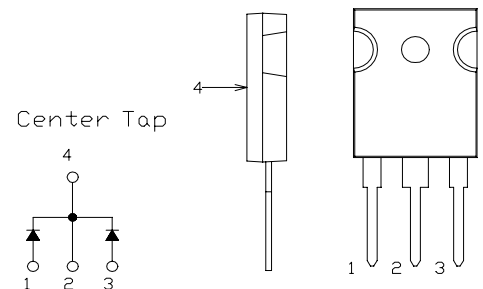


SBD Type : KCQ30A04

OUTLINE DRAWING

FEATURES

- * Similar to TO-247AC(TO-3P)Case
- * Dual Diodes Cathode Common
- * 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

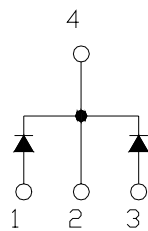
Rating	Symbol	KCQ30A04			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	40			V
Average Rectified Output Current	I _O	30	Tc=110℃	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	33.3			A
Surge Forward Current	I _{FSM}	300	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature 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

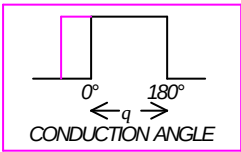
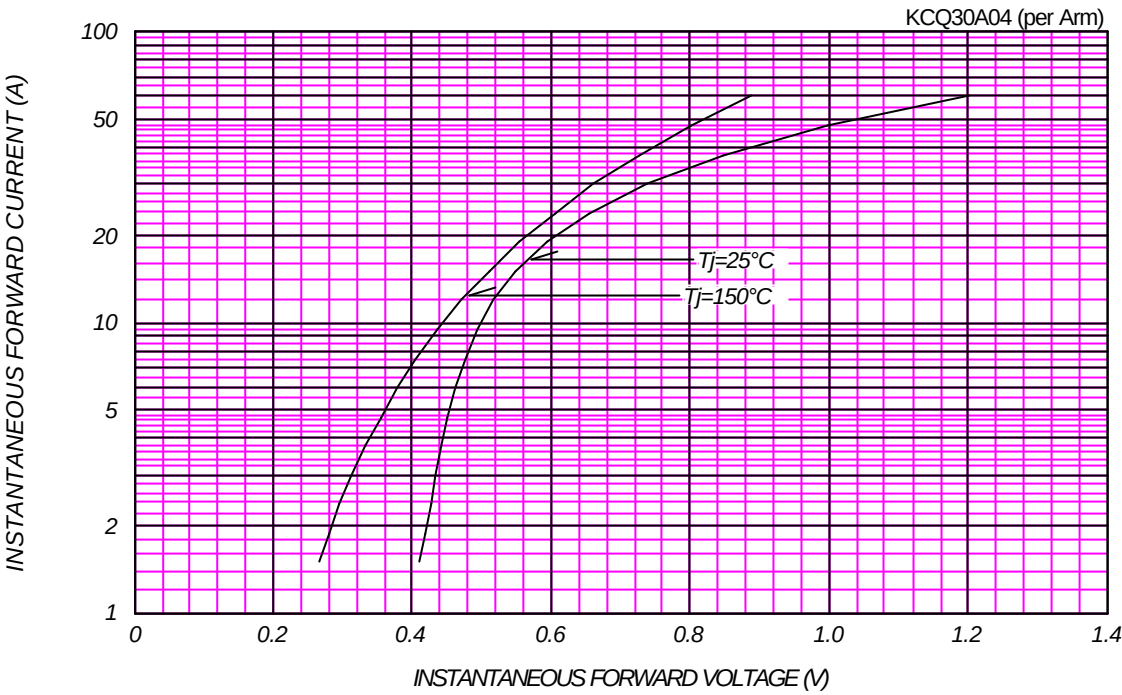
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}$, $V_{RM}= V_{RRM}$ per Arm	-	-	15	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}\text{C}$, $I_{FM}= 15\text{A}$ per Arm	-	-	0.55	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.3	$^{\circ}\text{C}/\text{W}$

KCQ30A04 OUTLINE DRAWING (Dimentions in mm)

