

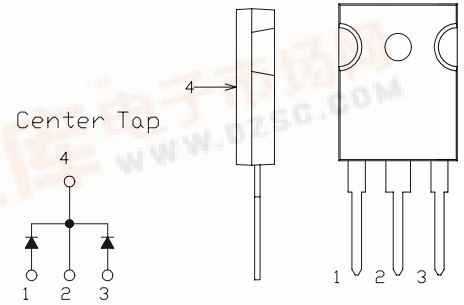


SBD Type : KCH30A10

OUTLINE DRAWING

FEATURES

- * Similar to TO-247AC(TO-3P)Case
- * Dual Diodes – Cathode Common
- * Low Forward Voltage Drop
- * Low Power Loss,High Efficiency
- * High Surge Current Capability
- * Tj=150°C operation



Maximum Ratings

Approx Net Weight: 5.55g

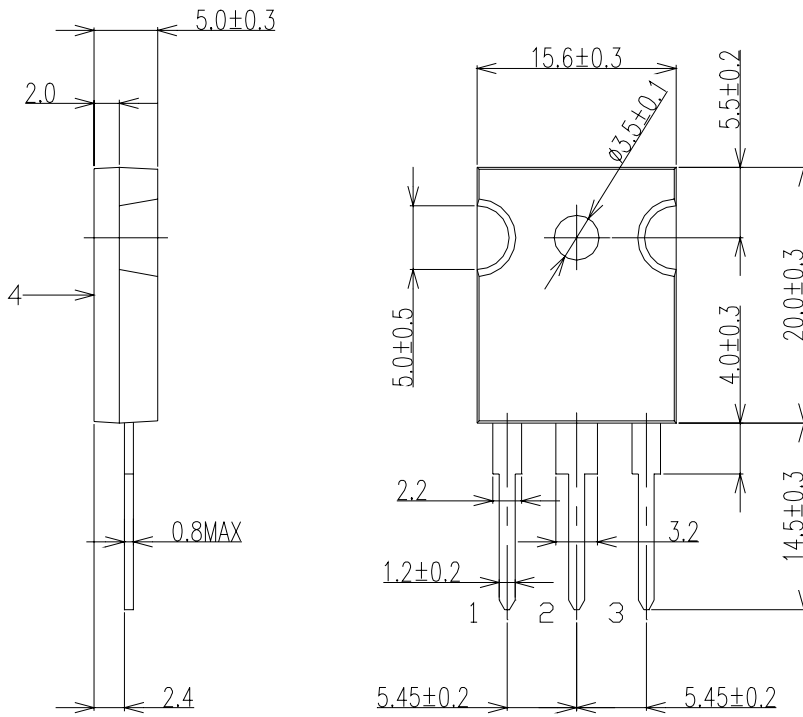
Rating	Symbol	KCH30A10		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100		V
Average Rectified Output Current	I_O	30	$T_c=111^\circ\text{C}$ 50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3		A
Surge Forward Current	I_{FSM}	250	50Hz Full Sine Wave ,1cycle Non-repetitive	A
Operating JunctionTemperature Range	T_{jw}	-40 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +150		$^\circ\text{C}$
Mounting torque	F_{tor}	recommended torque = 0.5		$\text{N}\cdot\text{m}$

Electrical • Thermal Characteristics

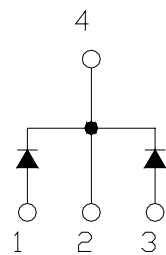
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^\circ\text{C}$, $V_{RM}=V_{RRM}$ per Arm	-	-	2	mA
Peak Forward Voltage	V_{FM}	$T_j=25^\circ\text{C}$, $I_{FM}=15\text{A}$ per Arm	-	-	0.88	V
Thermal Resistance Junction to Case	$R_{th(j-c)}$	Junction to Case	-	-	1.3	$^\circ\text{C}/\text{W}$



