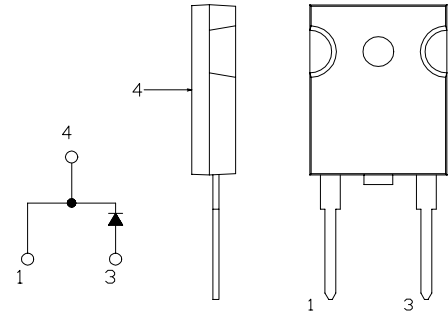


SBD Type : KSQ30A04

OUTLINE DRAWING

FEATURES

- * Similar to TO-247AC(TO-3P)Case
- * Low Forward Voltage Drop
- * Low Power Loss,High Efficiency
- * High Surge Current Capability
- * 40 Volts thru 60 Volts Types Available



Maximum Ratings

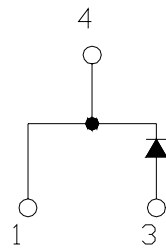
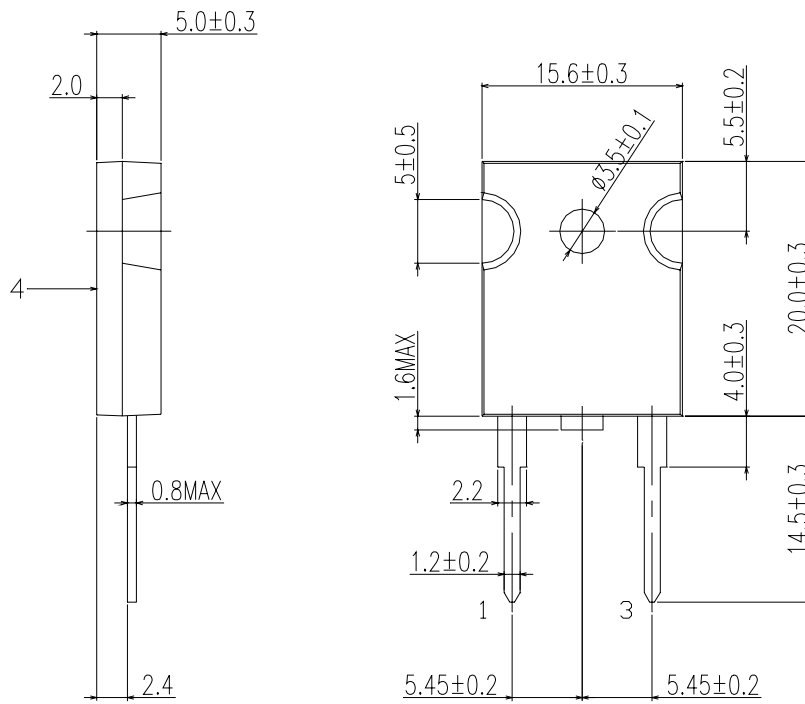
Approx Net Weight: 5.5g

Rating	Symbol	KSQ30A04			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	40			V
Average Rectified Output Current	I _O	30	Tc=107°C	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	47.1			A
Surge Forward Current	I _{FSM}	400	50Hz Half Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			°C
Storage Temperature Range	T _{stg}	-40 to +150			°C
Mounting torque	F _{tor}	recommended torque = 0.5			N•m

