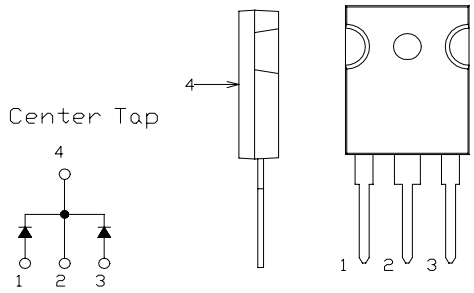
Nihon Inter Electronics Corporation

SBD Type : KCQ60A04

OULINE 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
* 40 Volts thru 60 Volts Types Available



Maximum Ratings

Approx Net Weight: 5.55g

Rating	Symbol	KCQ60A04			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40			V
Average Rectified Output Current	I_O	60	Tc=83℃	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	66.6			A
Surge Forward Current	I_{FSM}	400	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	Ftor	recommended torque = 0.5			N•m

Electrical • Thermal Characteristics

Characteristics		Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current		I_{RM}	Tj= 25℃, V_{RM}= V_{RRM} per Arm	-	-	25	mA
Peak Forward Voltage		V_{FM}	Tj=25℃, I_{FM}=30A per Arm	-	-	0.58	V
Thermal Resistance	Junction to Case	Rth(j-c)	Junction to Case	-	-	1.0	℃ /W

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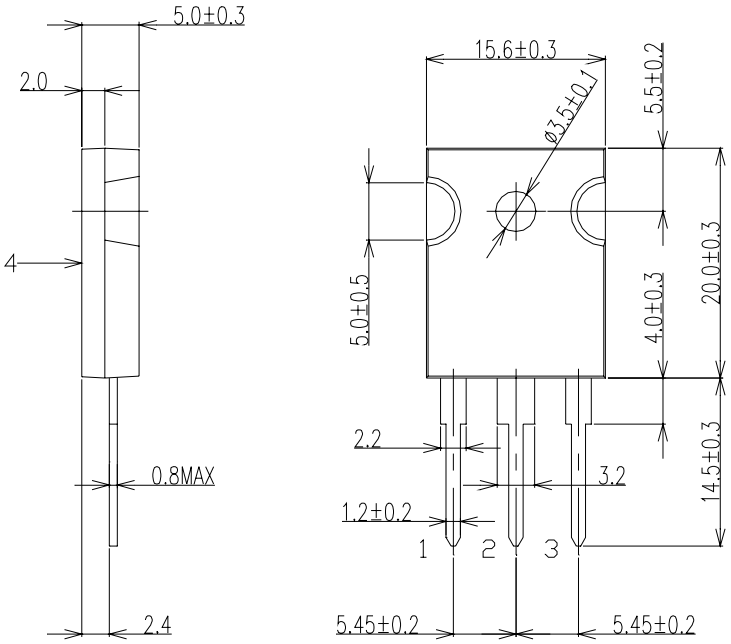
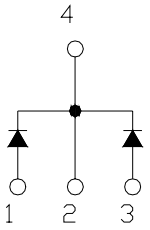
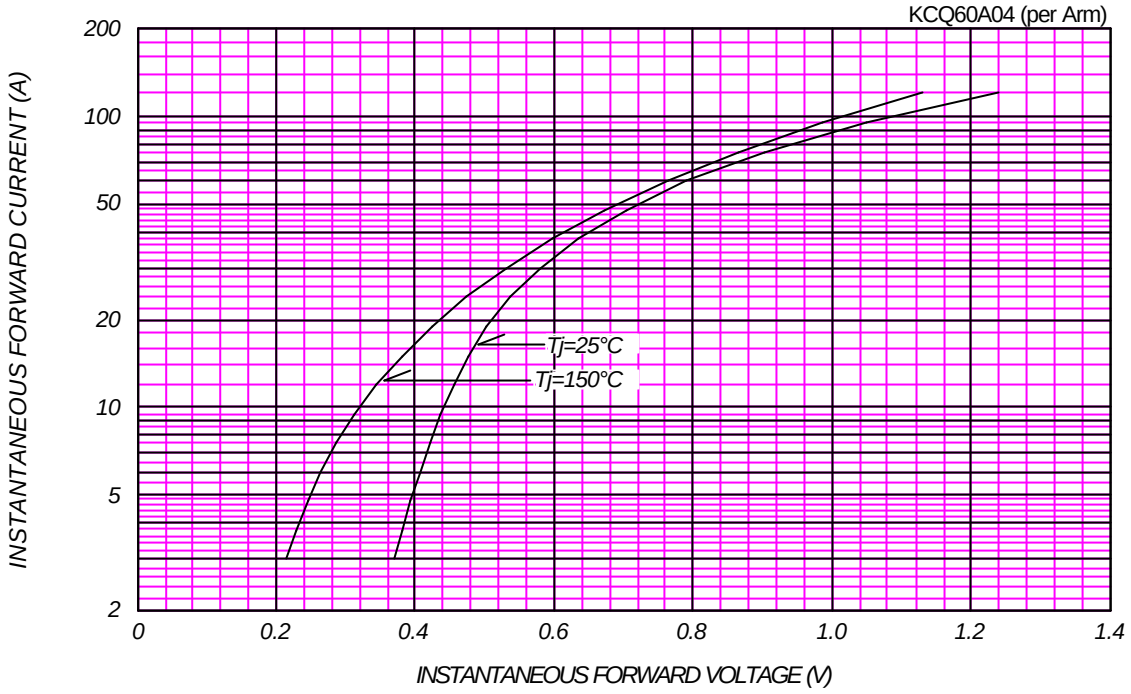
KCQ60A04 OUTLINE DRAWING (Dimentions in mm)

