

**30A 200V Cathode Common**

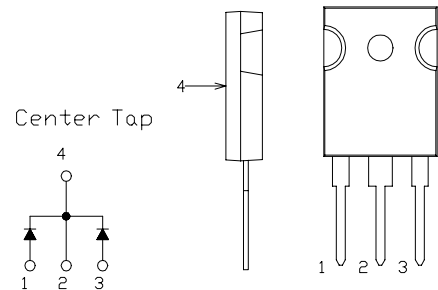
**SBD** Type : **KCH30A20**

OUTLINE DRAWING

For High Frequency Rectification

**FEATURES**

- \* High VRM SBD
- \* Low Forward Voltage Drop and Low Noise
- \* Dual Diodes Cathode Common



**Maximum Ratings**

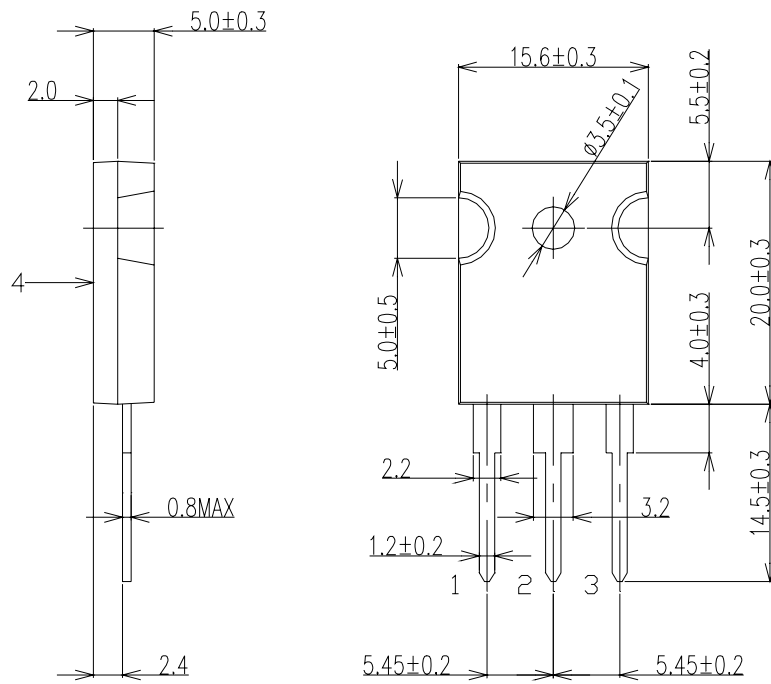
Approx Net Weight:5.55g

Rating	Symbol	KCH30A20		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	200		V
Average Rectified Output Current	$I_O$	30	$T_c=106^{\circ}C$ 50 Hz, Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3		A
Surge Forward Current	$I_{FSM}$	150	50 Hz Full Sine Wave, 1cycle Non-repetitive	A
Operating Junction Temperature Range	$T_{jw}$	- 40 to + 150		$^{\circ}C$
Storage Temperature Range	$T_{stg}$	- 40 to + 150		$^{\circ}C$
Mounting torque		0.5	Recommended value	N•m

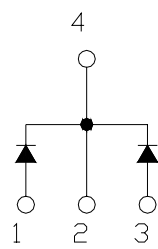
**Electrical • Thermal Characteristics**

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Diode	-	-	300	$\mu A$
Peak Forward Voltage	$V_{FM}$	$T_j=25^{\circ}C, I_{FM}=15A$ per Diode	-	-	0.92	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^{\circ}C/W$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

