

## 20A 200V Cathode Common

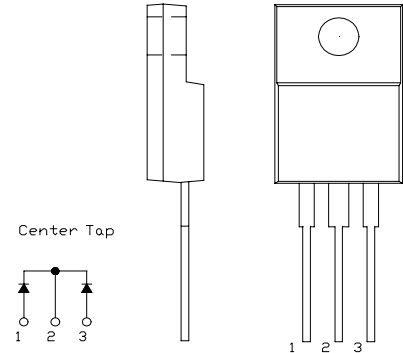
# SBD Type : FCH20A20

## OUTLINE DRAWING

For High Frequency Rectification

### FEATURES

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



## Maximum Ratings

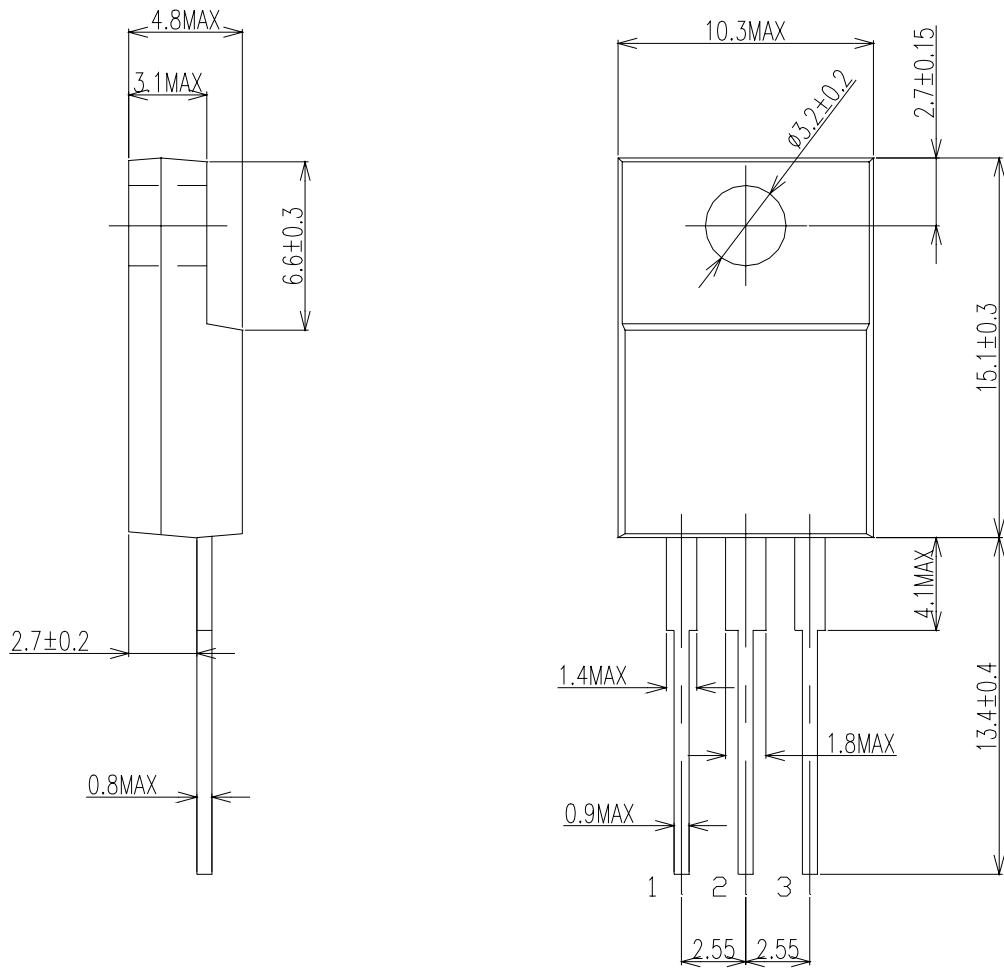
Approx Net Weight:1.75g

Rating	Symbol	FCH20A20			Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	200			V
Average Rectified Output Current	I <sub>O</sub>	20	Tc=118℃	50 Hz,Full Sine Wave Resistive Load	A
RMS Forward Current	I <sub>F(RMS)</sub>	22.2			A
Surge Forward Current	I <sub>FSM</sub>	120	50 Hz Full Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T <sub>jw</sub>	- 40 to + 150			℃
Storage Temperature Range	T <sub>stg</sub>	- 40 to + 150			℃
Mounting torque		0.5	Recommended value		N•m

