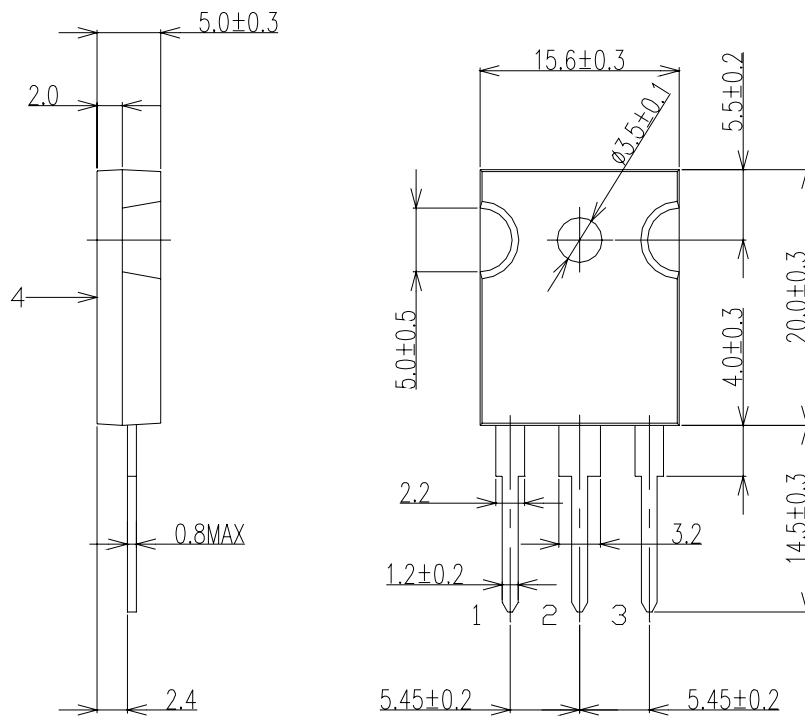
Approx Net Weight: 5.55g

Rating	Symbol	KCQ20A03L			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30			V
Average Rectified Output Current	I _O	20	Tc=119℃	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			℃
Storage Temperature Range	T _{stg}	-40 to +150			℃
Mounting torque	F _{tor}	recommended torque = 0.5			N•m

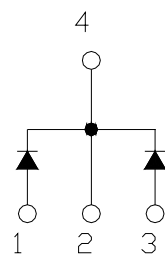
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}C$, $V_{RM}= V_{RRM}$ per Arm	-	-	10	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C$, $I_{FM}= 10A$ per Arm	-	-	0.49	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^{\circ}C /W$

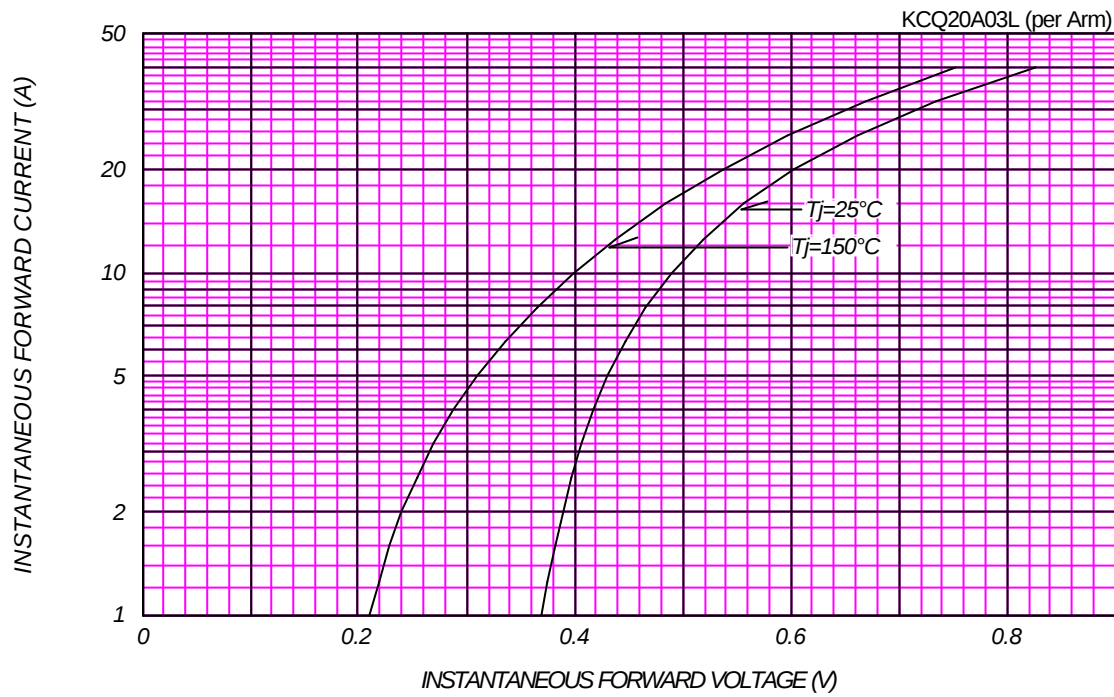
KCQ20A03L OUTLINE DRAWING (Dimensions in mm)



