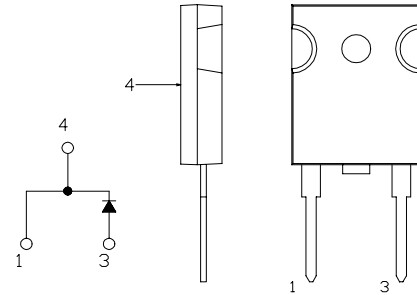


# SBD Type : KSH15A10

OUTLINE DRAWING

## FEATURES

- \* Similar to TO-247AC(TO-3P)Case
- \* Low Forward Voltage Drop
- \* Low Power Loss,High Efficiency
- \* High Surge Current Capability
- \*  $T_j=150^{\circ}\text{C}$  operation



## Maximum Ratings

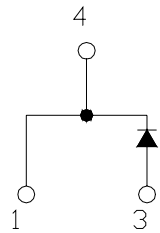
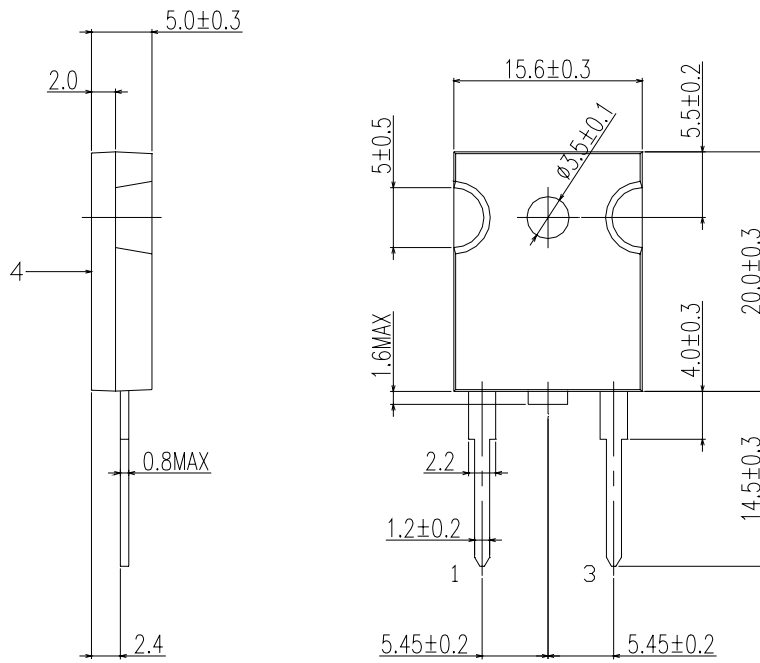
Approx Net Weight: 5.5g

Rating	Symbol	KSH15A10		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100		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

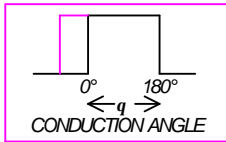
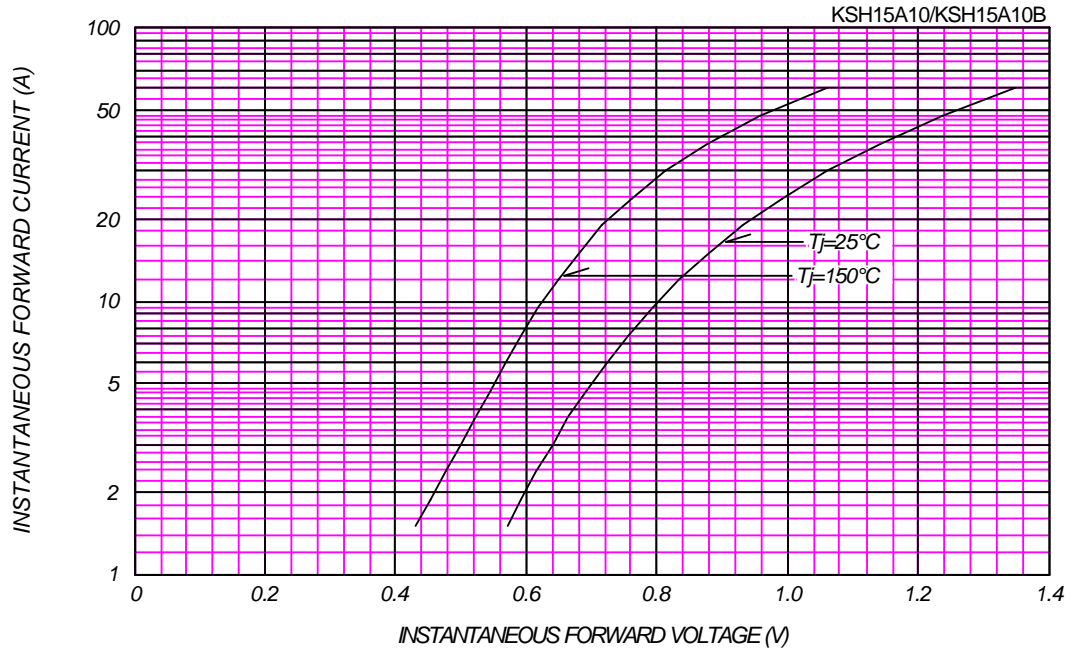
## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}\text{C}$ , $V_{RM}= V_{RRM}$	-	-	2.0	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^{\circ}\text{C}$ , $I_{FM}= 15\text{ A}$	-	-	0.88	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	2.0	$^{\circ}\text{C}/\text{W}$