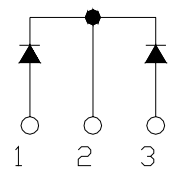
## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^{\circ}\text{C}$ , $V_{RM}=V_{RRM}$ per Diode	-	-	200	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j=25^{\circ}\text{C}$ , $I_{FM}=10\text{A}$ per Diode	-	-	0.90	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^{\circ}\text{C/W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

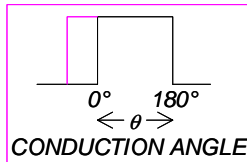
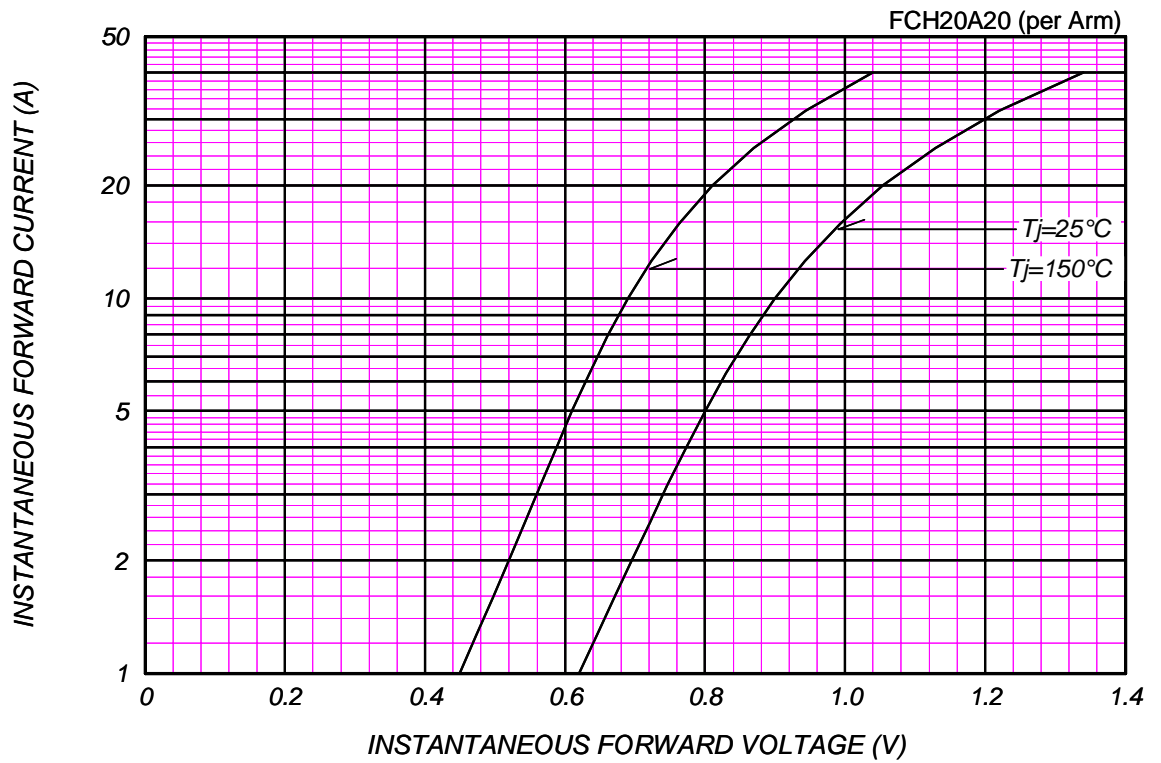
FxH20A20 OUTLINE DRAWING (Dimensions in mm)