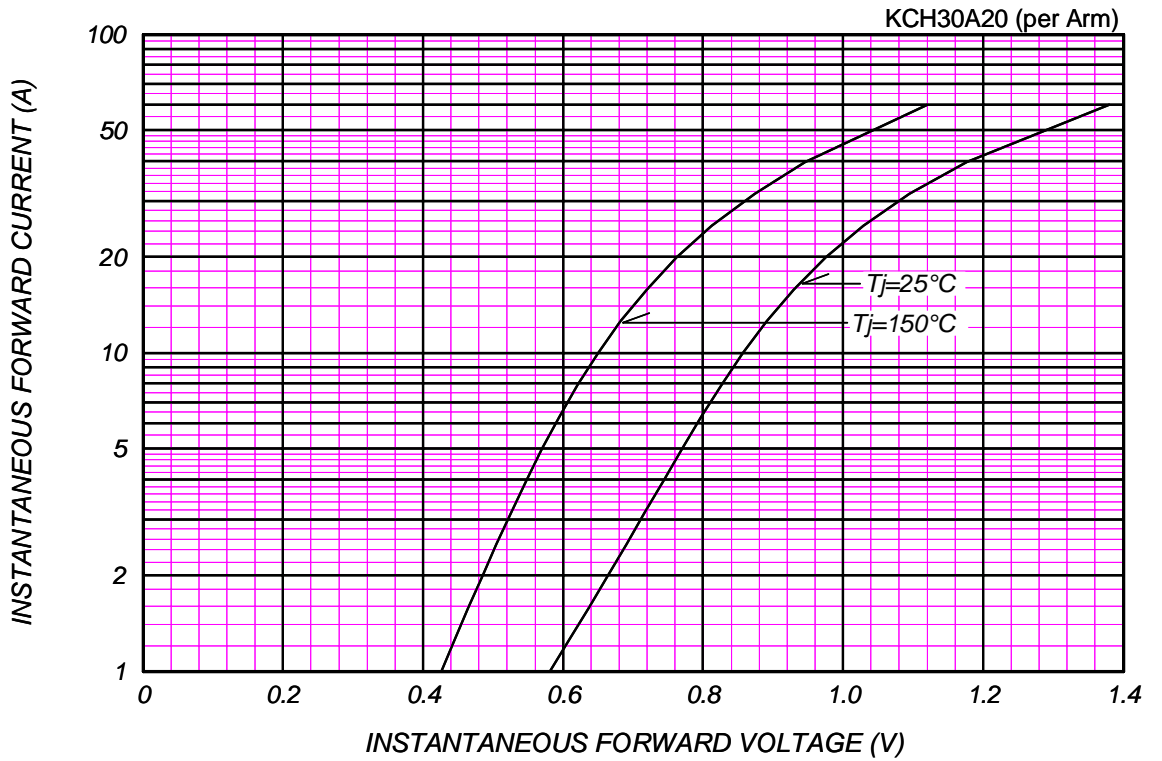
KCH30A20 OUTLINE DRAWING (Dimensions in mm)