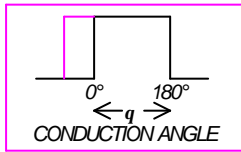
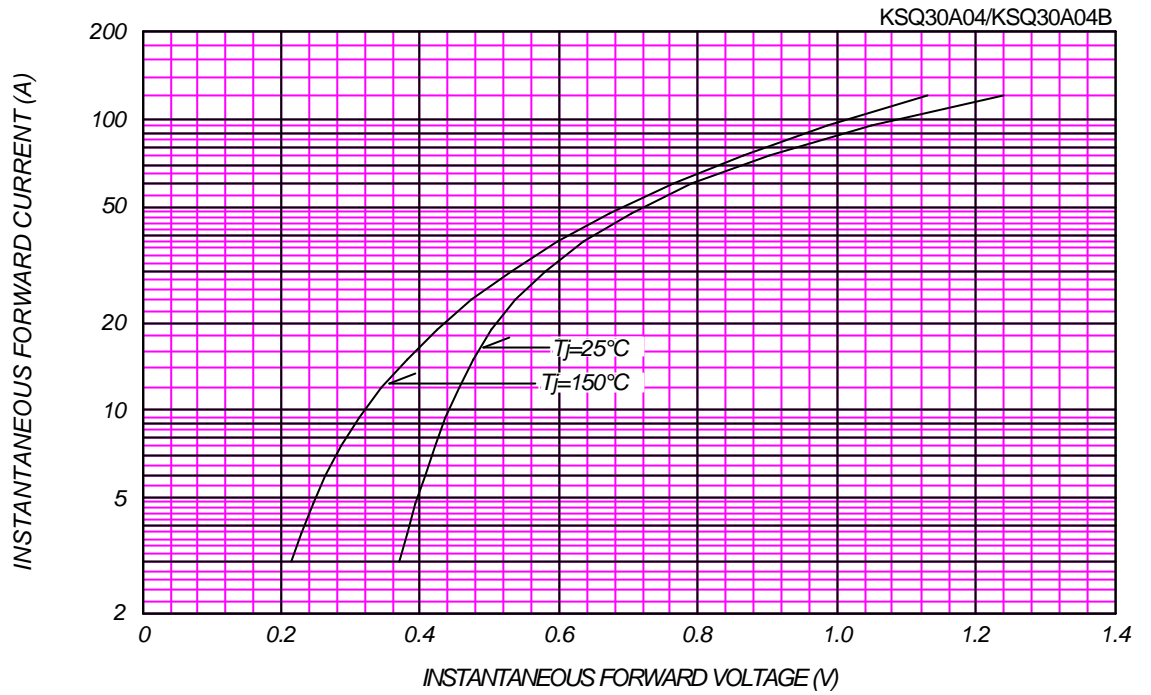
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}, V_{RM}= V_{RRM}$	-	-	25	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}, I_{FM}= 30 \text{ A}$	-	-	0.58	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.3	$^{\circ}\text{C}/\text{W}$

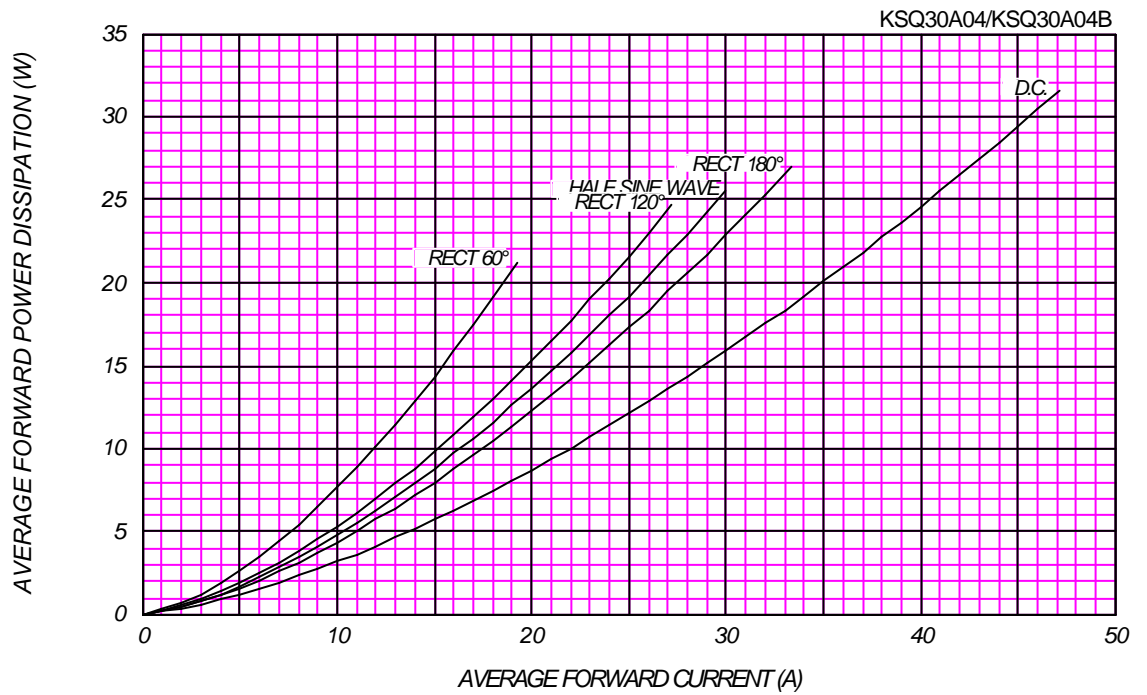
KSQ30A04 OUTLINE DRAWING (Dimention in mm)