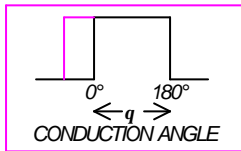
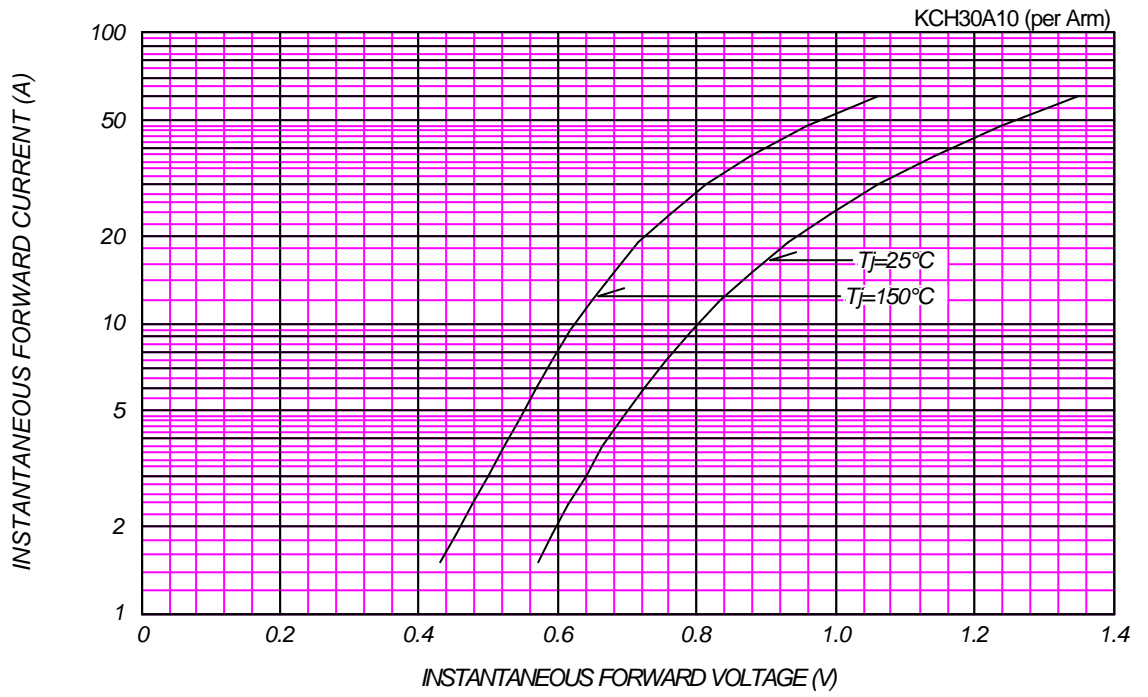
KCH30A10 OUTLINE DRAWING (Dimensions in mm)