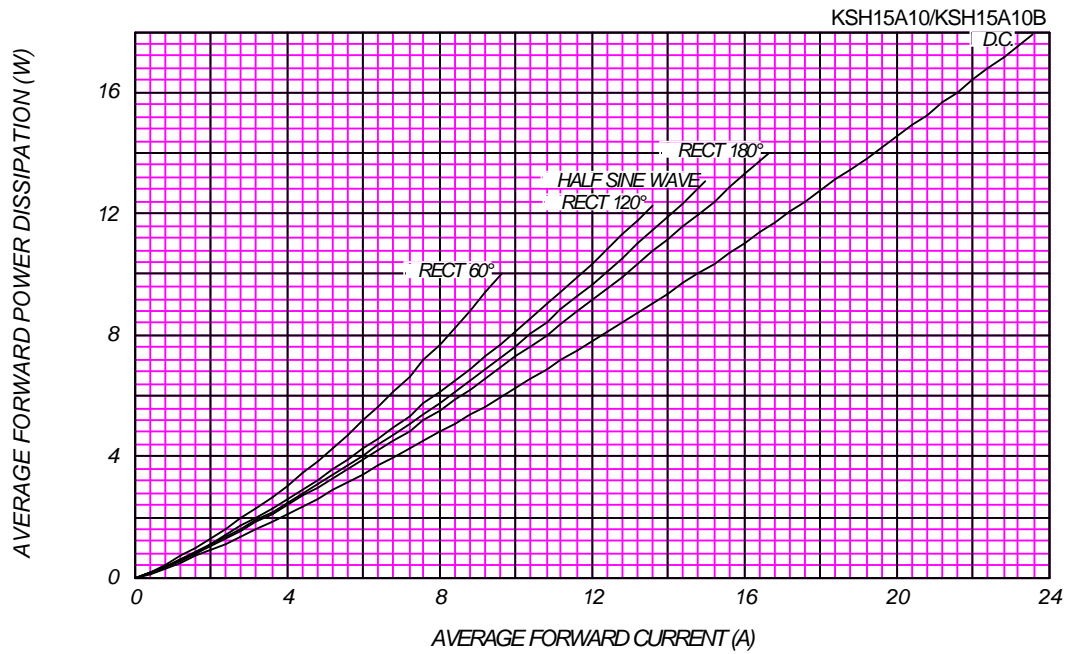
KSH15A10 OUTLINE DRAWING (Dimension in mm)