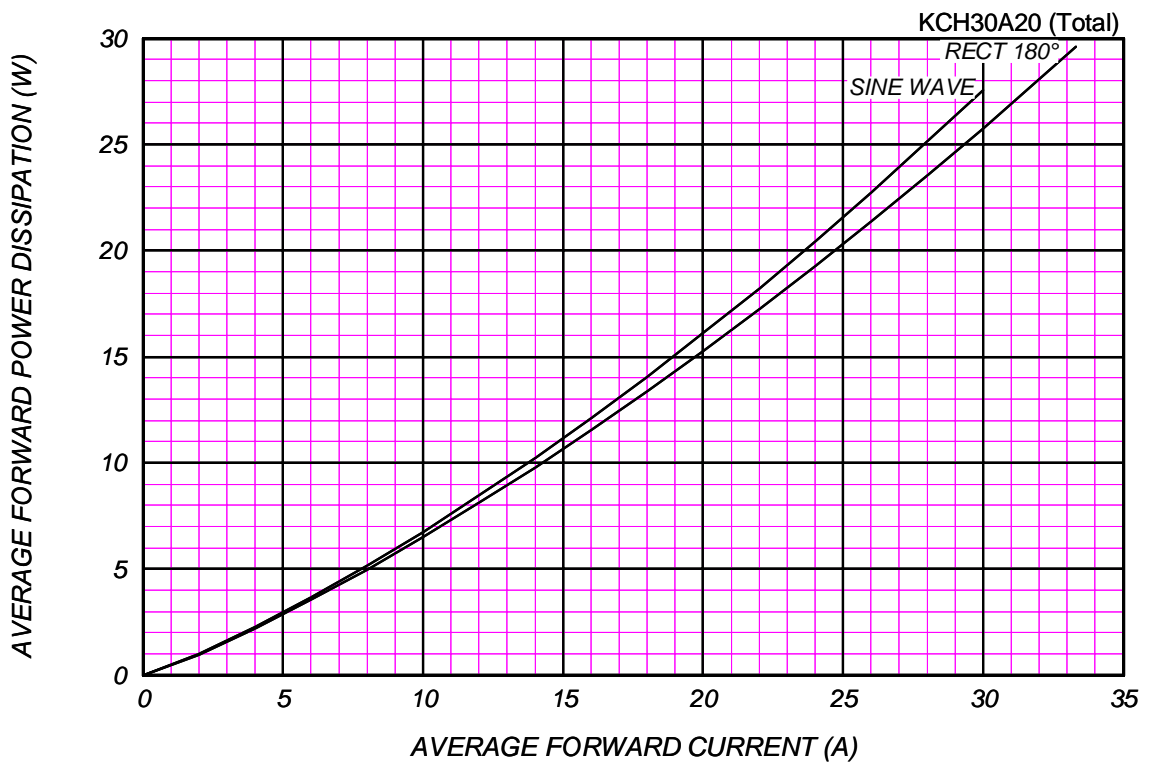
Center Tap



### FORWARD CURRENT VS. VOLTAGE

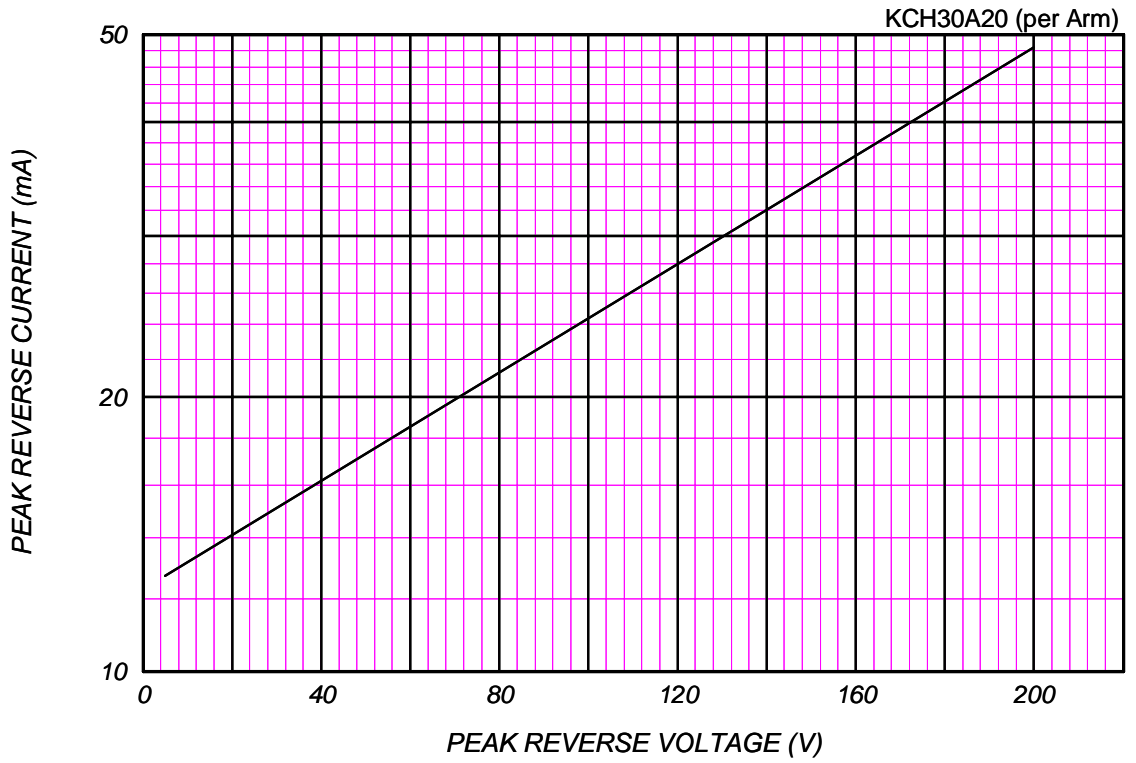


### AVERAGE FORWARD POWER