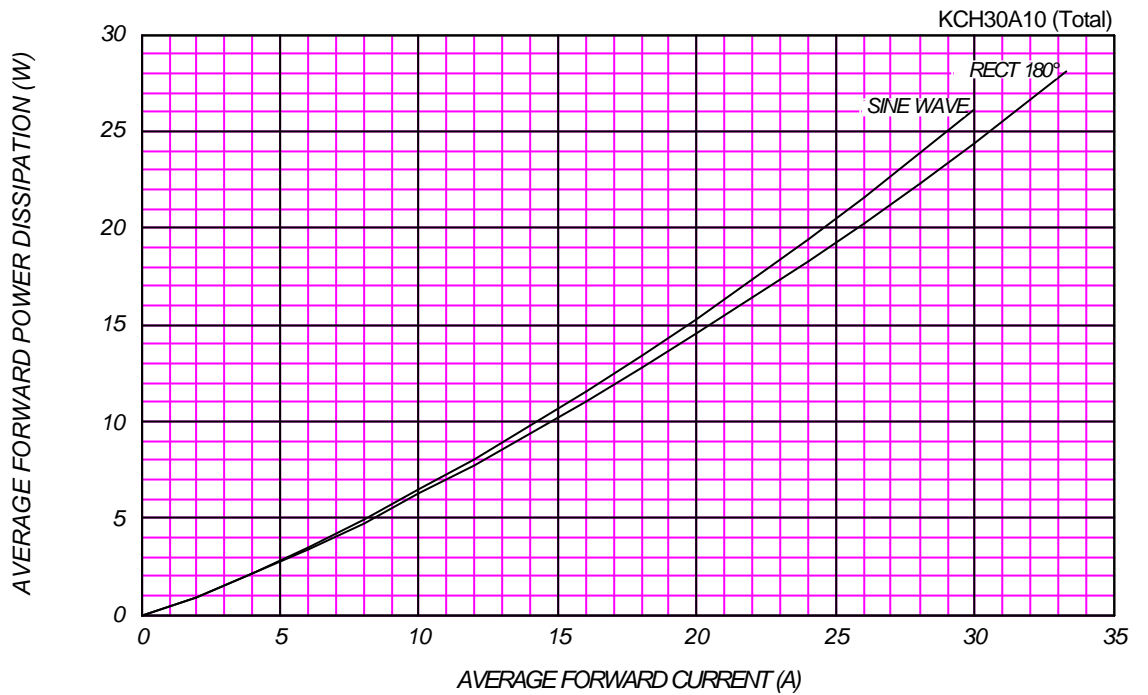
Center Tap



FORWARD CURRENT VS. VOLTAGE

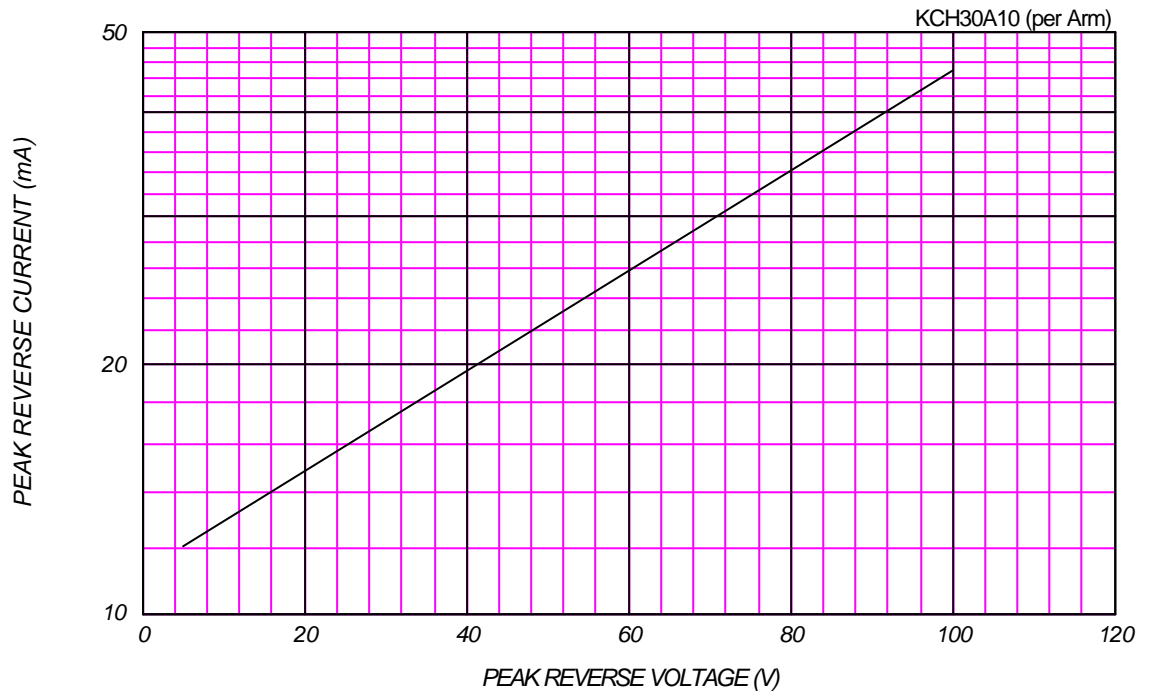


AVERAGE FORWARD POWER DISSIPATION