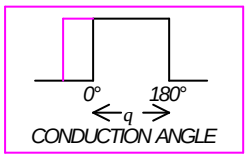


Center Tap

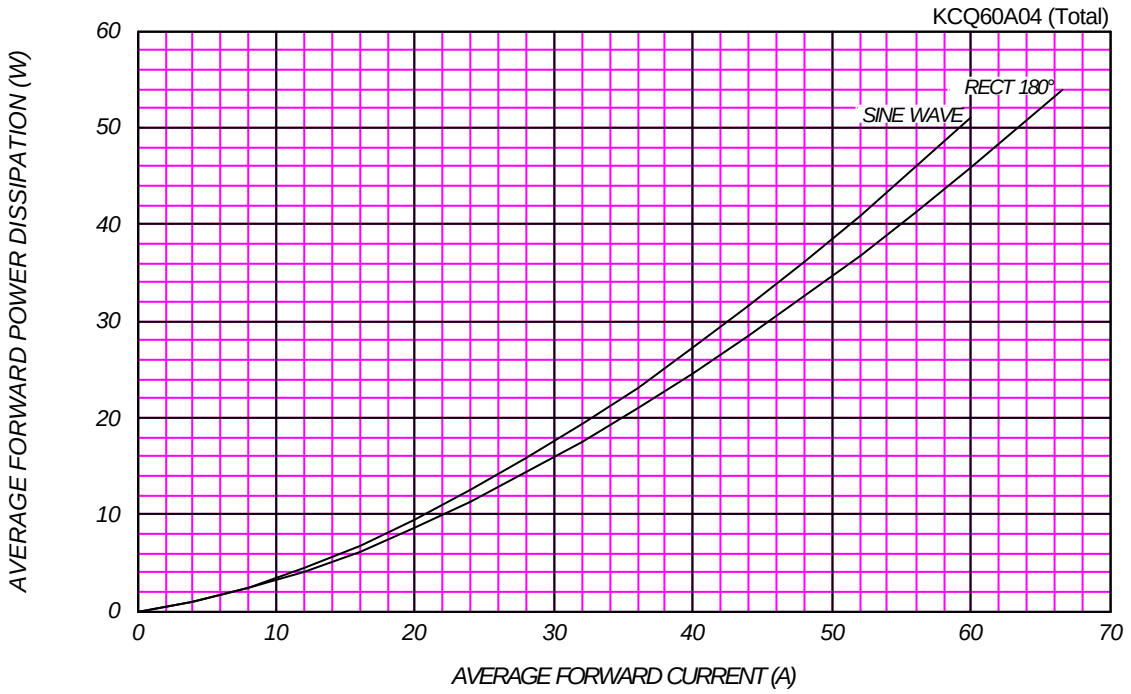


FORWARD CURRENT VS. VOLTAGE

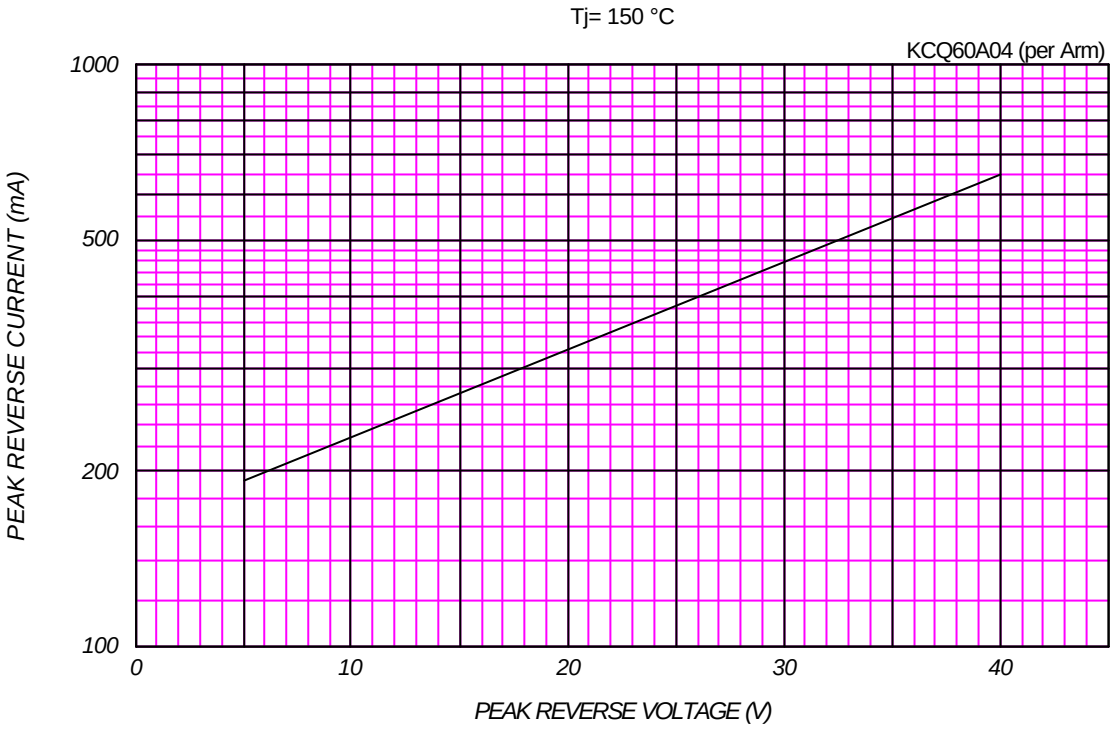




