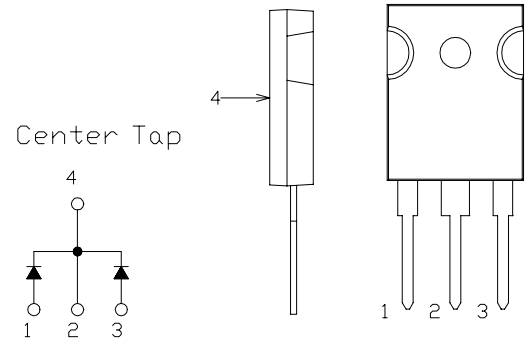


# SBD Type : KCH30A15

OUTLINE DRAWING

**FEATURES**

- \*Similar to TO-247AC Case
- \*Dual Diodes – Cathode Common
- \*High Voltage Low Leakage Current
- \*Low Forward Voltage Drop
- \*Low Power Loss,High Efficiency
- \*High Surge Capability
- \*Tj=150 °C operation



**Maximum Ratings**

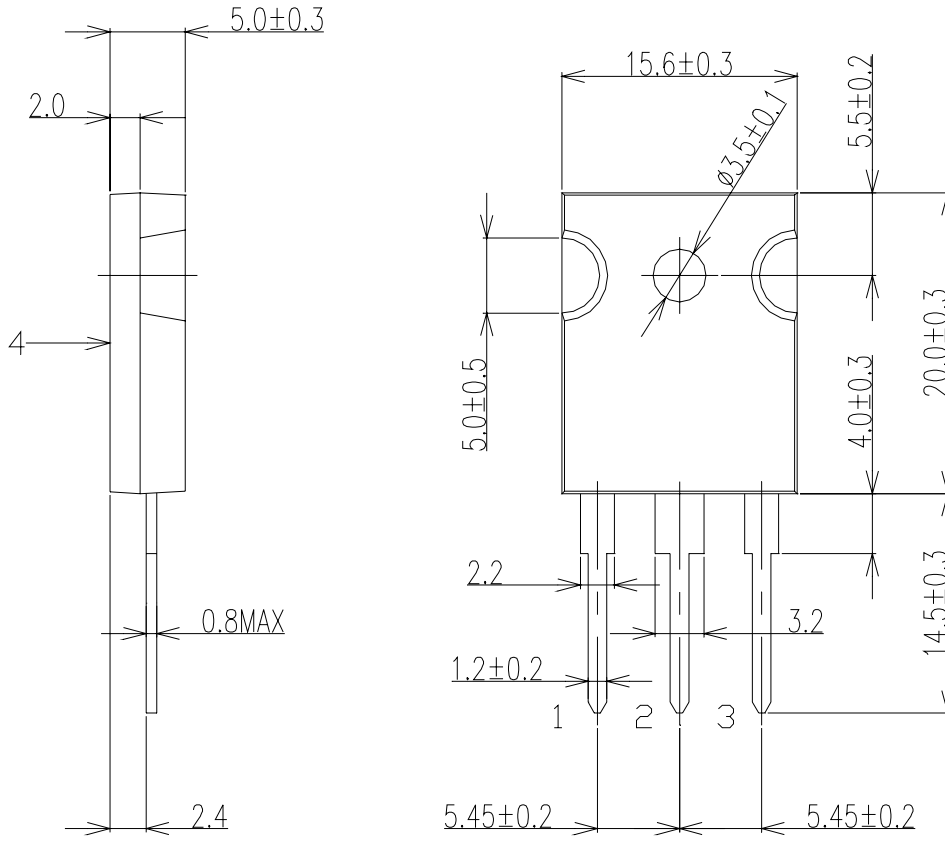
Approx Net Weight: 5.55g

Rating	Symbol	KCH30A15			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	150			V
Average Rectified Output Current	$I_O$	30	$T_c=109^{\circ}C$	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3			A
Surge Forward Current	$I_{FSM}$	250	50Hz Full 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	Ftor	recommended torque = 0.5			N•m

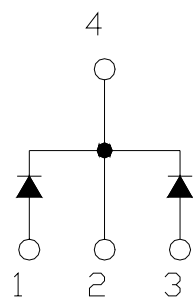
**Electrical • Thermal Characteristics**