FORWARD CURRENT VS. VOLTAGE

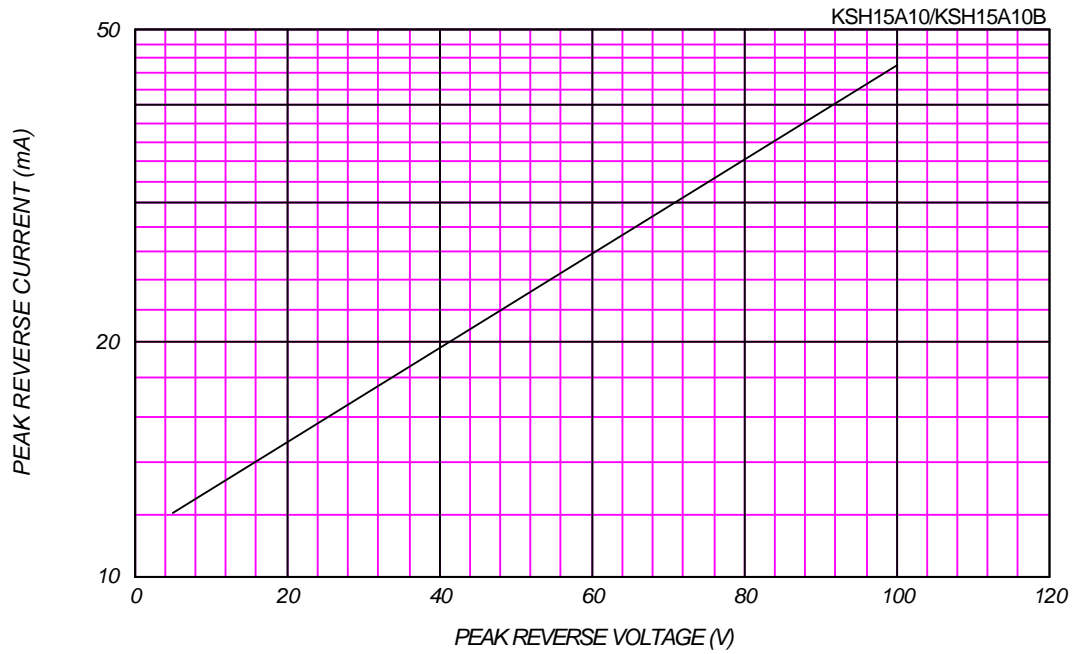


AVERAGE FORWARD POWER DISSIPATION

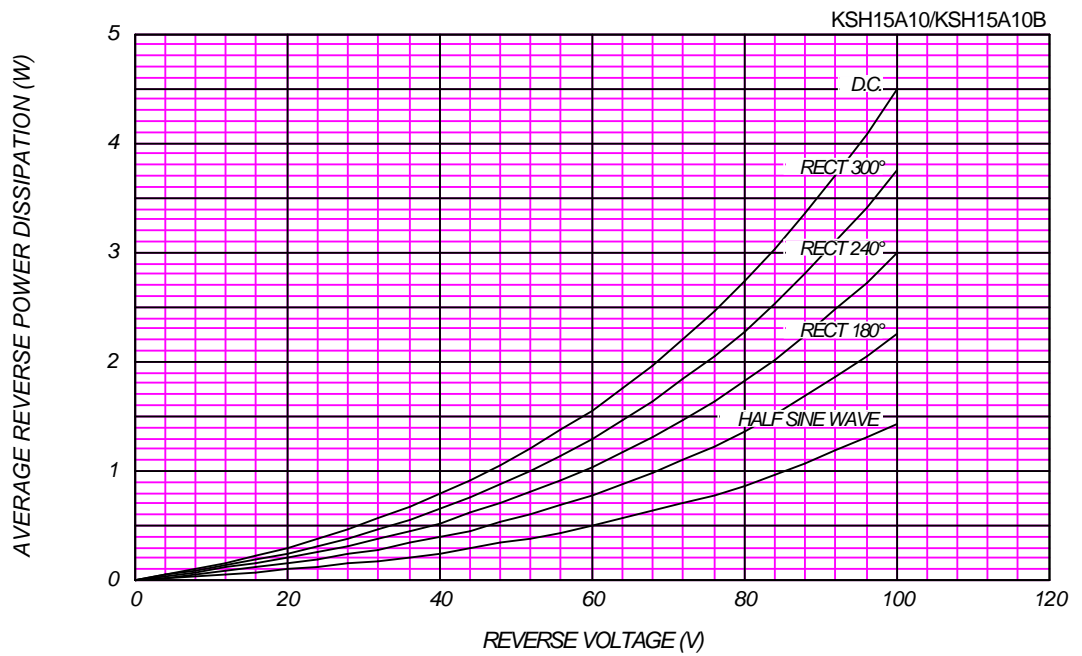


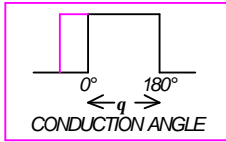
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



