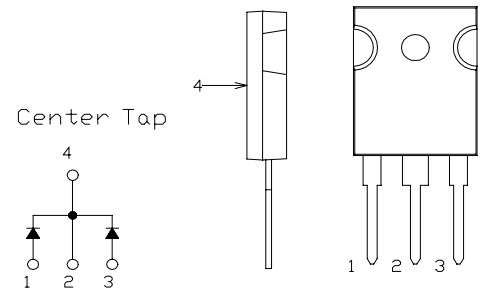


SBD Type : KCQ30A06

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

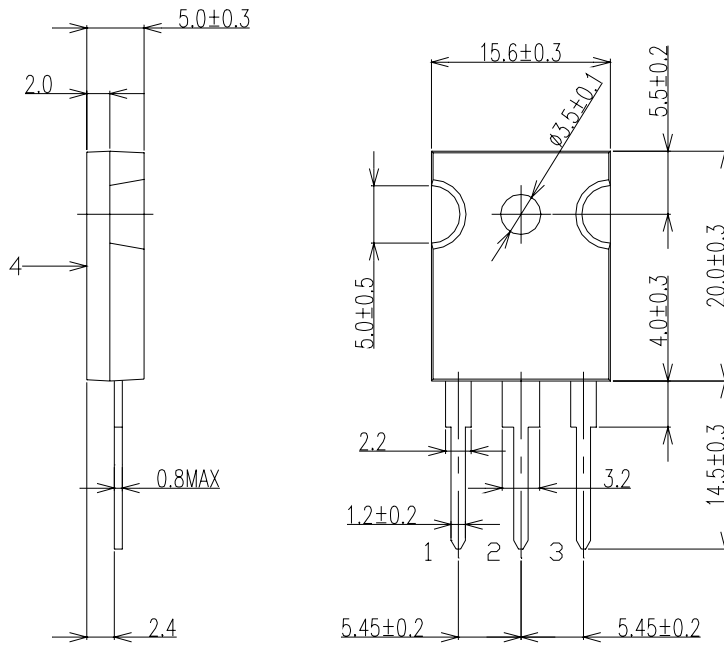
Approx Net Weight: 5.55g

Rating	Symbol	KCQ30A06		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	60		V
Average Rectified Output Current	I_O	30	$T_c=102^{\circ}C$ 50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3		A
Surge Forward Current	I_{FSM}	200	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		$^{\circ}C$
Mounting torque	F_{tor}	recommended torque = 0.5		N•m

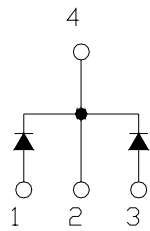
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}C, V_{RM}= V_{RRM}$ per Arm	-	-	15	mA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C, I_{FM}=15A$ per Arm	-	-	0.65	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.3	$^{\circ}C/W$

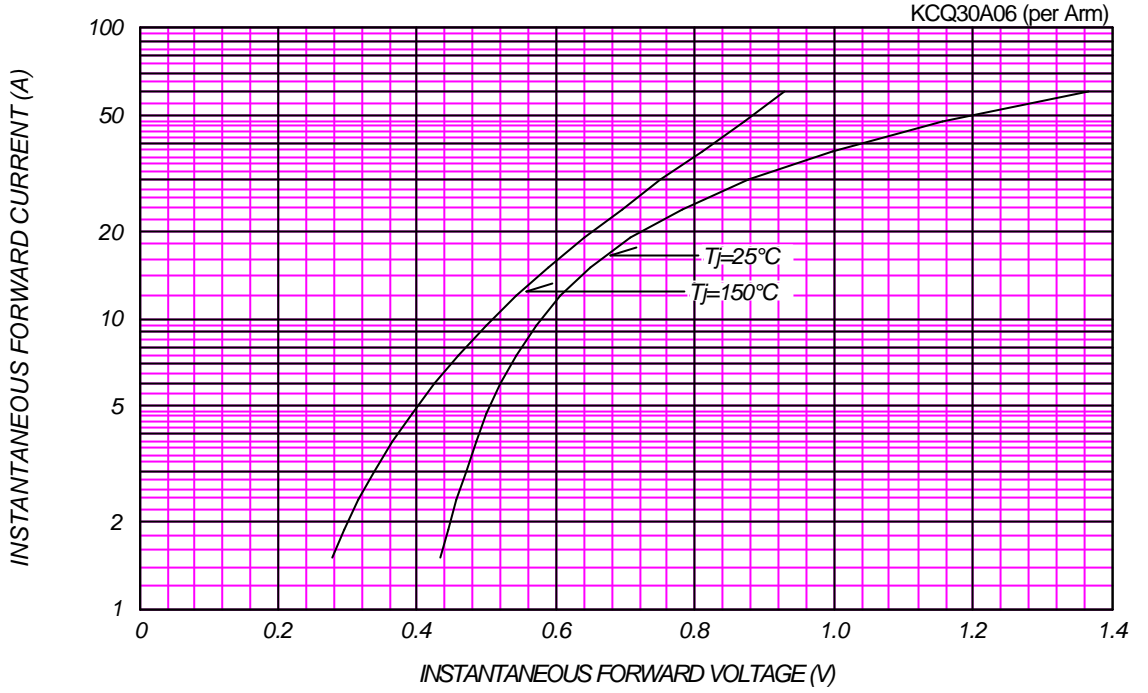
KCQ30A06 OUTLINE DRAWING (Dimensions in mm)



