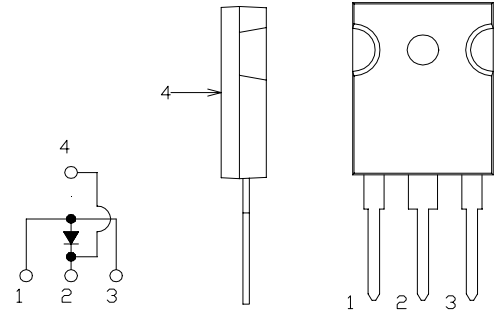


# SBD Type : KSQ60A06B

OULINE DRAWING

**FEATURES**

- \* Similar to TO-247AC(TO-3P)Case
- \* 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	KSQ60A06B			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	60			V
Average Rectified Output Current *1	$I_O$	60	$T_c=87^{\circ}C$	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	94.2			A
Surge Forward Current	$I_{FSM}$	700	50Hz Half 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

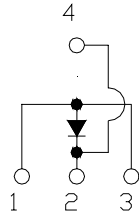
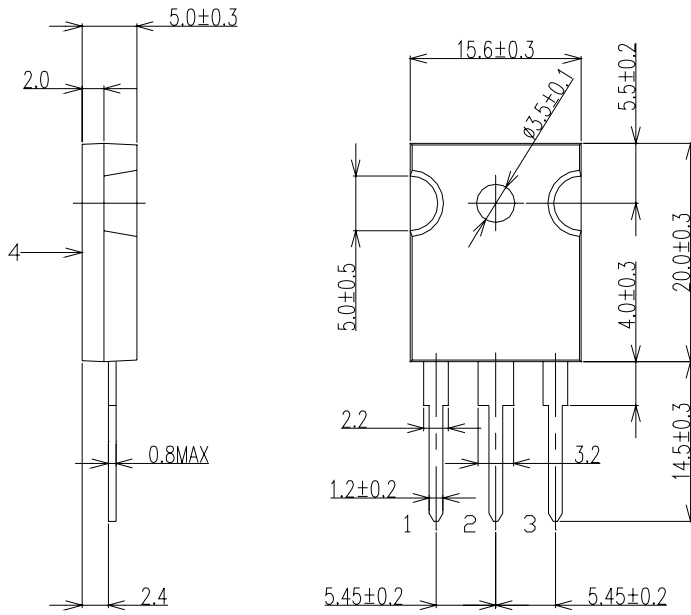
\*1:Anode Terminals 1 and 3 Connected

**Electrical • Thermal Characteristics**

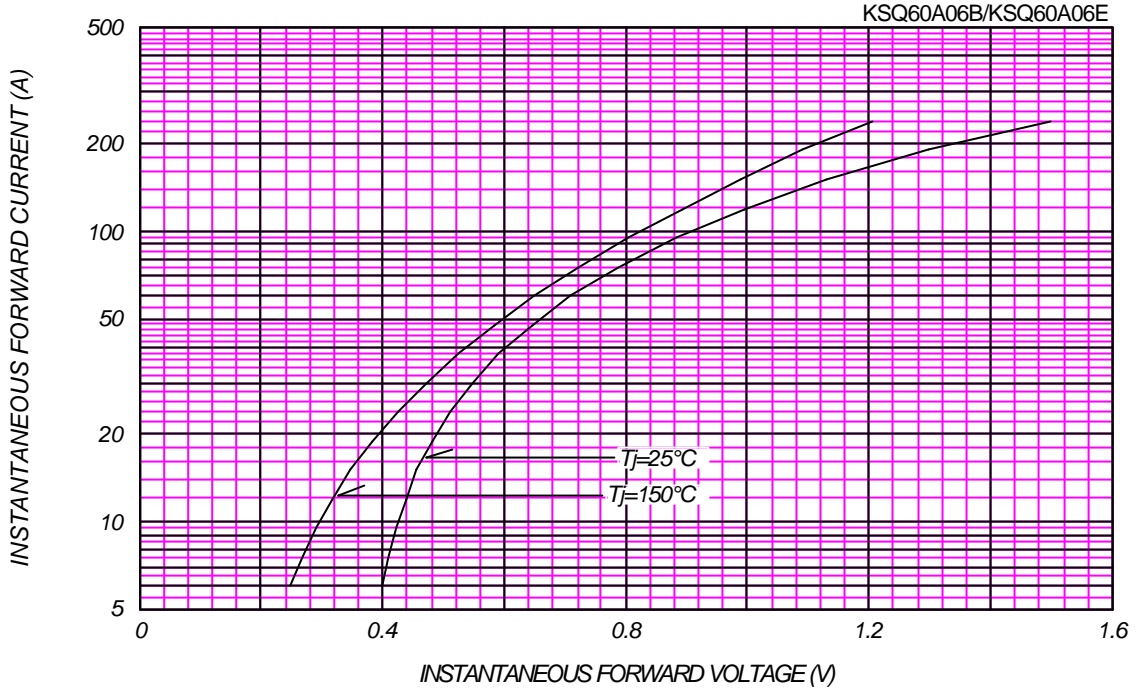
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}C, V_{RM}= V_{RRM}$	-	-	40	mA
Peak Forward Voltage *1	$V_{FM}$	$T_j= 25^{\circ}C, I_{FM}= 60 A$	-	-	0.71	V
Thermal Resistance   Junction to Case	$R_{th(j-c)}$	Junction to Case	-	-	0.75	$^{\circ}C/W$