DISSIPATION

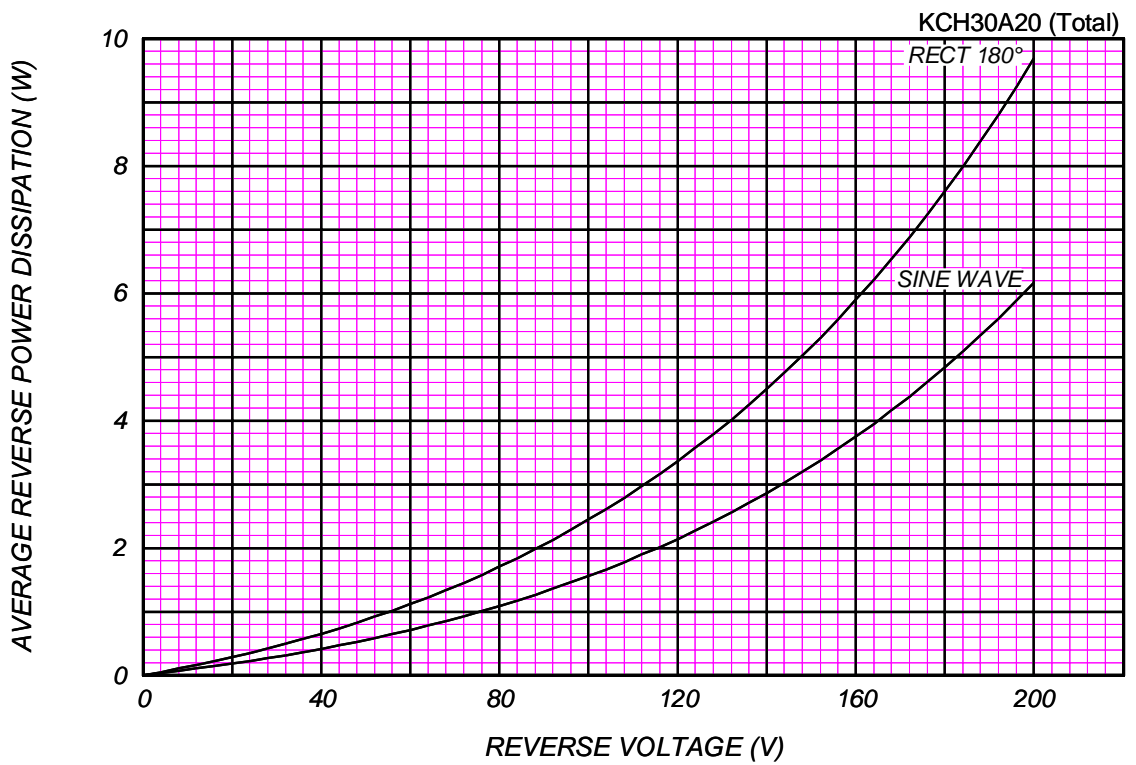


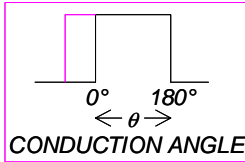
### PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