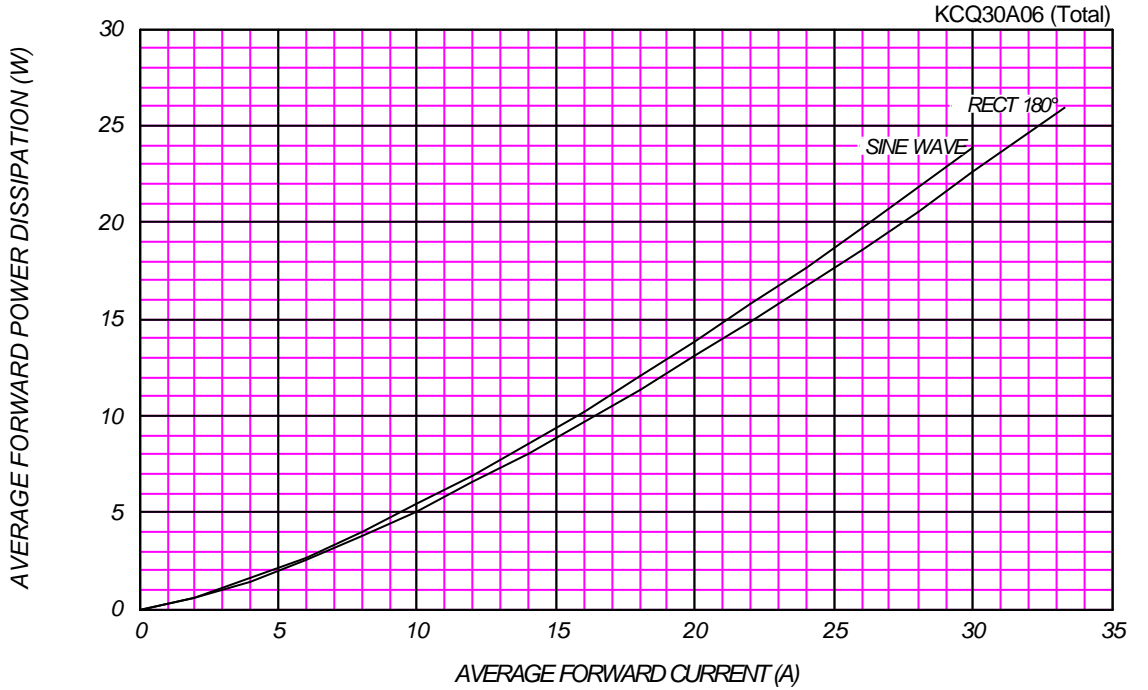
Center Tap



FORWARD CURRENT VS. VOLTAGE



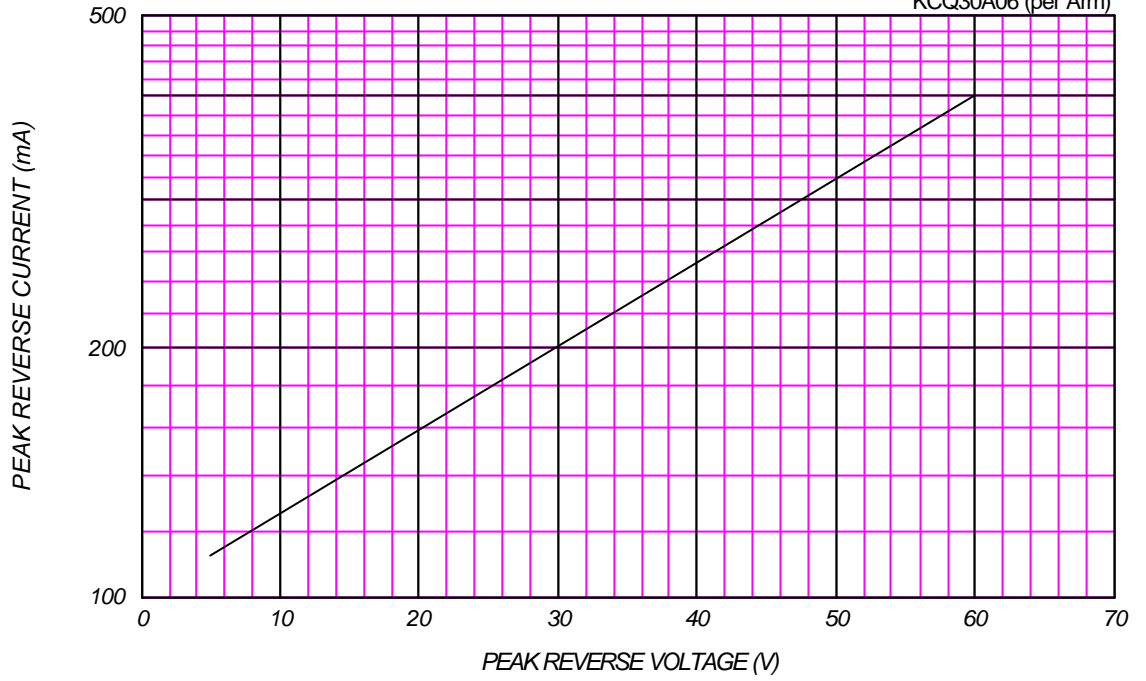
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

