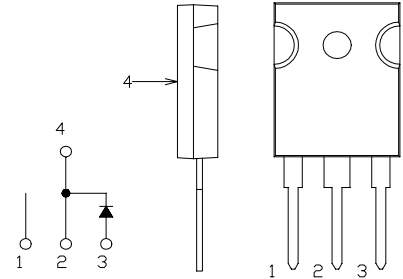


# SBD Type : KSQ15A04B

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: 5.55g

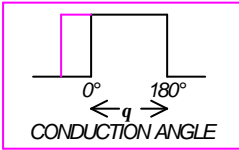
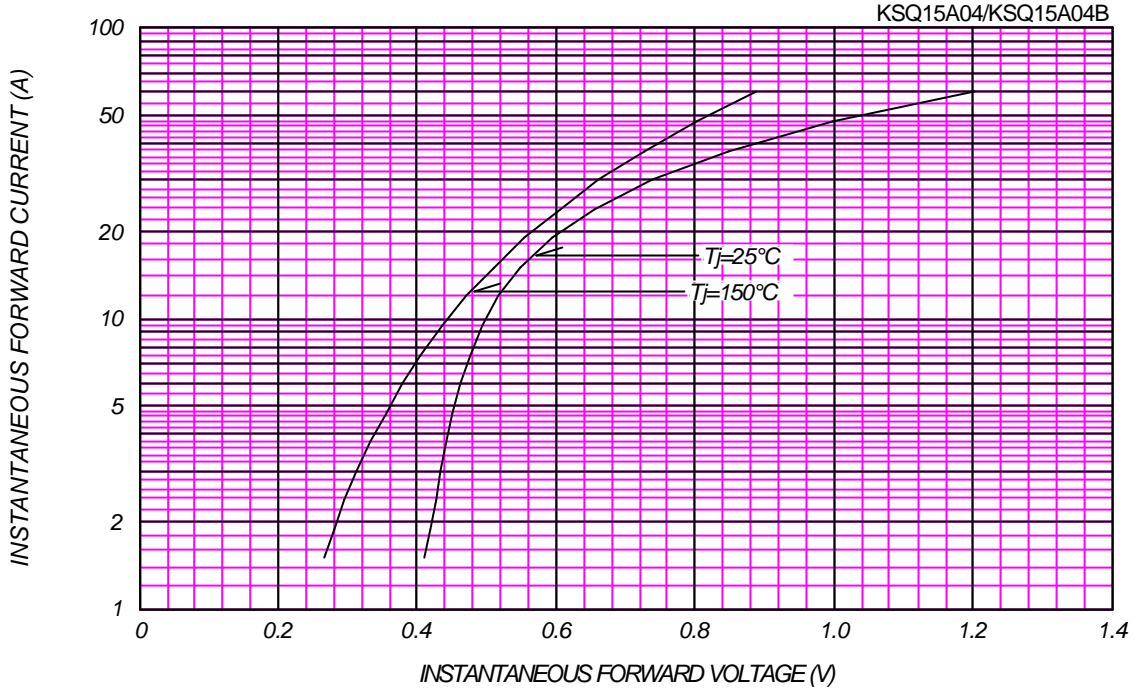
Rating	Symbol	KSQ15A04B			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	40			V
Non-repetitive Peak Reverse Voltage	$V_{RSM}$	45			V
Average Rectified Output Current	$I_O$	15	$T_c=120^\circ\text{C}$	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	23.5			A
Surge Forward Current	$I_{FSM}$	250	50Hz Half Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	$T_{jw}$	-40 to +150			$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to +150			$^\circ\text{C}$
Mounting torque	Ftor	recommended torque = 0.5			N•m