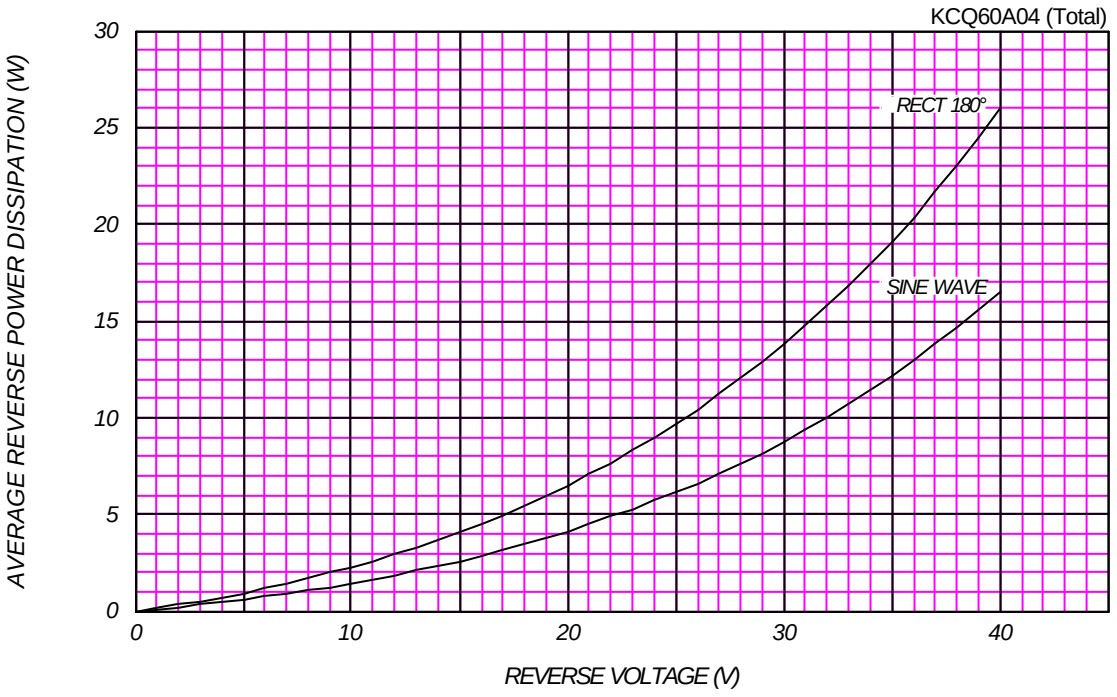
AVERAGE FORWARD POWER DISSIPATION

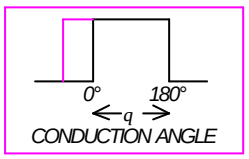


PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE