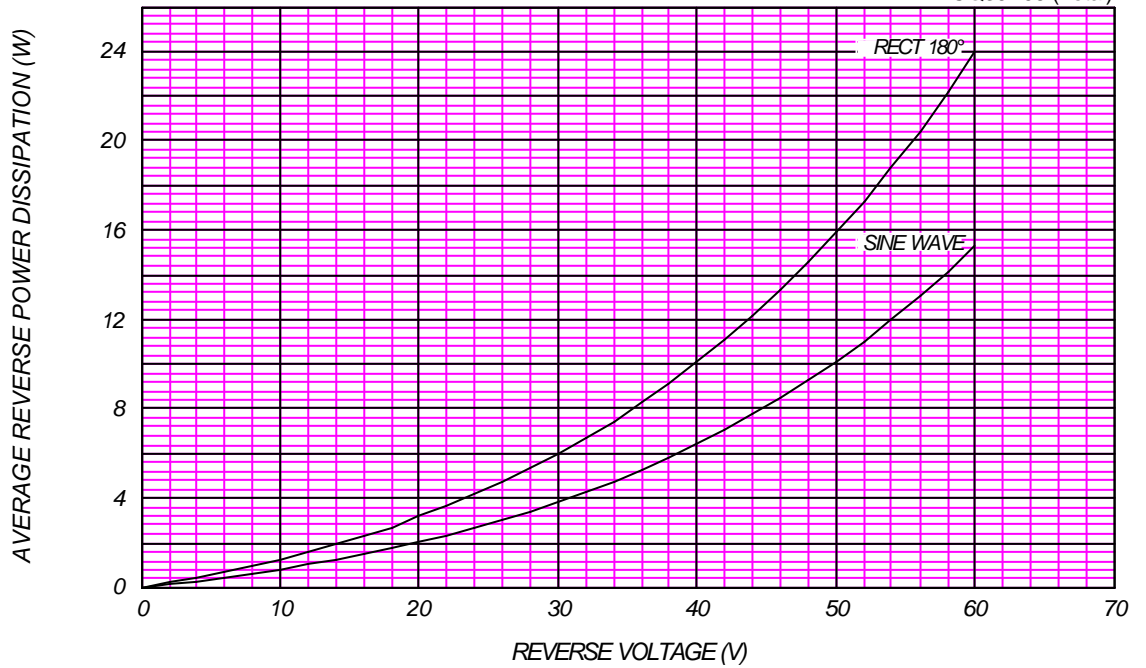
$T_j = 150\text{ }^\circ\text{C}$

KCQ30A06 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

KCQ30A06 (Total)