### Electrical • Thermal Characteristics

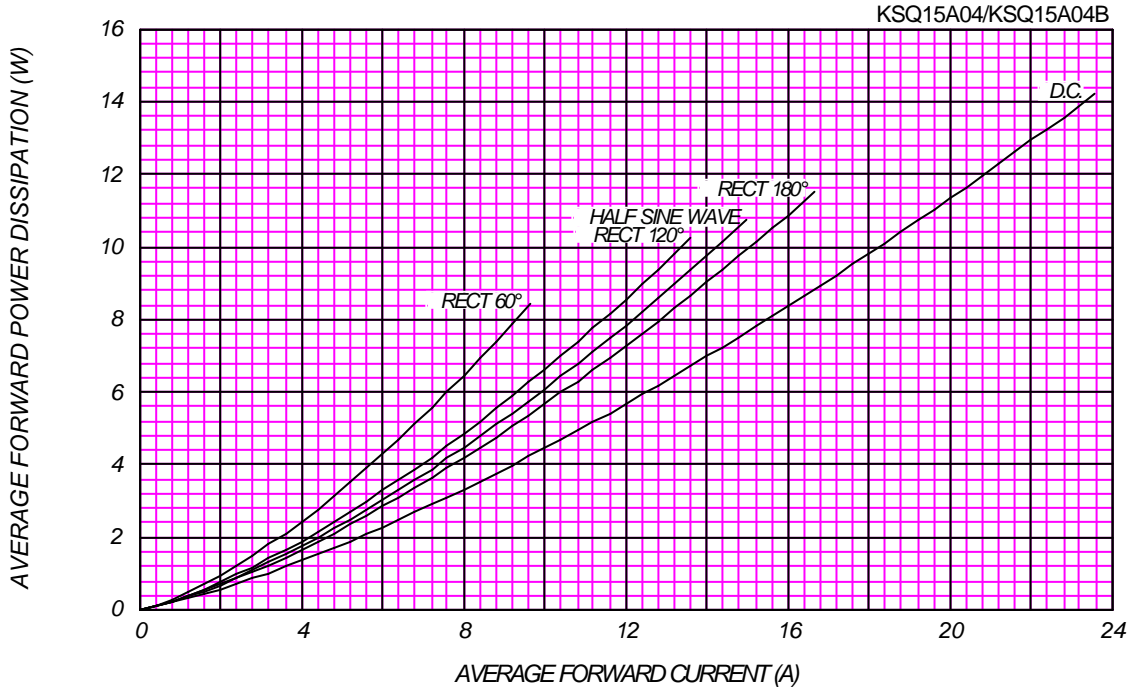
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^\circ\text{C}, V_{RM}= V_{RRM}$	-	-	15	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^\circ\text{C}, I_{FM}= 15 \text{ A}$	-	-	0.55	V
Thermal Resistance   Junction to Case	$R_{th(j-c)}$	Junction to Case	-	-	2.0	$^\circ\text{C}/\text{W}$



FORWARD CURRENT VS. VOLTAGE



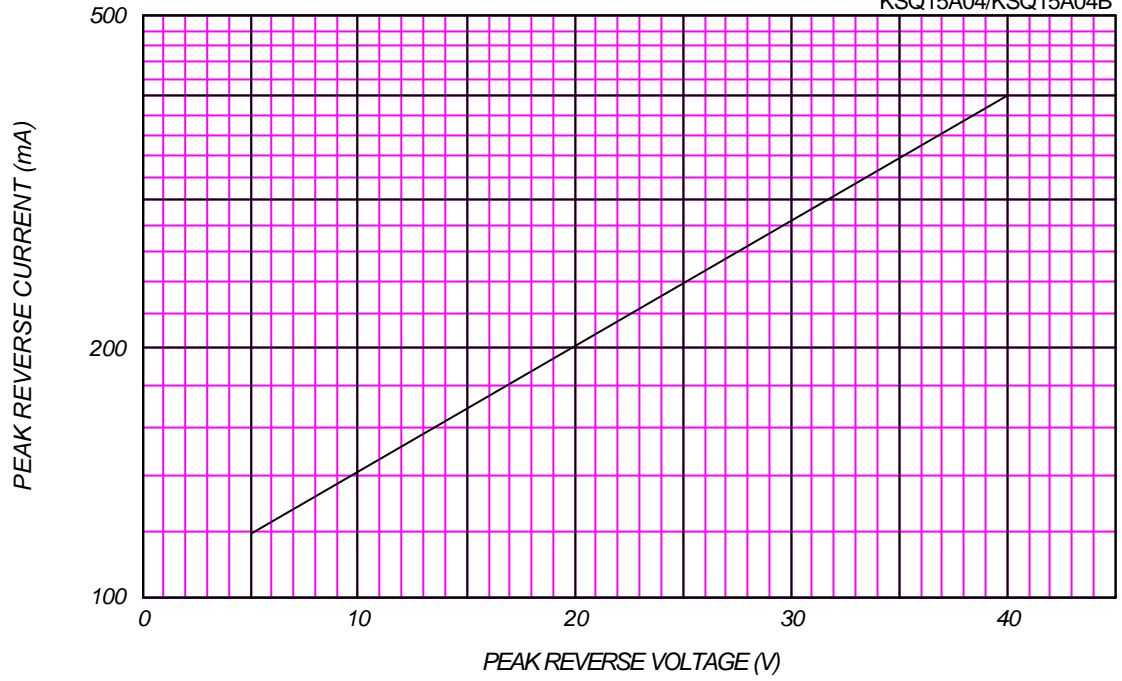
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