FORWARD CURRENT VS. VOLTAGE



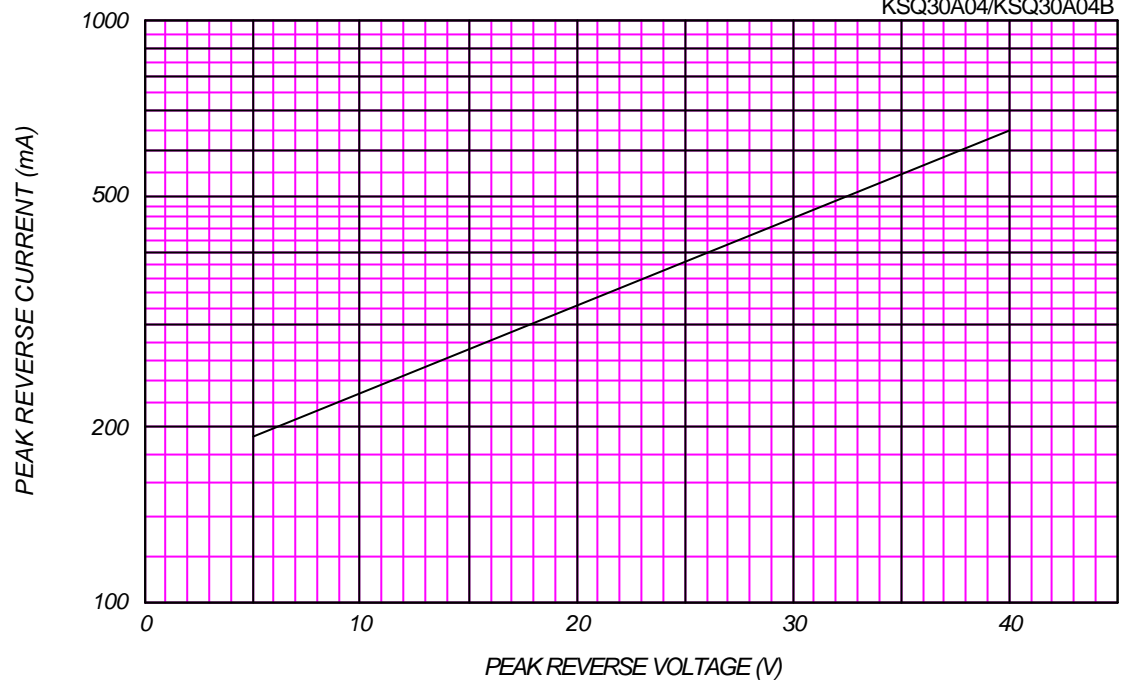
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