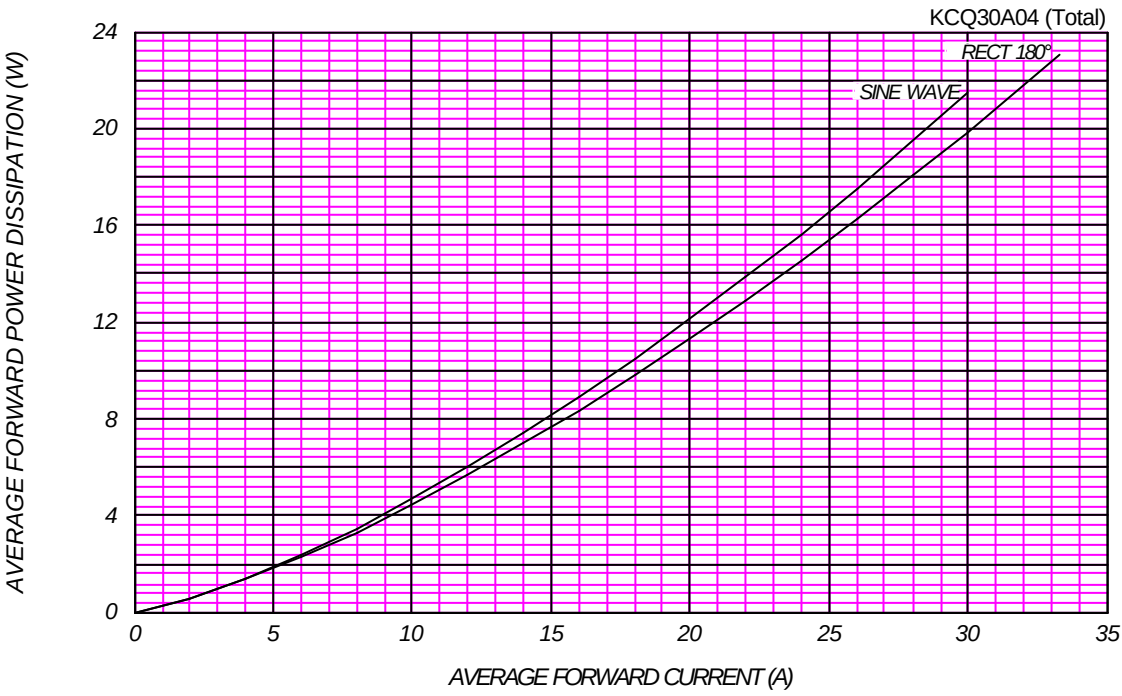
Center Tap



FORWARD CURRENT VS. VOLTAGE



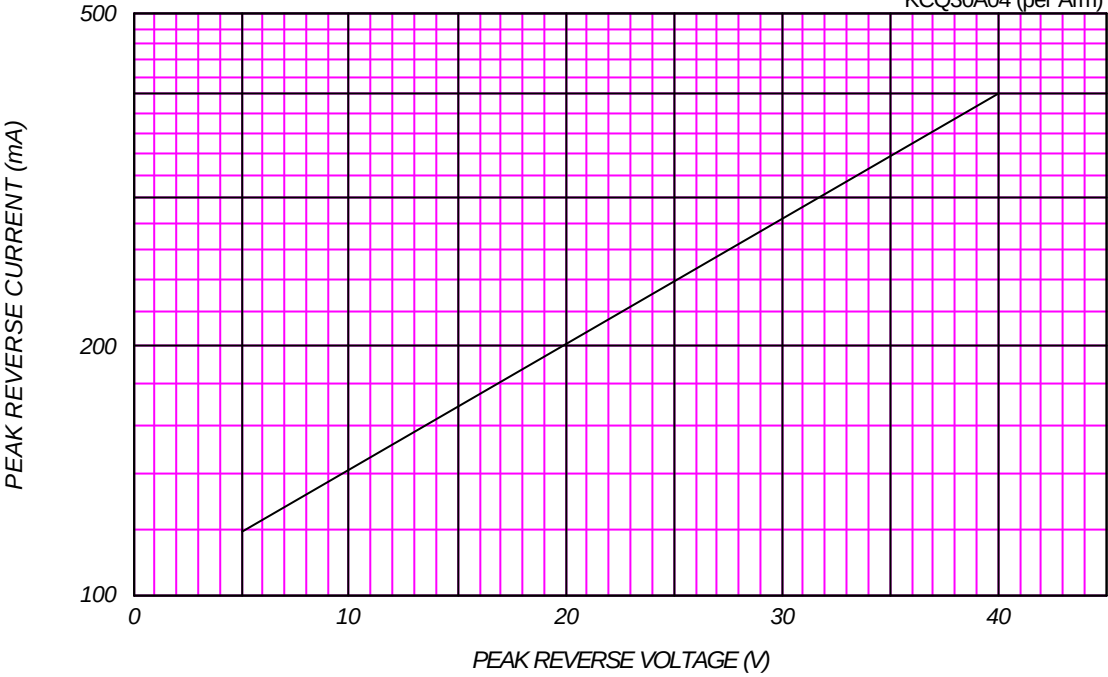
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