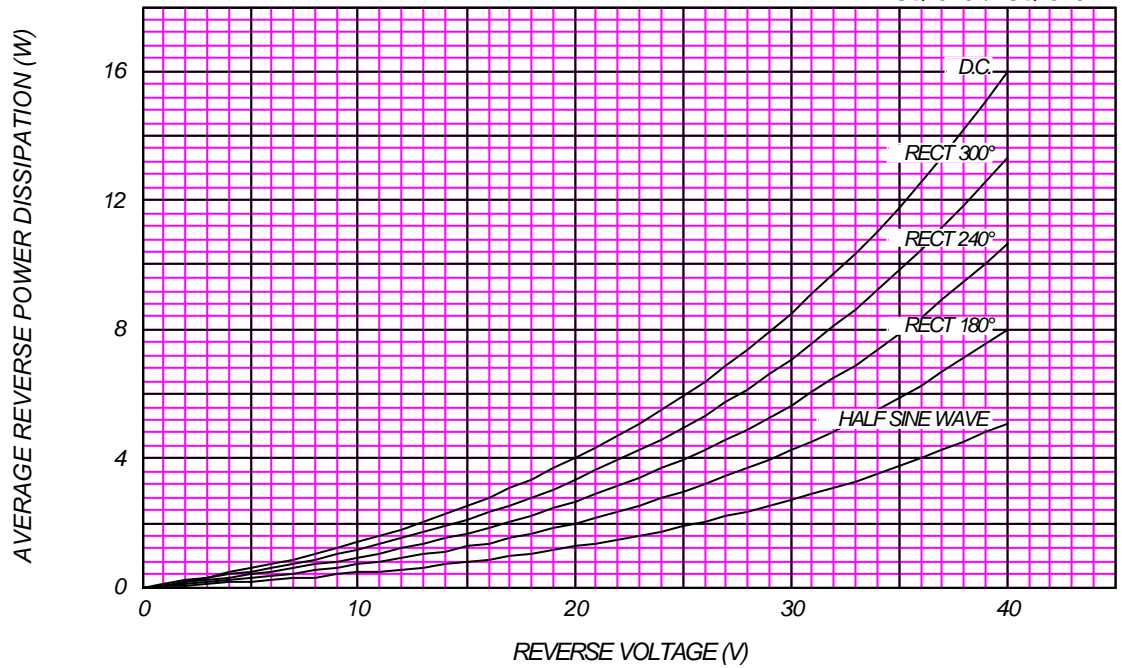
$T_j = 150\text{ }^\circ\text{C}$

KSQ15A04/KSQ15A04B



AVERAGE REVERSE POWER DISSIPATION

KSQ15A04/KSQ15A04B

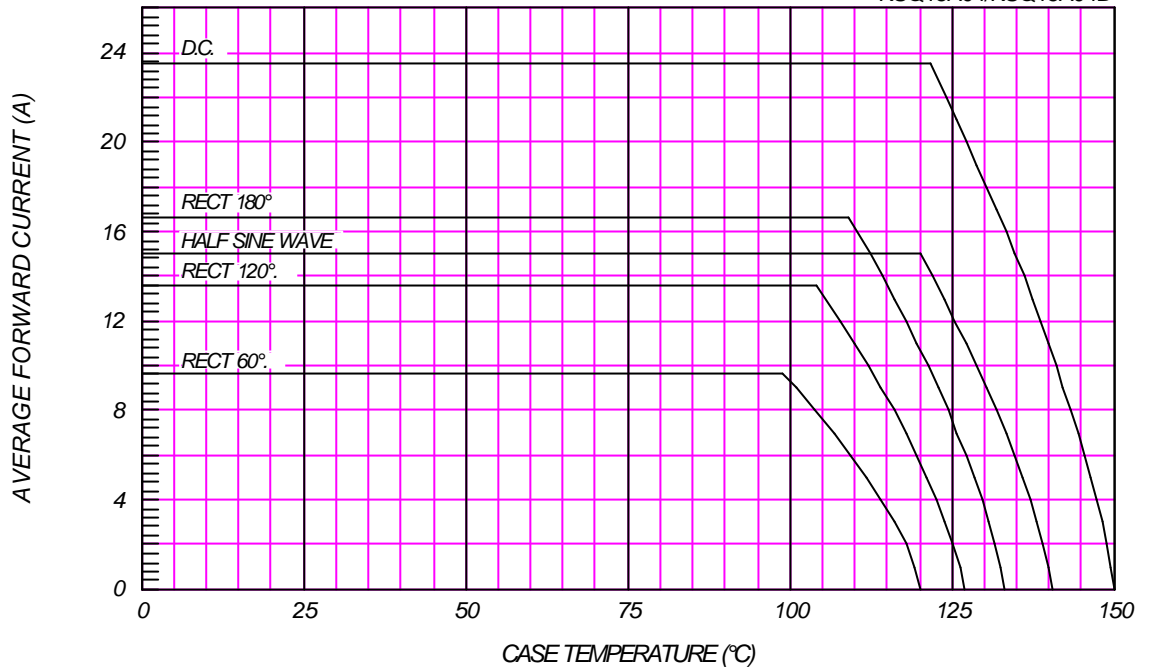




### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=40V$