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}C, V_{RM}= V_{RRM}$ per Arm	-	-	2	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^{\circ}C, I_{FM}= 15 A$ per Arm	-	-	0.91	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	°C/W

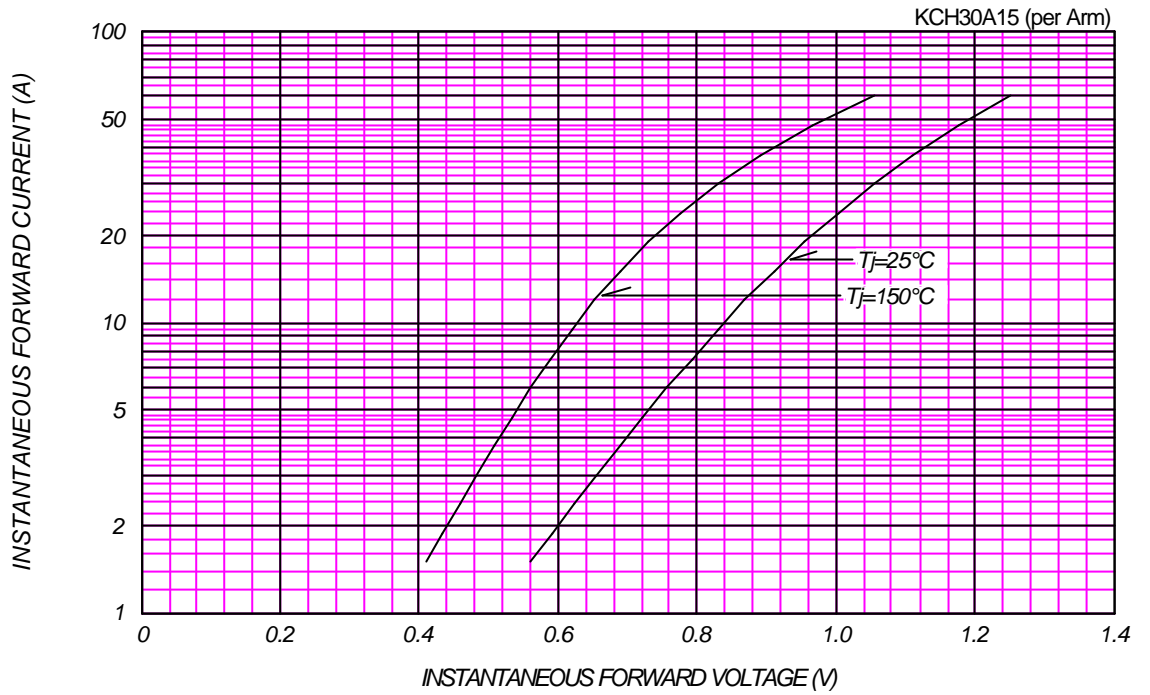
KCH30A15 OUTLINE DRAWING (Dimensions in mm)