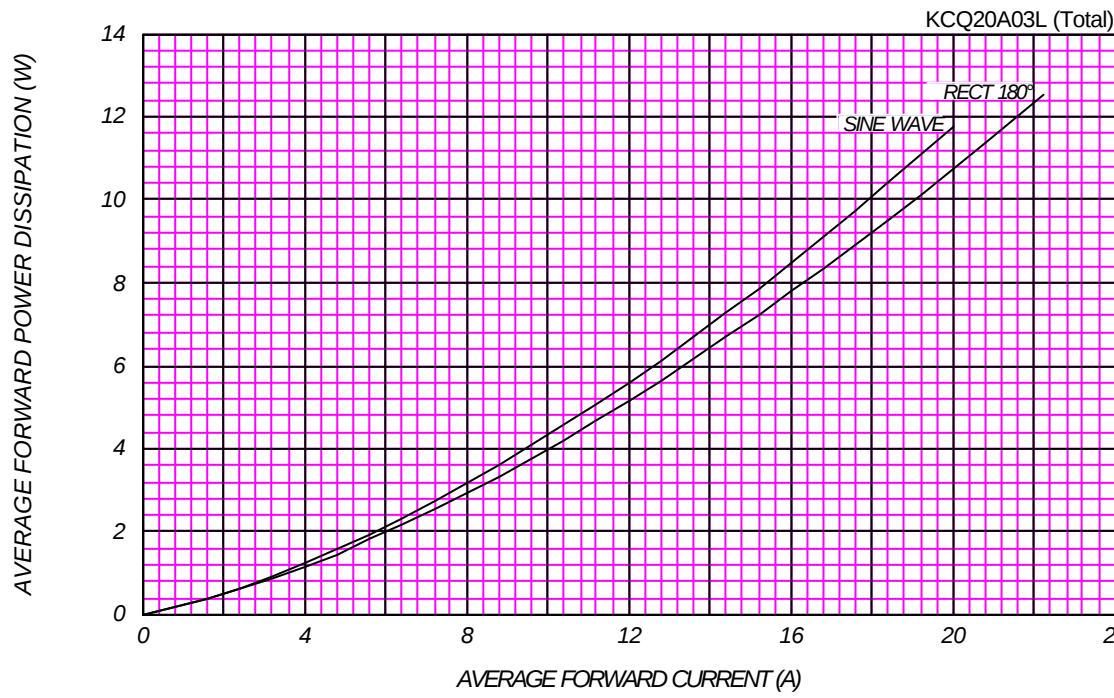
Center Tap



FORWARD CURRENT VS. VOLTAGE



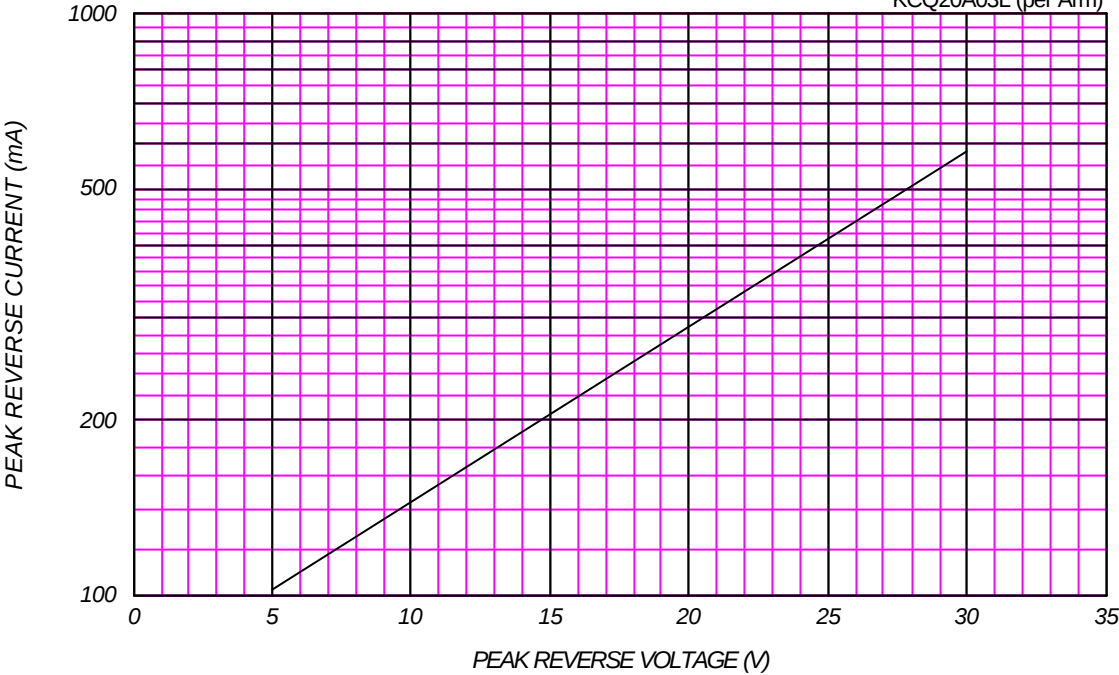
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