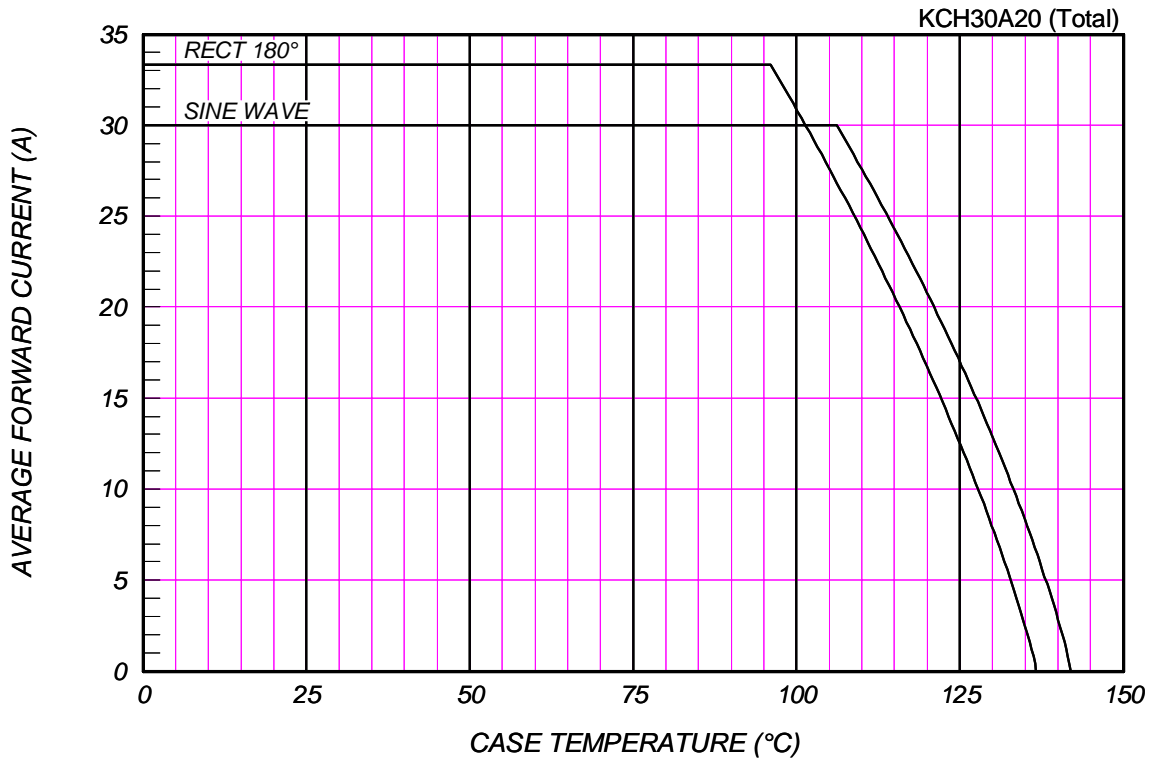
### AVERAGE REVERSE POWER DISSIPATION





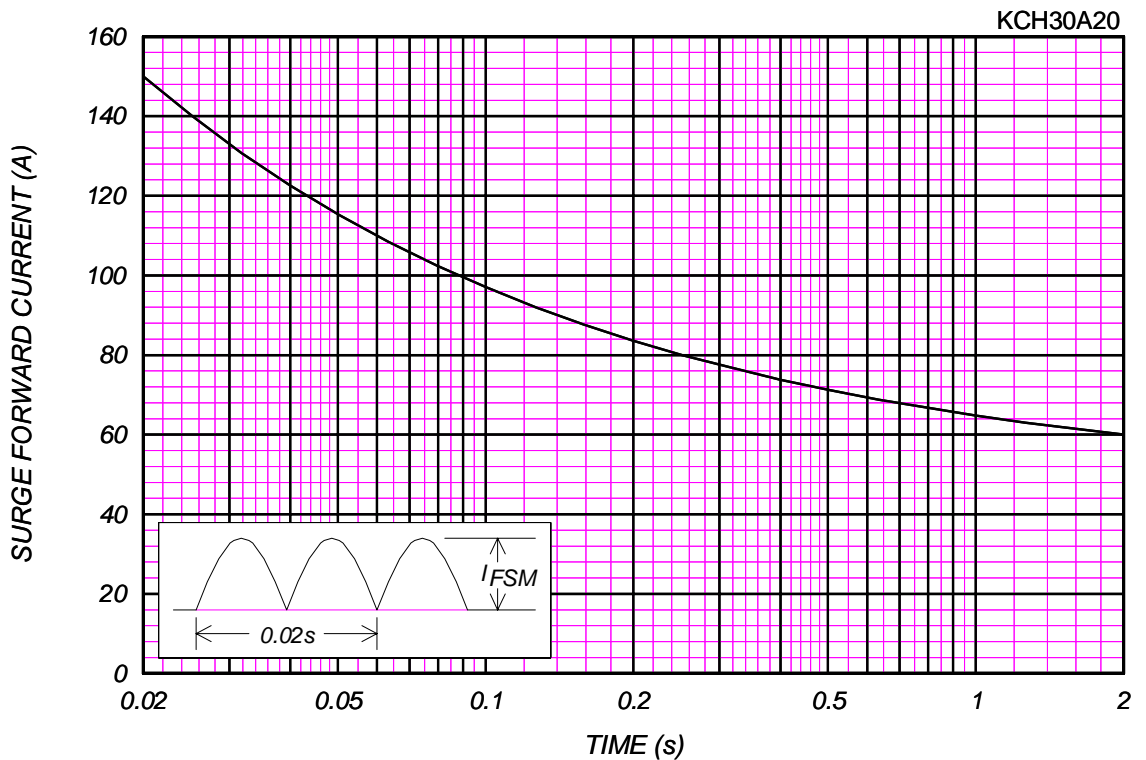
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=200V$



### SURGE CURRENT RATINGS

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



# JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

KCH30A20 (per Arm)