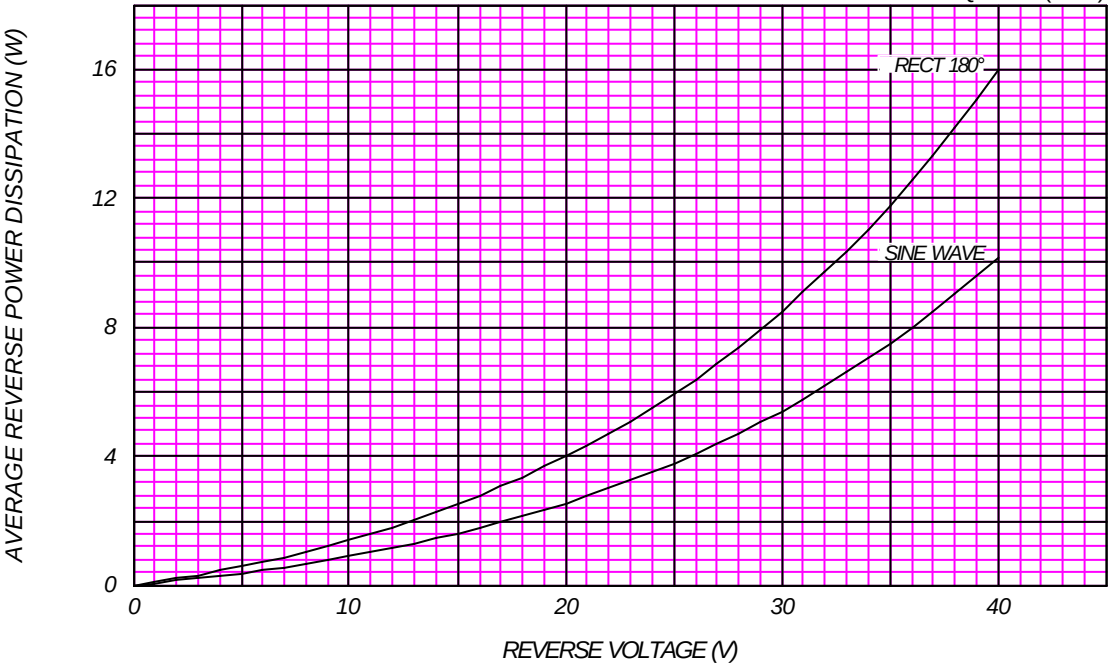
T_j = 150 °C

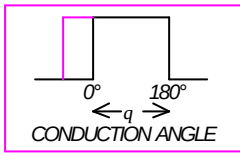
KCQ30A04 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

KCQ30A04 (Total)