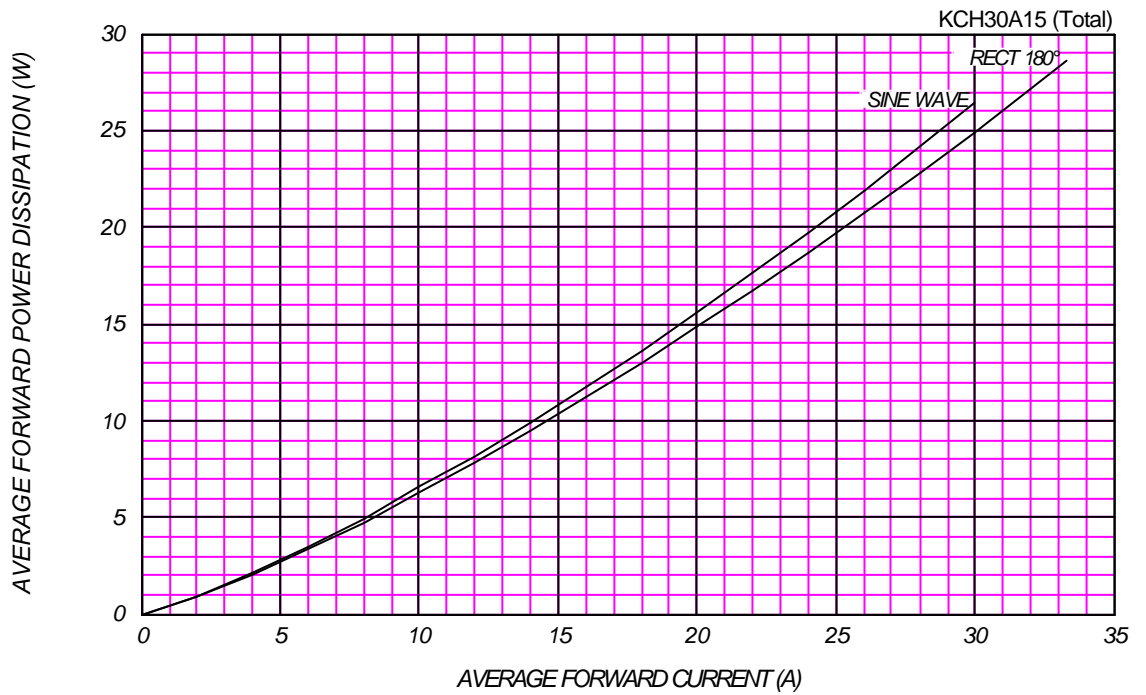
Center Tap



### FORWARD CURRENT VS. VOLTAGE



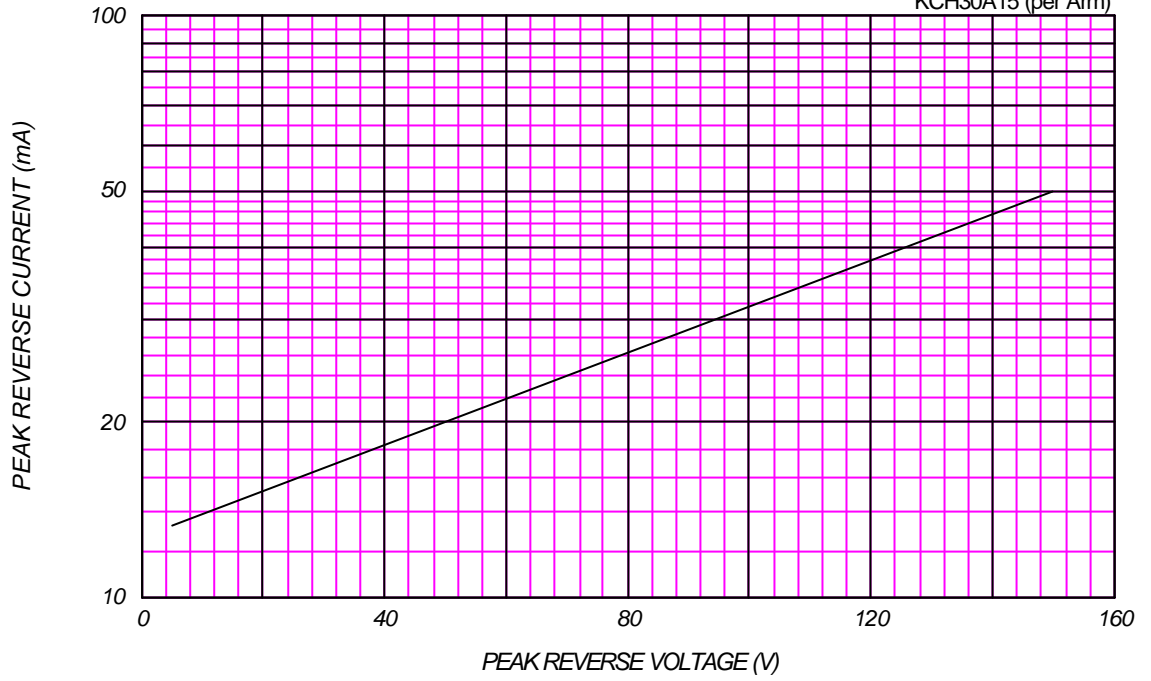
### AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