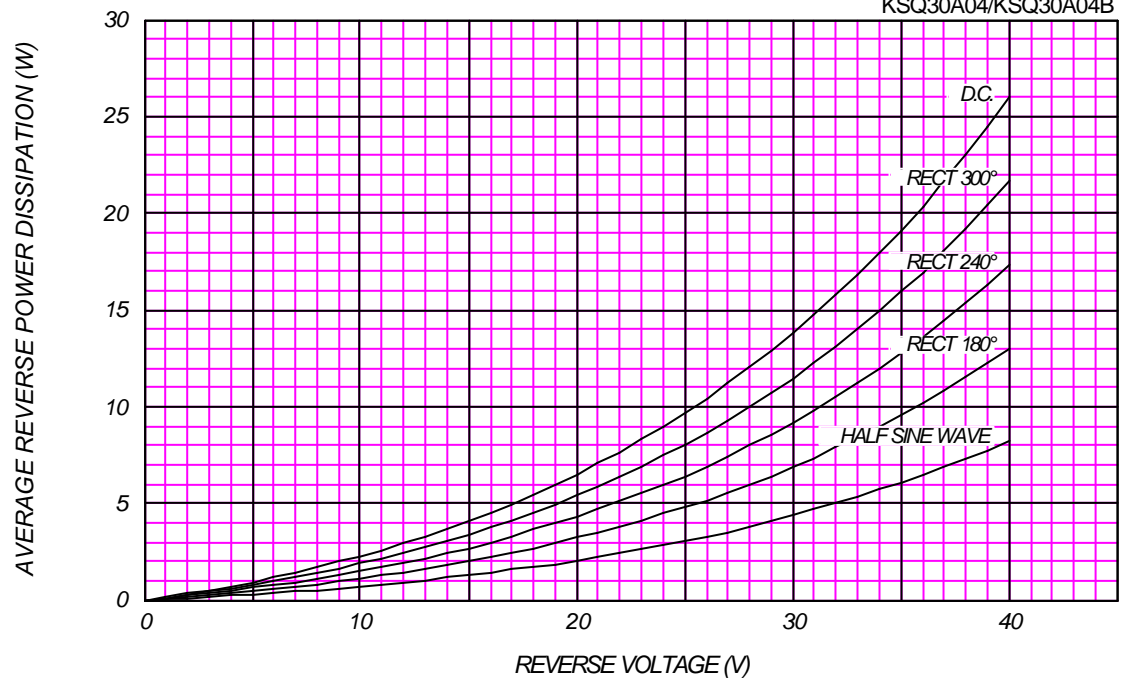
$T_j = 150\text{ }^{\circ}\text{C}$

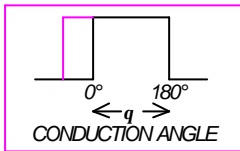
KSQ30A04/KSQ30A04B



AVERAGE REVERSE POWER DISSIPATION

KSQ30A04/KSQ30A04B

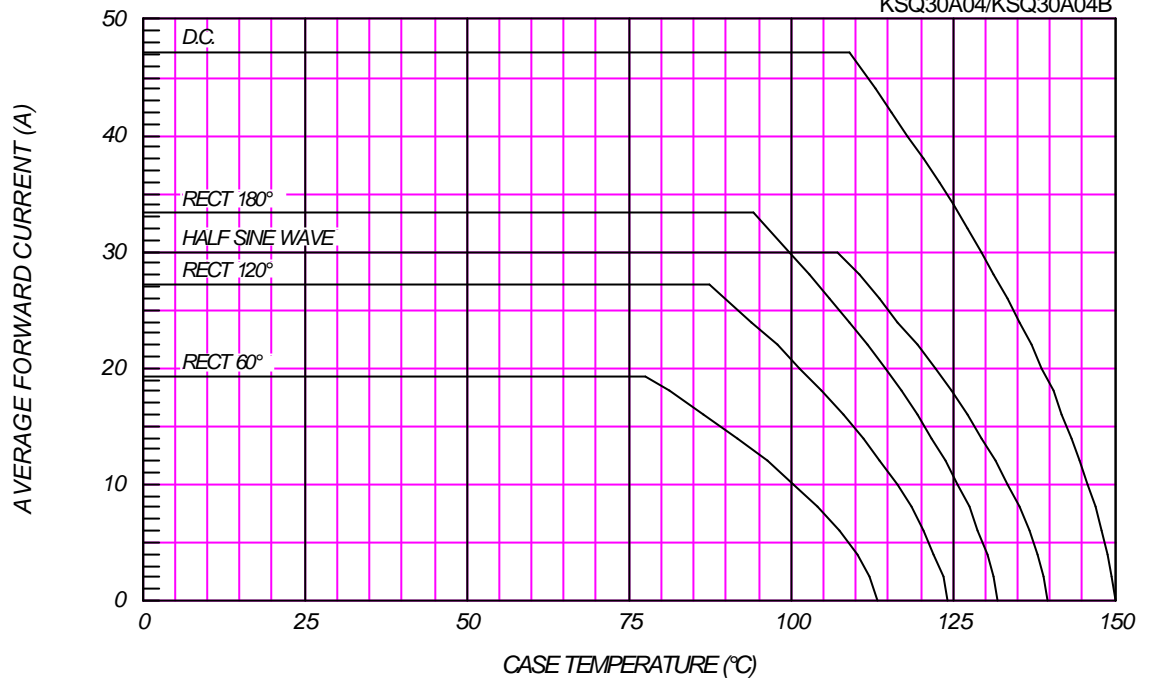