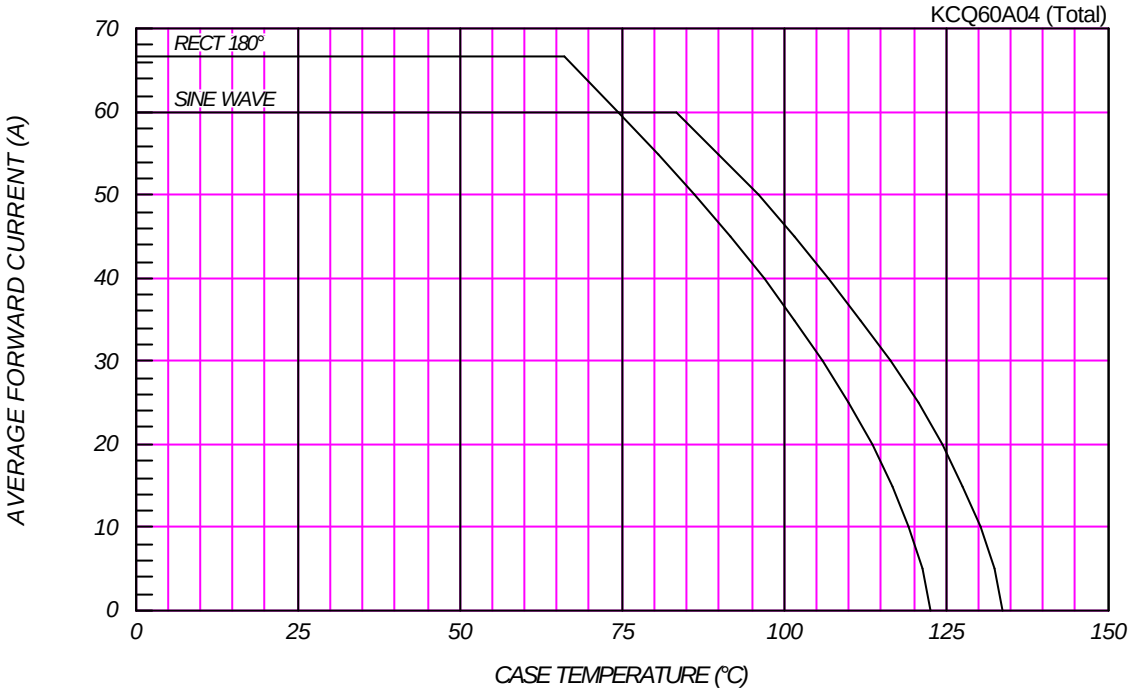
AVERAGE REVERSE POWER DISSIPATION





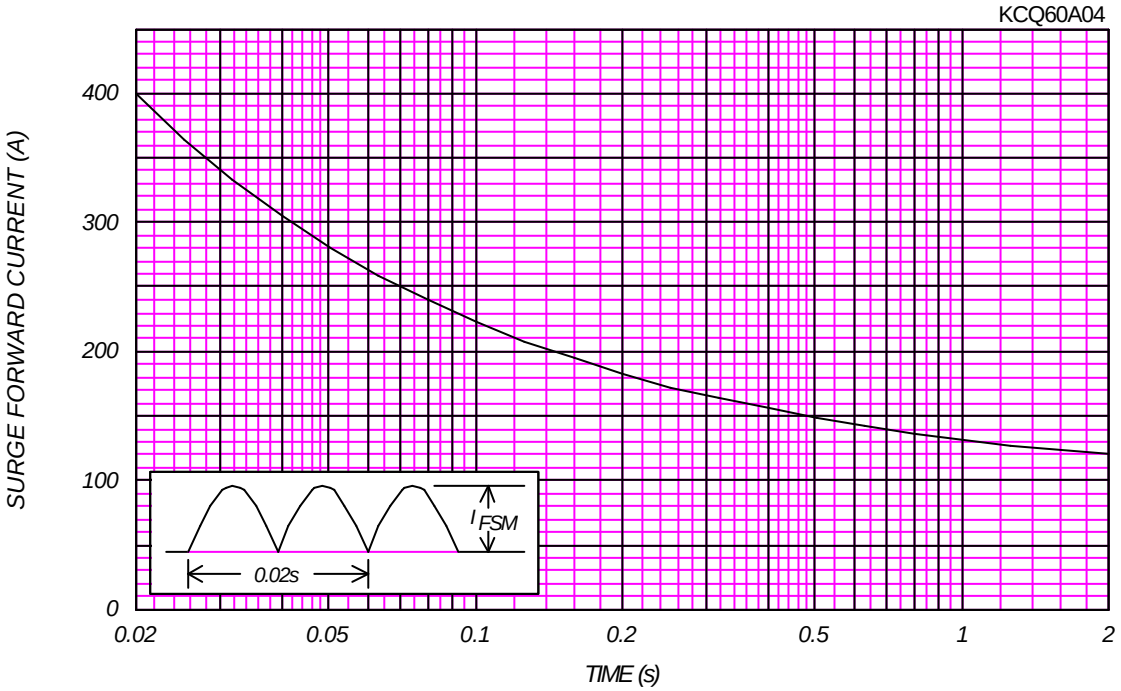
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