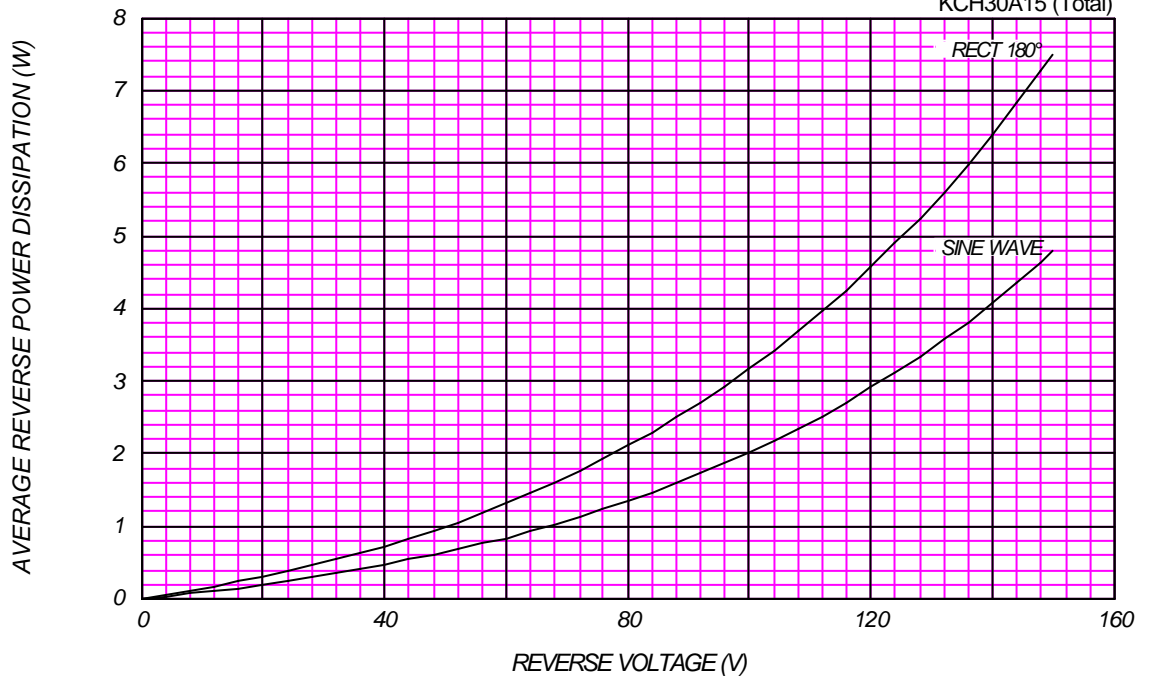
$T_j = 150\text{ }^\circ\text{C}$

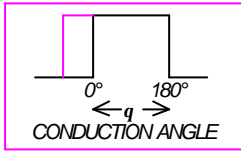
KCH30A15 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

KCH30A15 (Total)