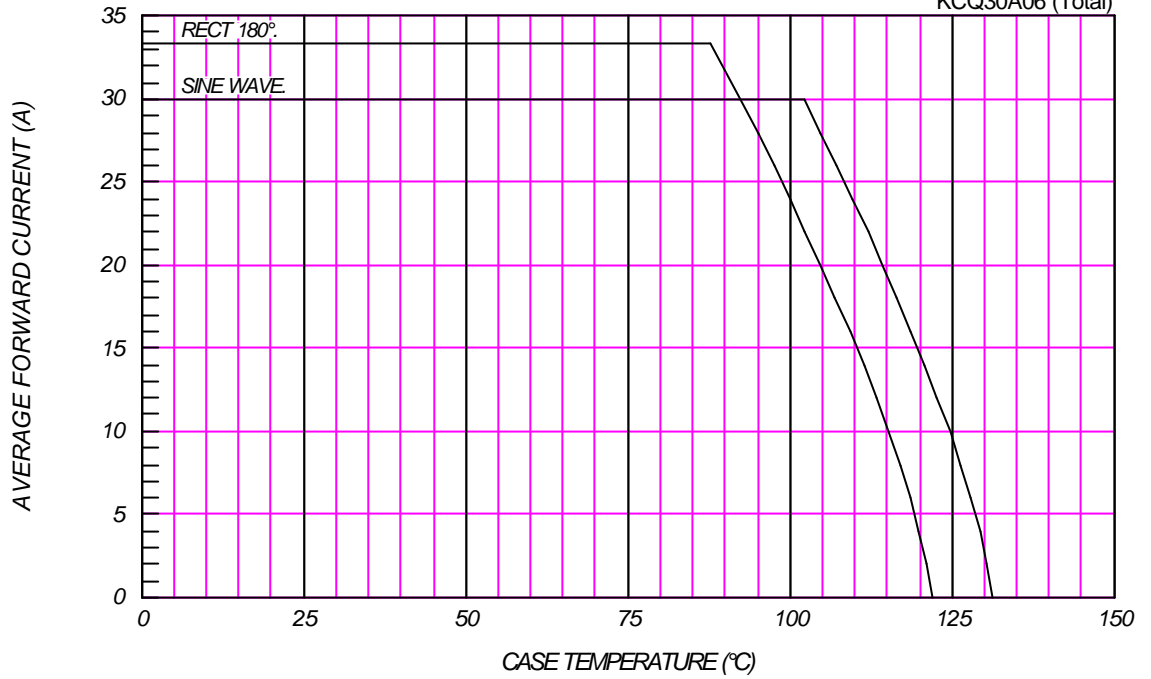




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$

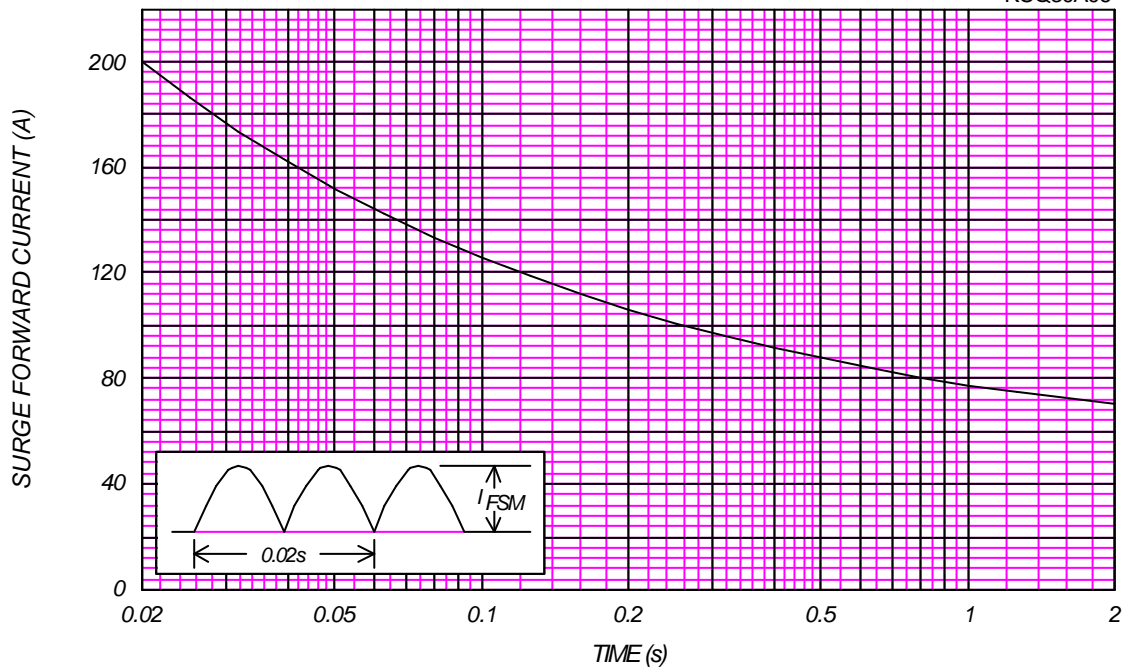
KCQ30A06 (Total)



SURGE CURRENT RATINGS

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

KCQ30A06



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KCQ30A06 (per Arm)