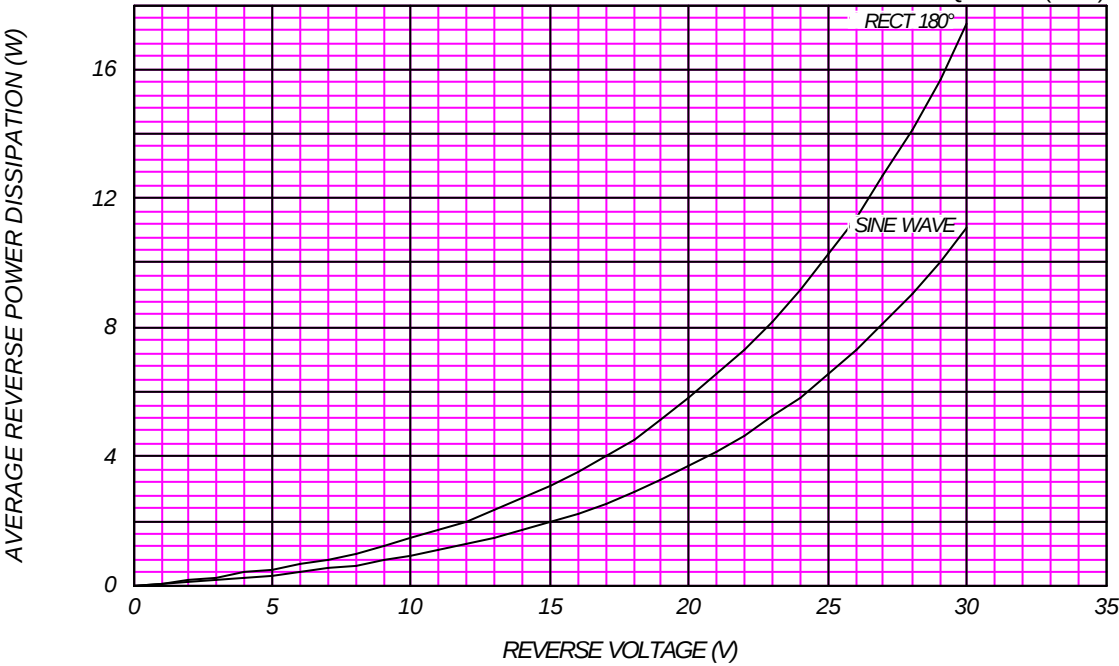
T_j= 150 °C

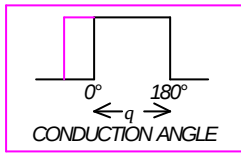
KCQ20A03L (per Arm)



AVERAGE REVERSE POWER DISSIPATION

KCQ20A03L (Total)