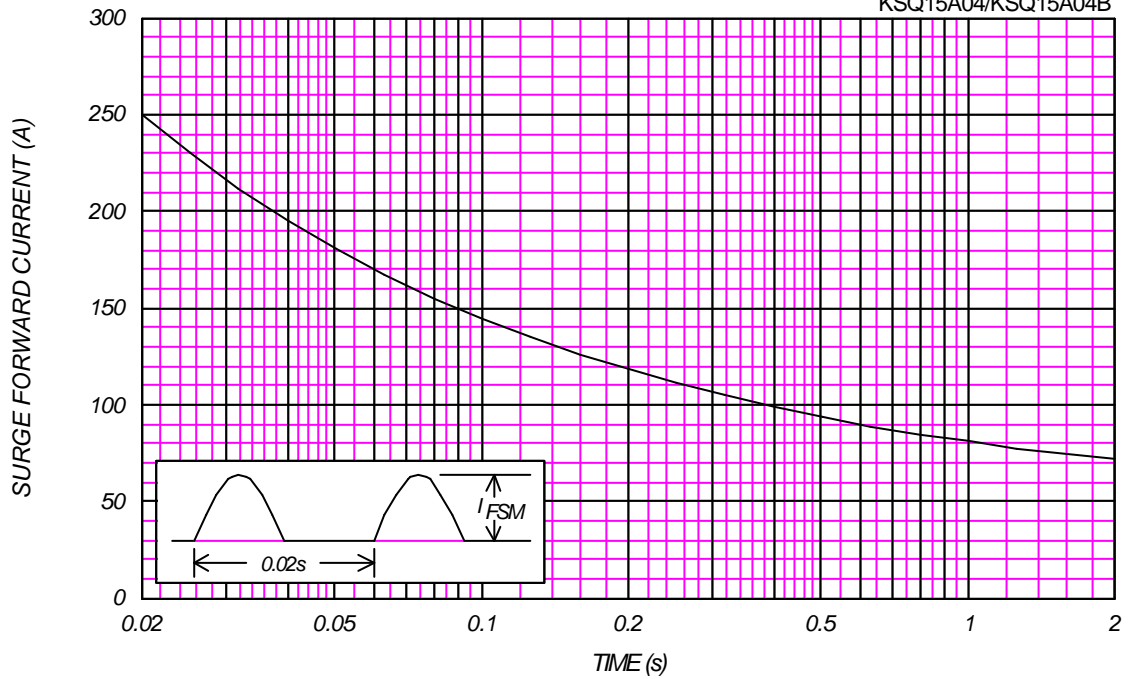
KSQ15A04/KSQ15A04B



### SURGE CURRENT RATINGS

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

KSQ15A04/KSQ15A04B



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KSQ15A04/KSQ15A04B