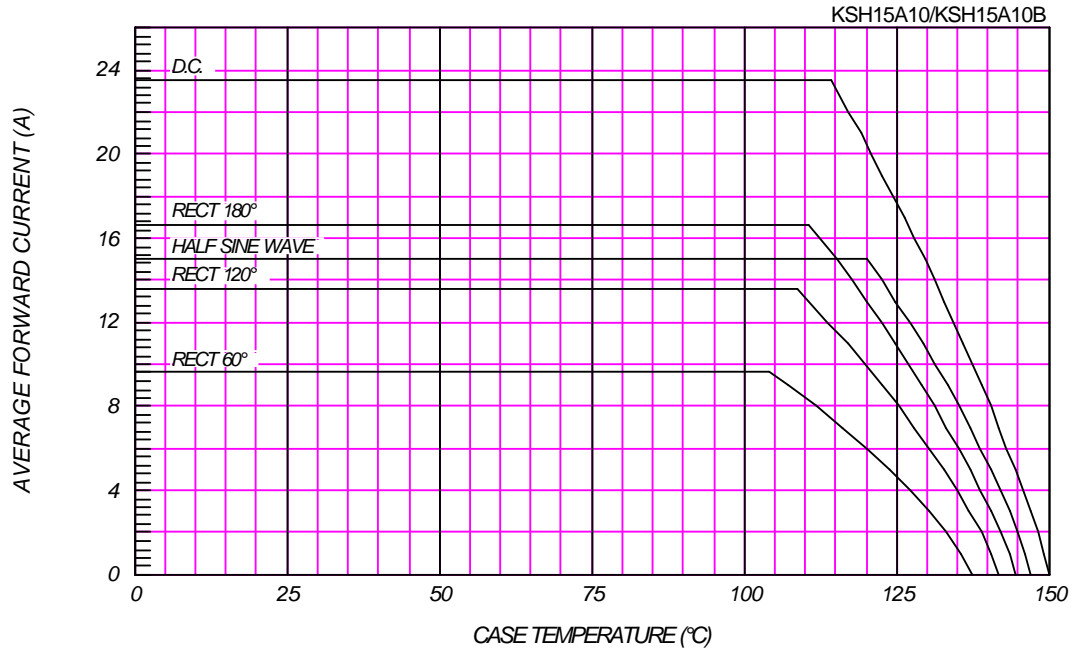
AVERAGE REVERSE POWER DISSIPATION





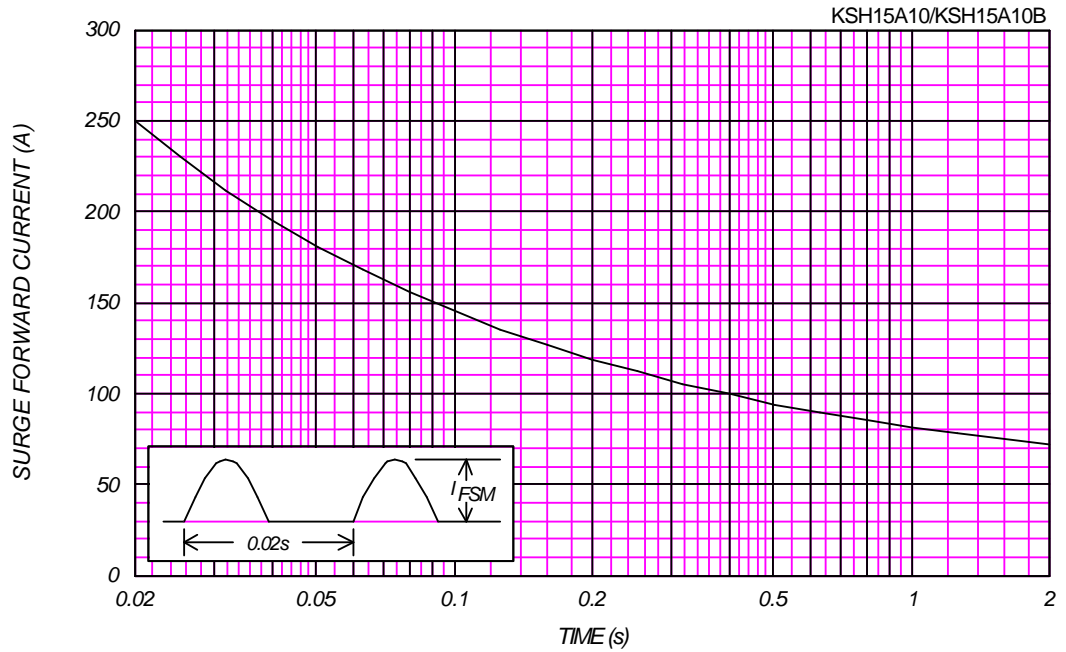
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM} = 100V$



### SURGE CURRENT RATINGS

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



### JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