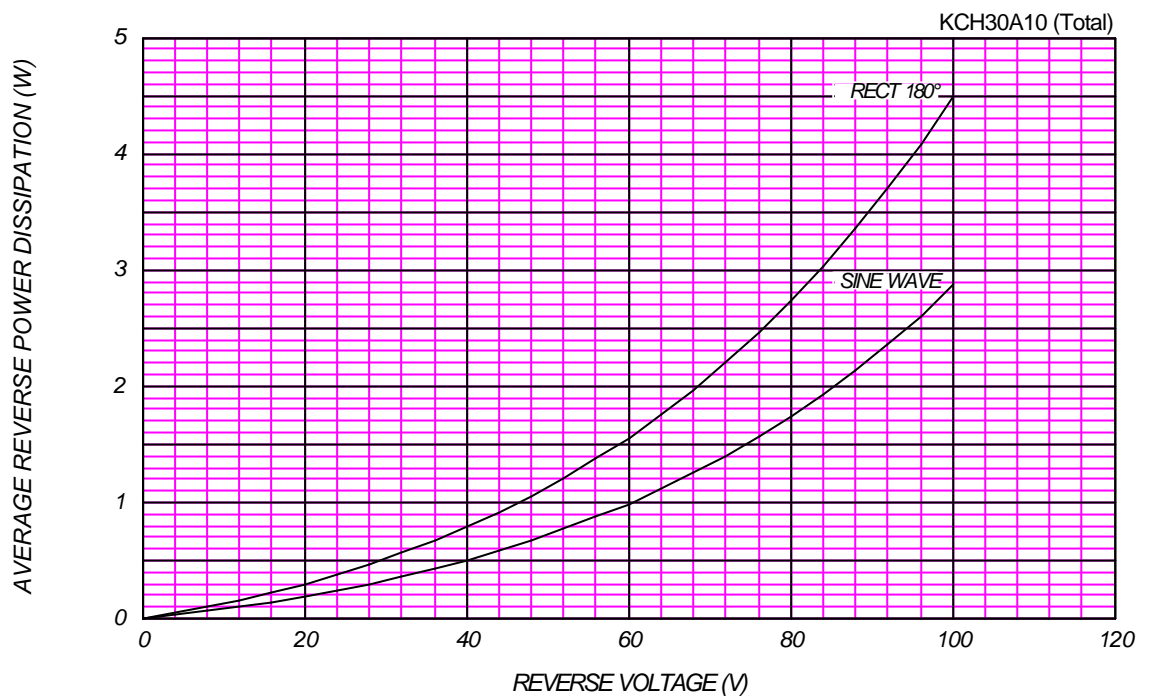


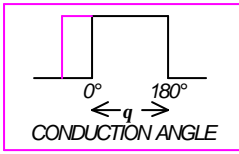
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