\*1:Anode Terminals 1 and 3 Connected

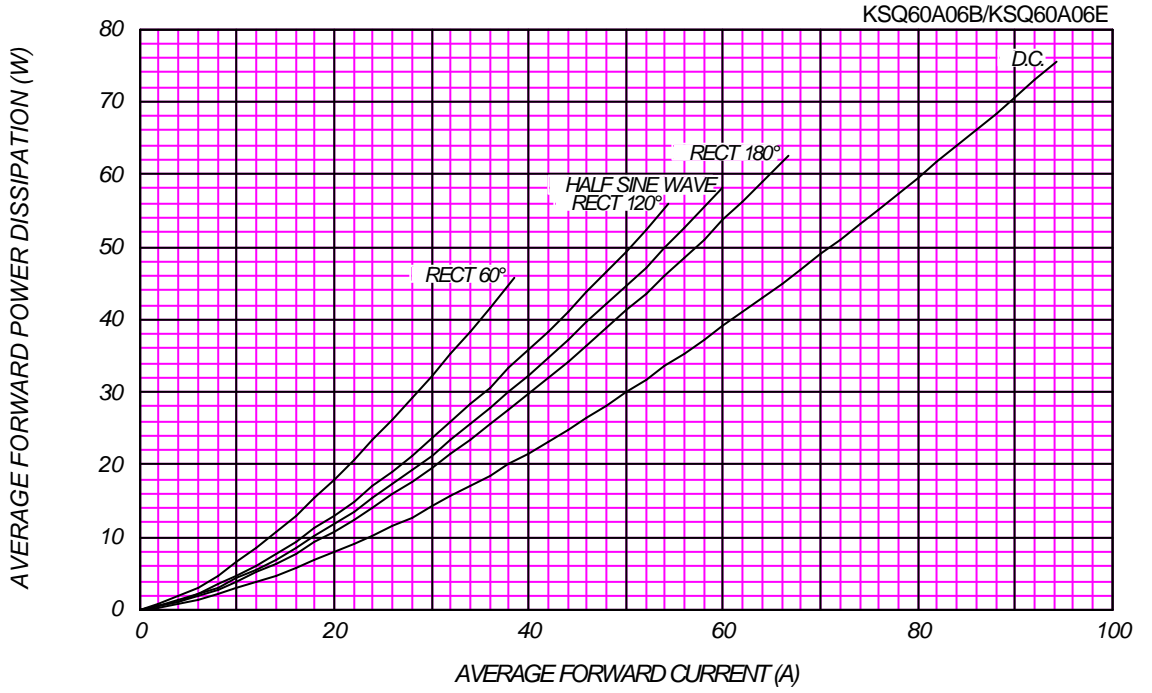
KSQ60A06B OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