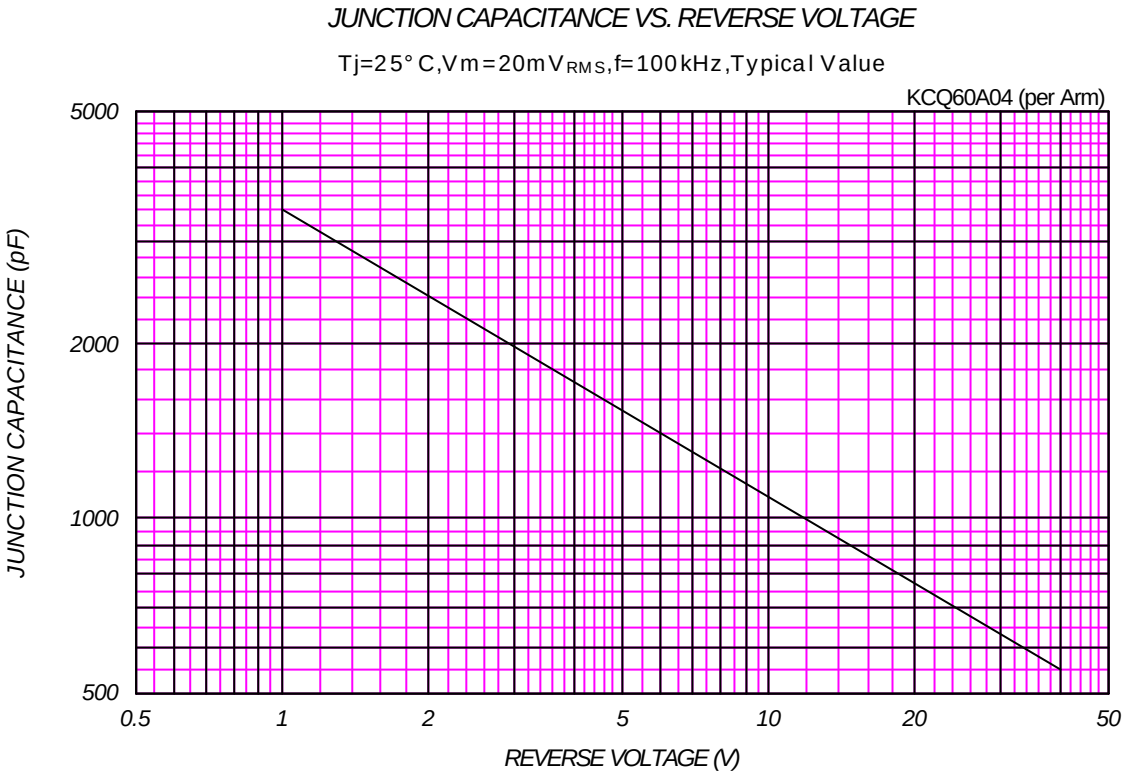
V_{RM}=40 V



SURGE CURRENT RATINGS

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




JUNCTION CAPACITANCE VS. REVERSE VOLTAGE
Tj=25° C,Vm=20mV RMS,f=100kHz,Typical Value
KCQ60A04 (per Arm)
5000
2000
1000
500
JUNCTION CAPACITANCE (pF)
0.5
1
2
5
10
20
50
REVERSE VOLTAGE (V)