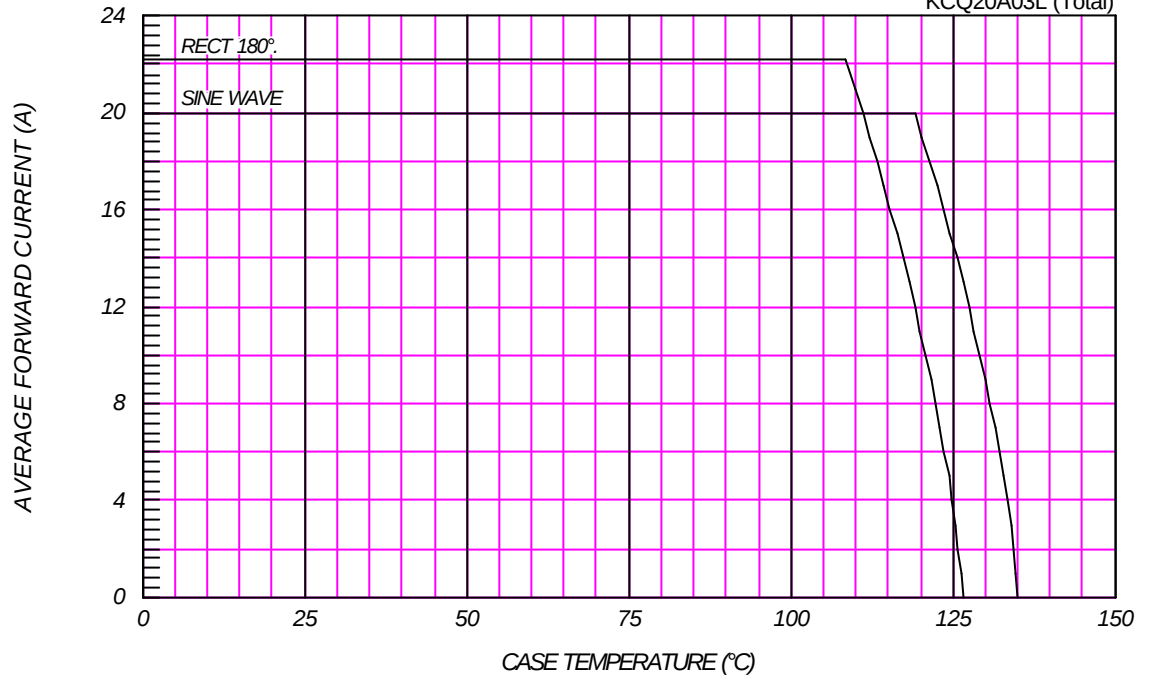




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

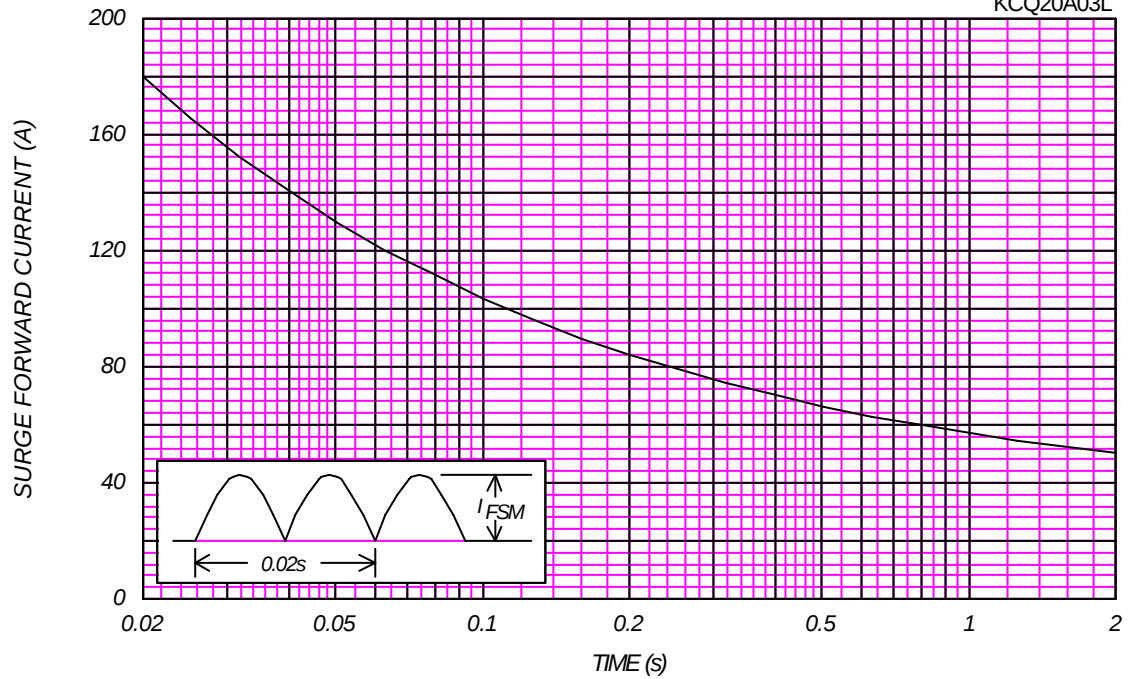
KCQ20A03L (Total)



SURGE CURRENT RATINGS

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

KCQ20A03L



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KCQ20A03L (per Arm)