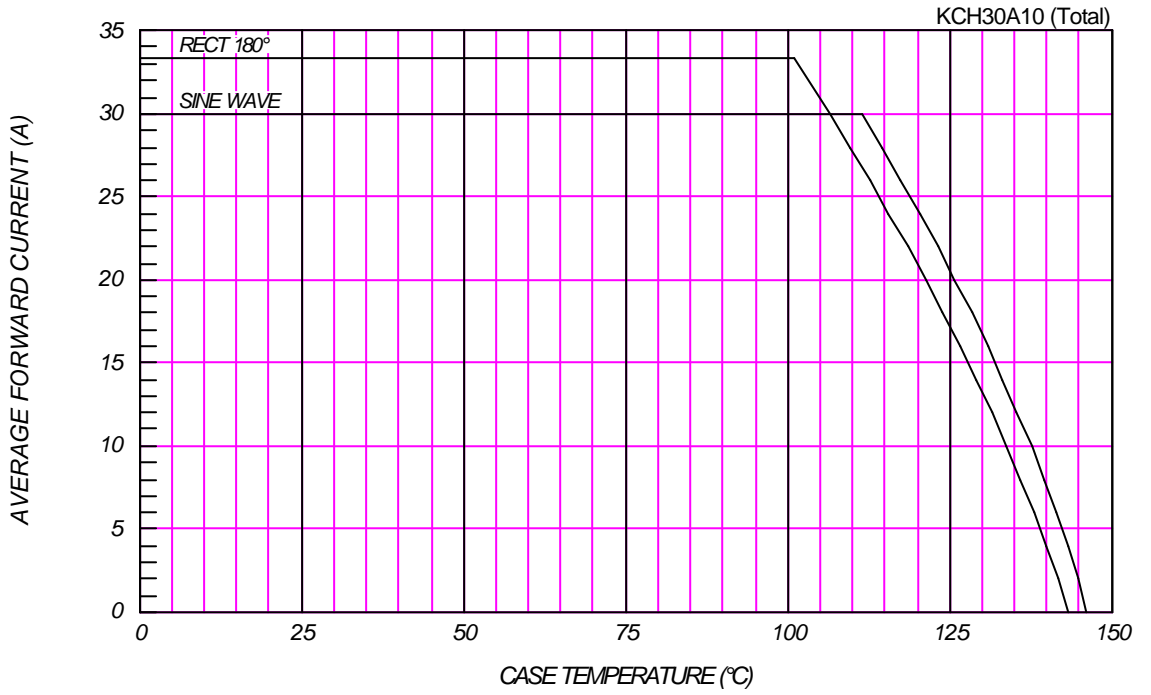
AVERAGE REVERSE POWER DISSIPATION





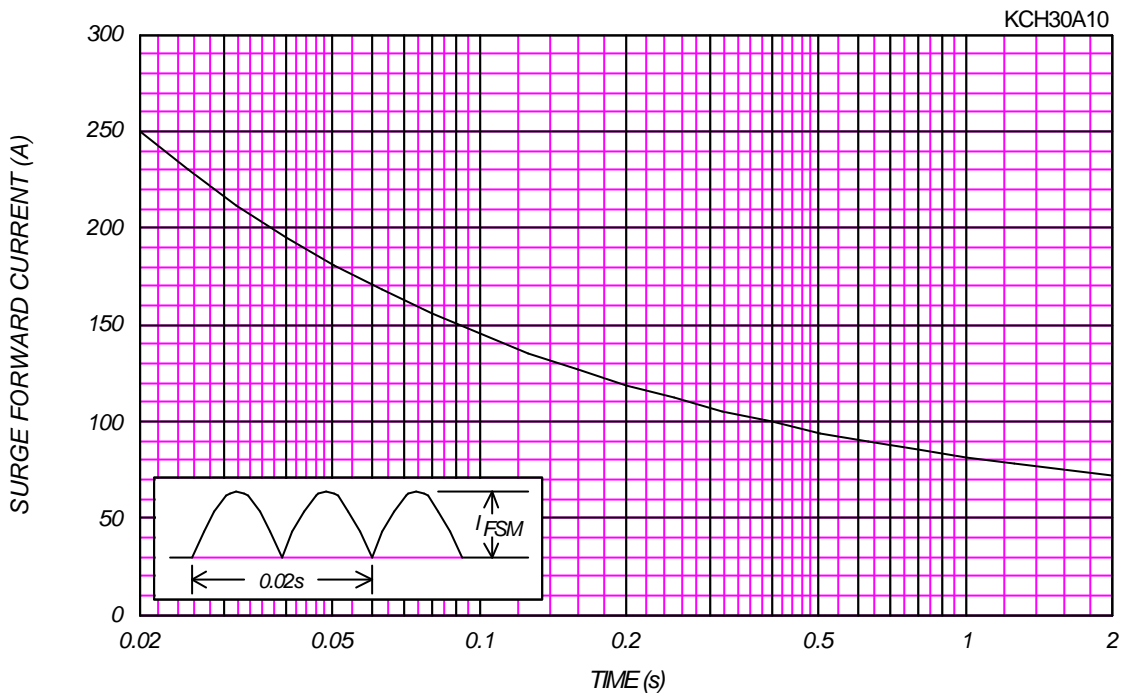
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=100V$



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