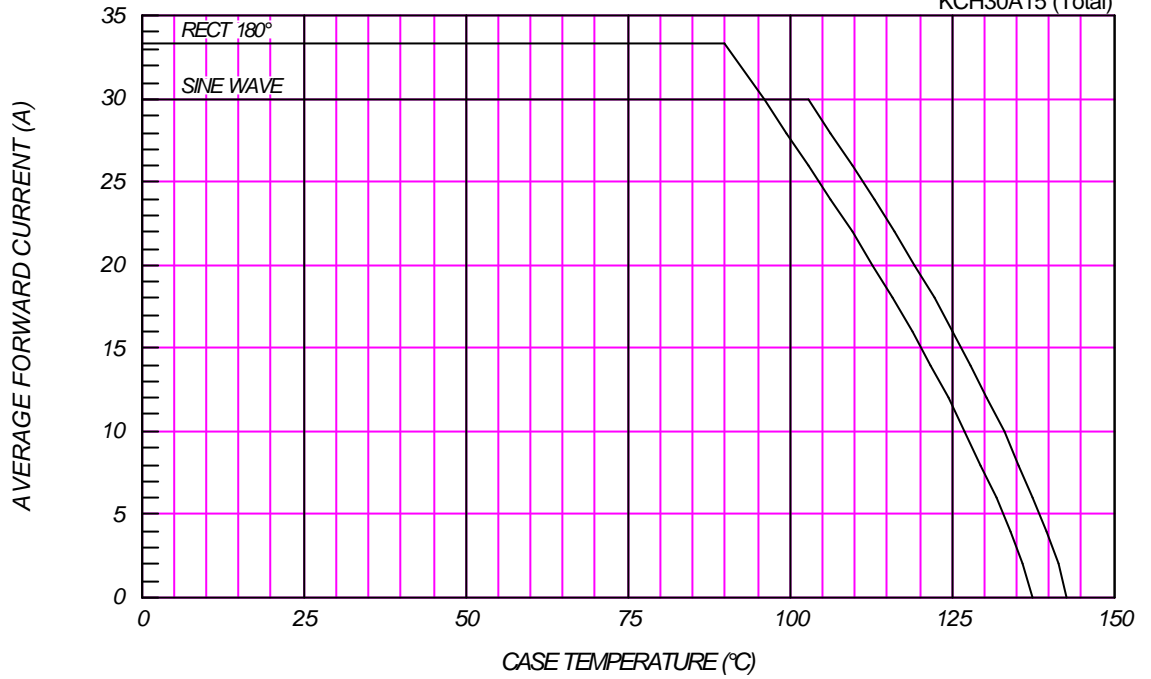




### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM} = 150V$

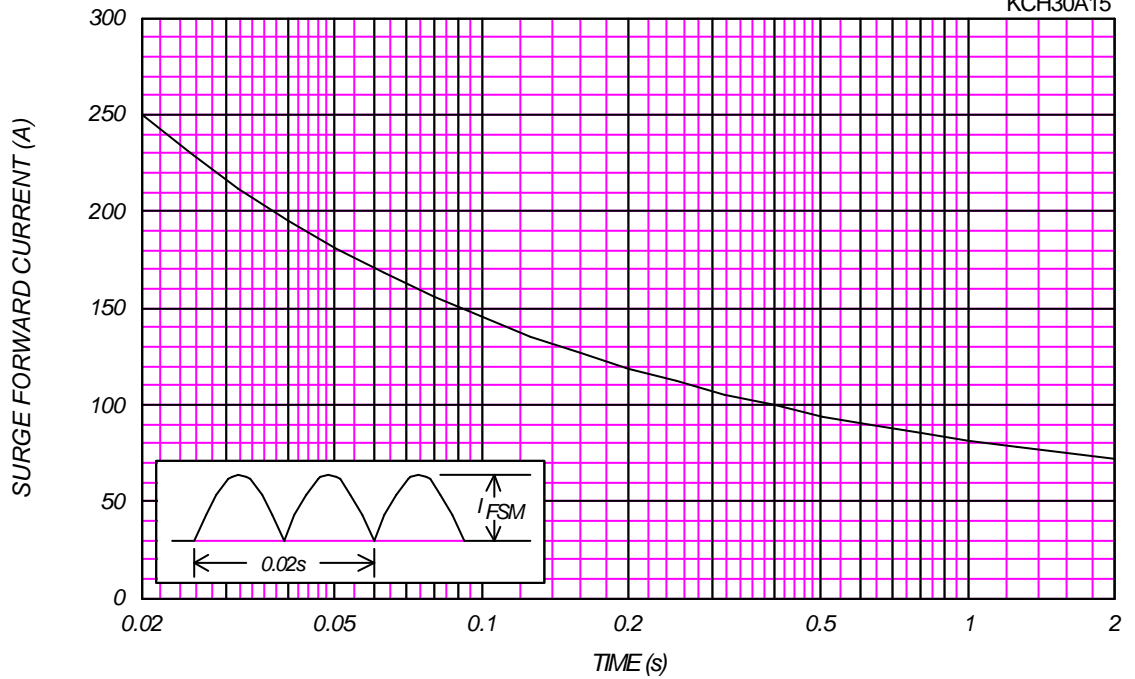
KCH30A15 (Total)



### SURGE CURRENT RATINGS

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

KCH30A15



### JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KCH30A15 (per Arm)