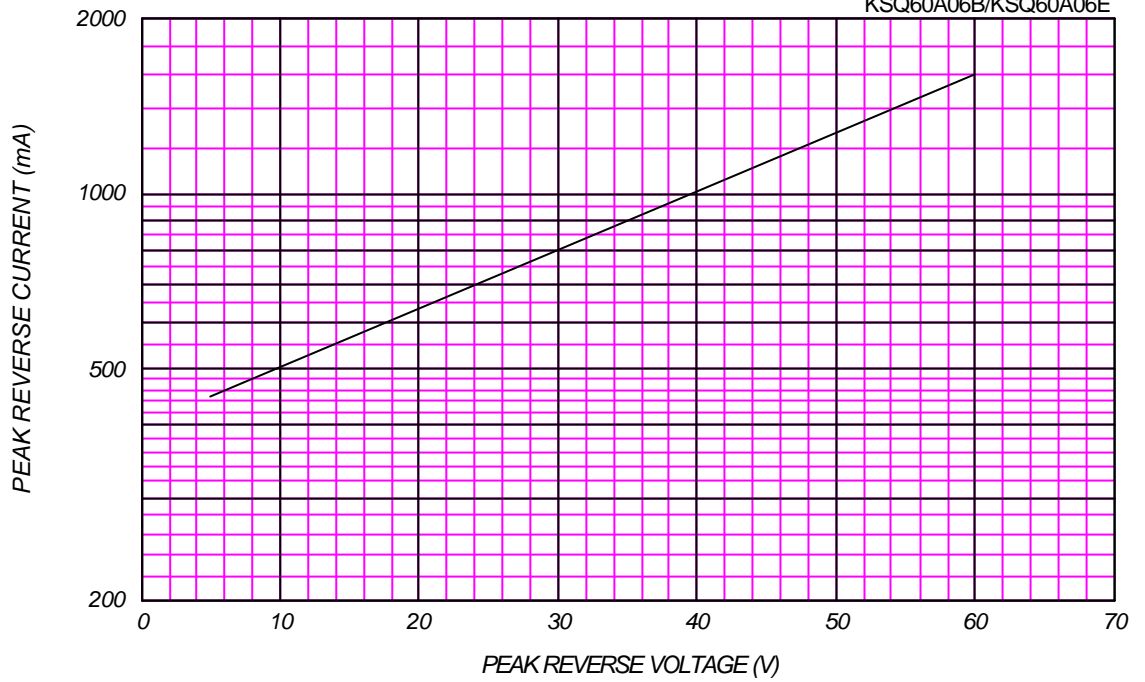
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