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

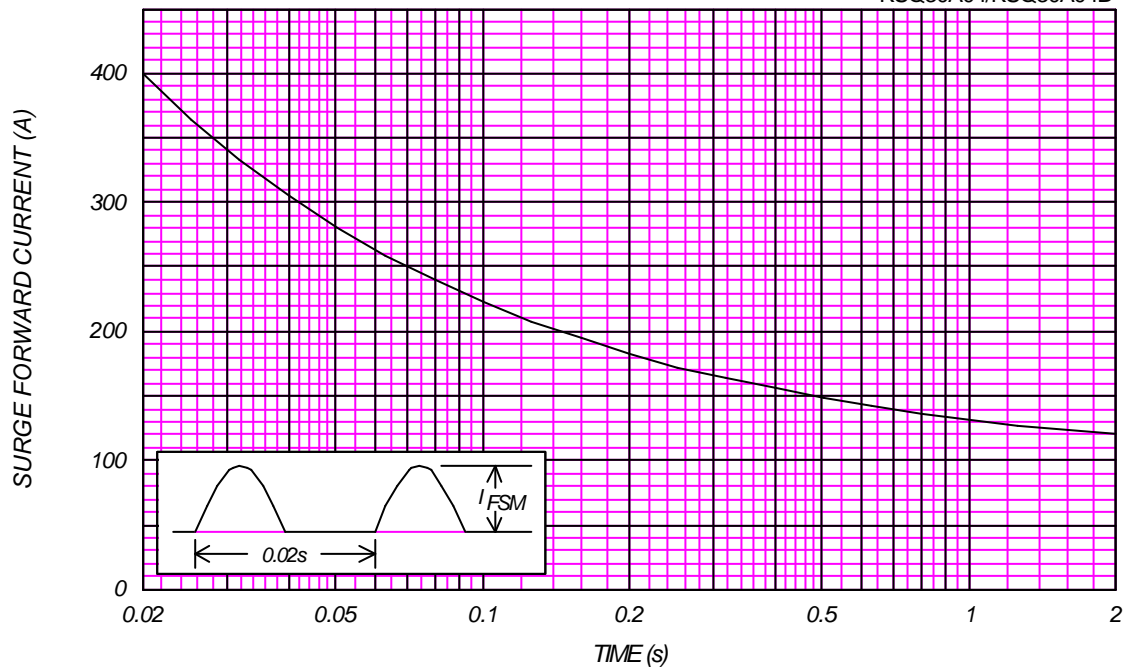
KSQ30A04/KSQ30A04B



SURGE CURRENT RATINGS

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

KSQ30A04/KSQ30A04B



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KSQ30A04/KSQ30A04B