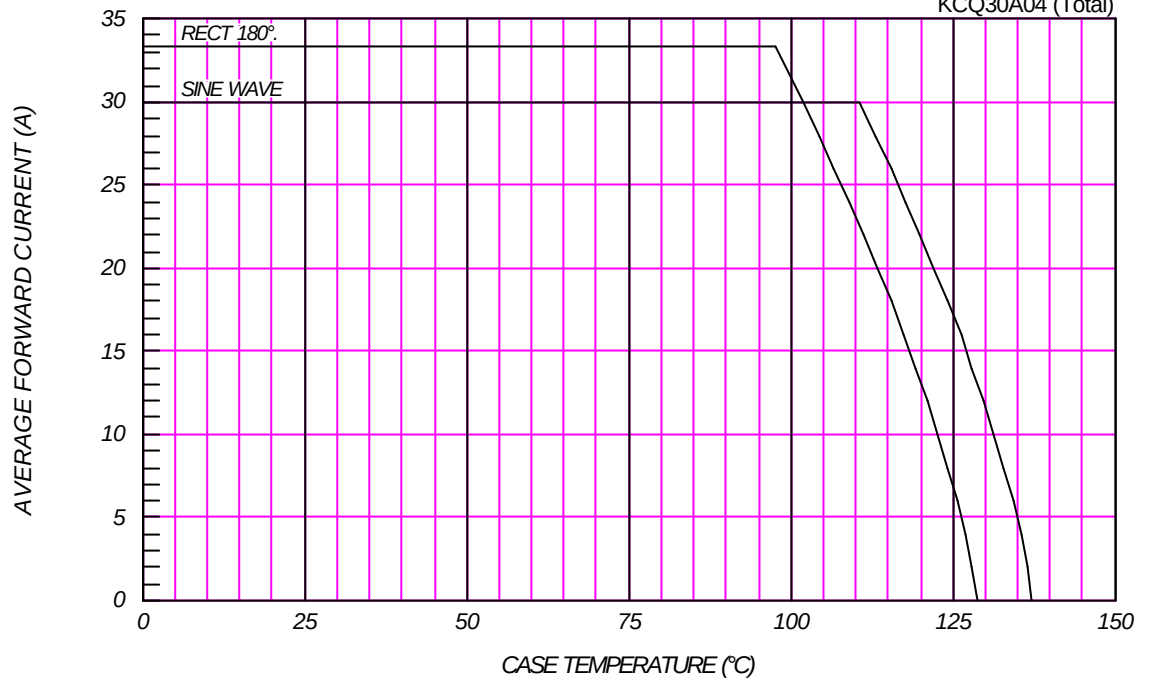




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

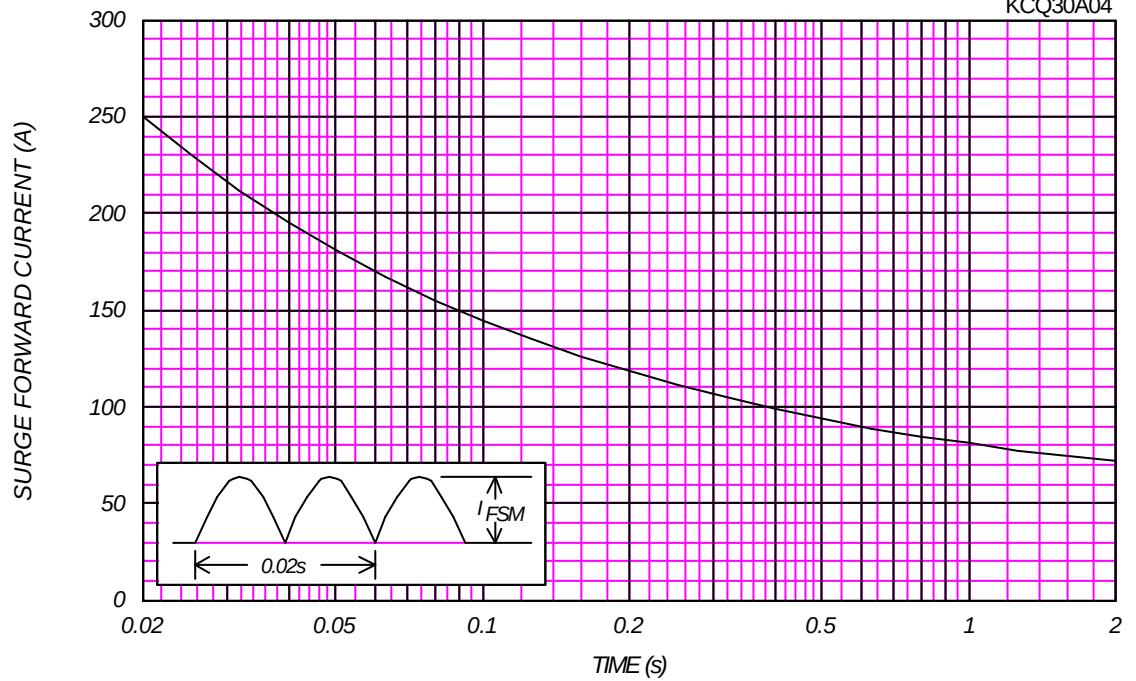
KCQ30A04 (Total)



SURGE CURRENT RATINGS

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

KCQ30A04



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KCQ30A04 (per Arm)