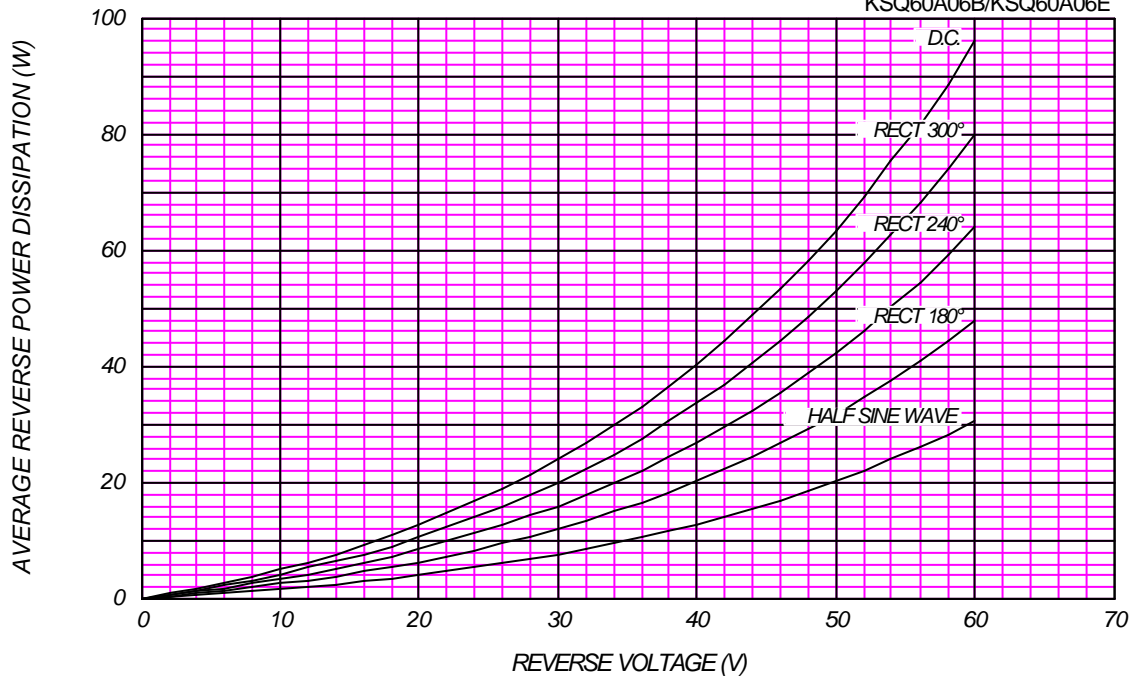
T<sub>j</sub> = 150 °C

KSQ60A06B/KSQ60A06E



AVERAGE REVERSE POWER DISSIPATION

KSQ60A06B/KSQ60A06E

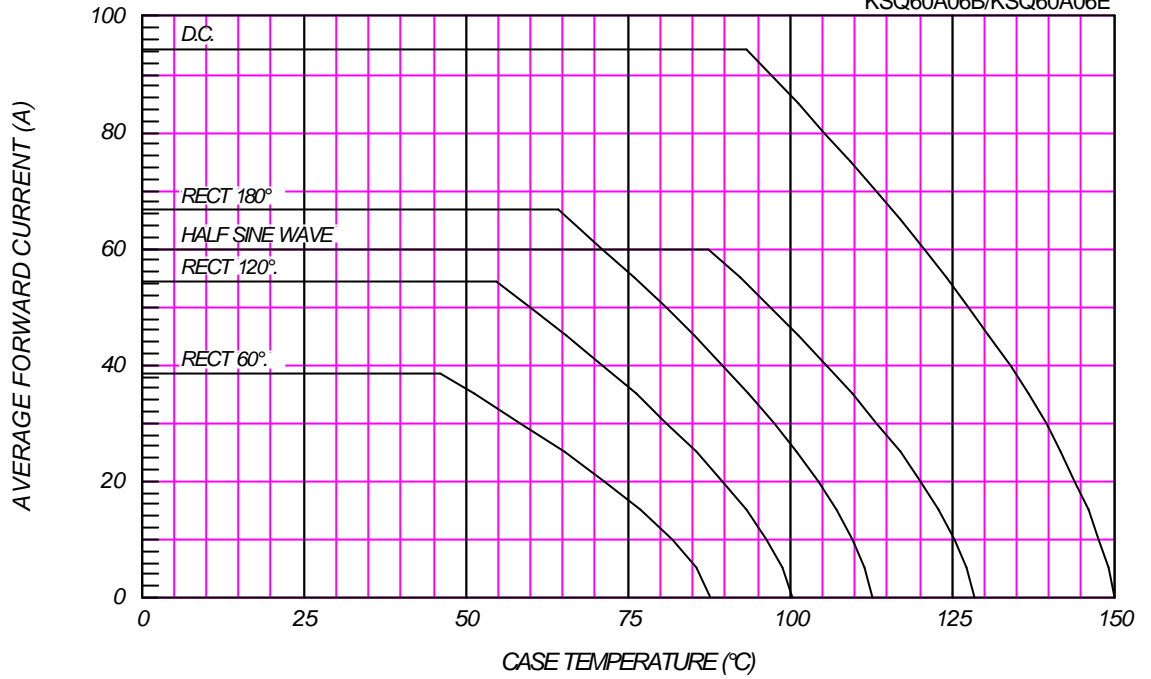




### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$

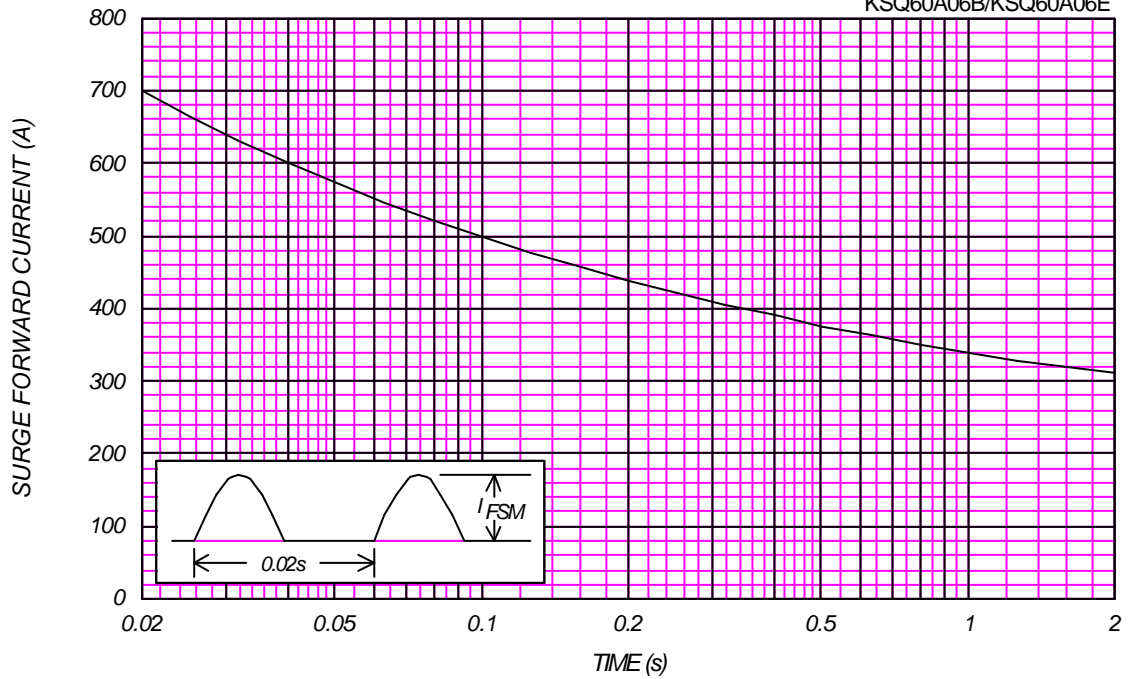
KSQ60A06B/KSQ60A06E



### SURGE CURRENT RATINGS

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

KSQ60A06B/KSQ60A06E



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KSQ60A06B/KSQ60A06E