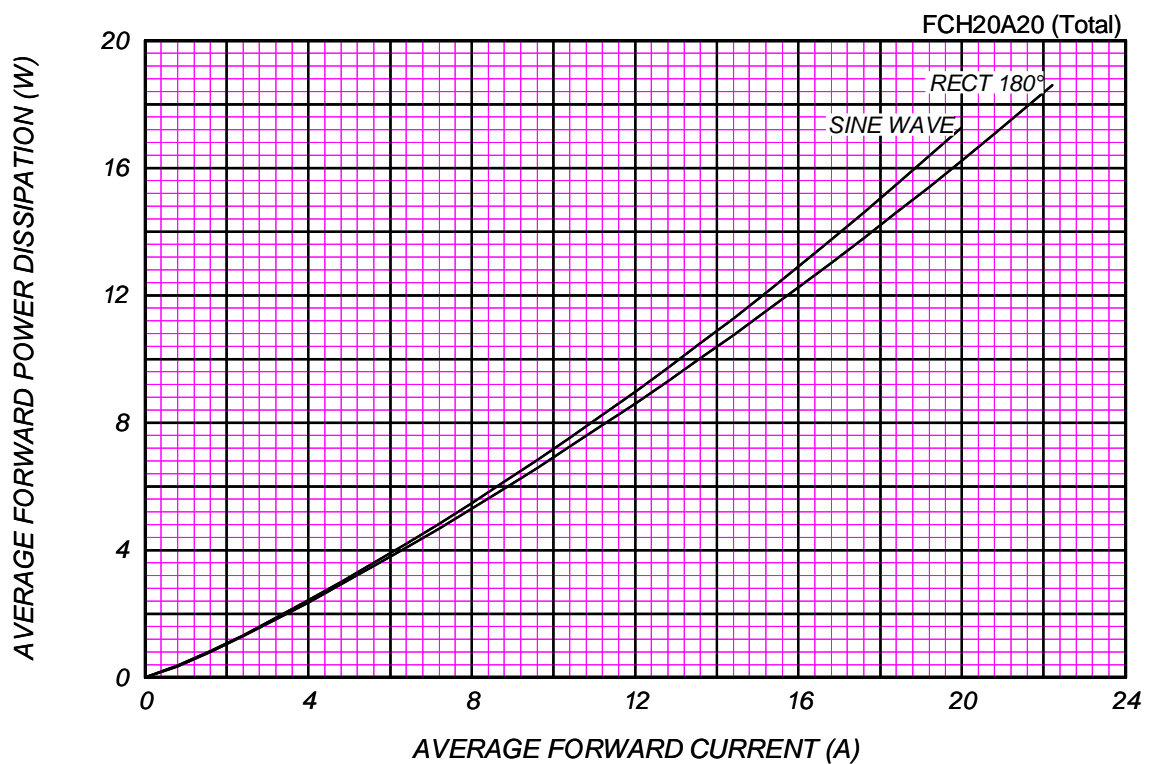
Center Tap



## FORWARD CURRENT VS. VOLTAGE



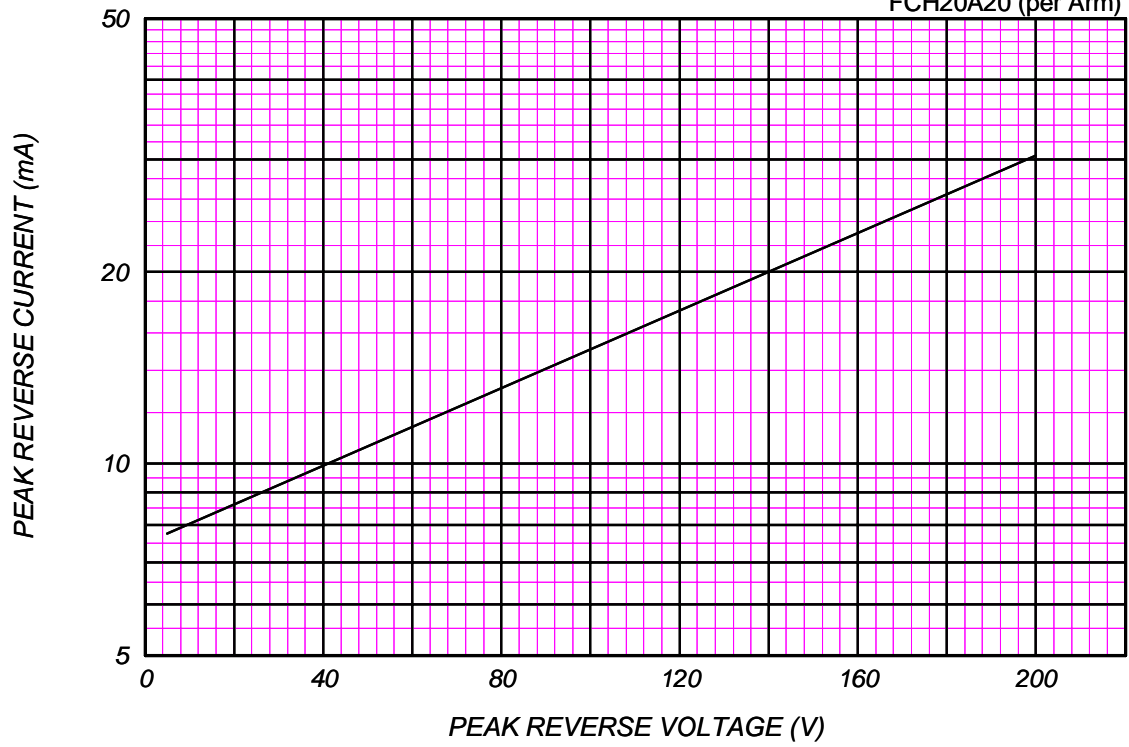
## AVERAGE FORWARD POWER DISSIPATION



### PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

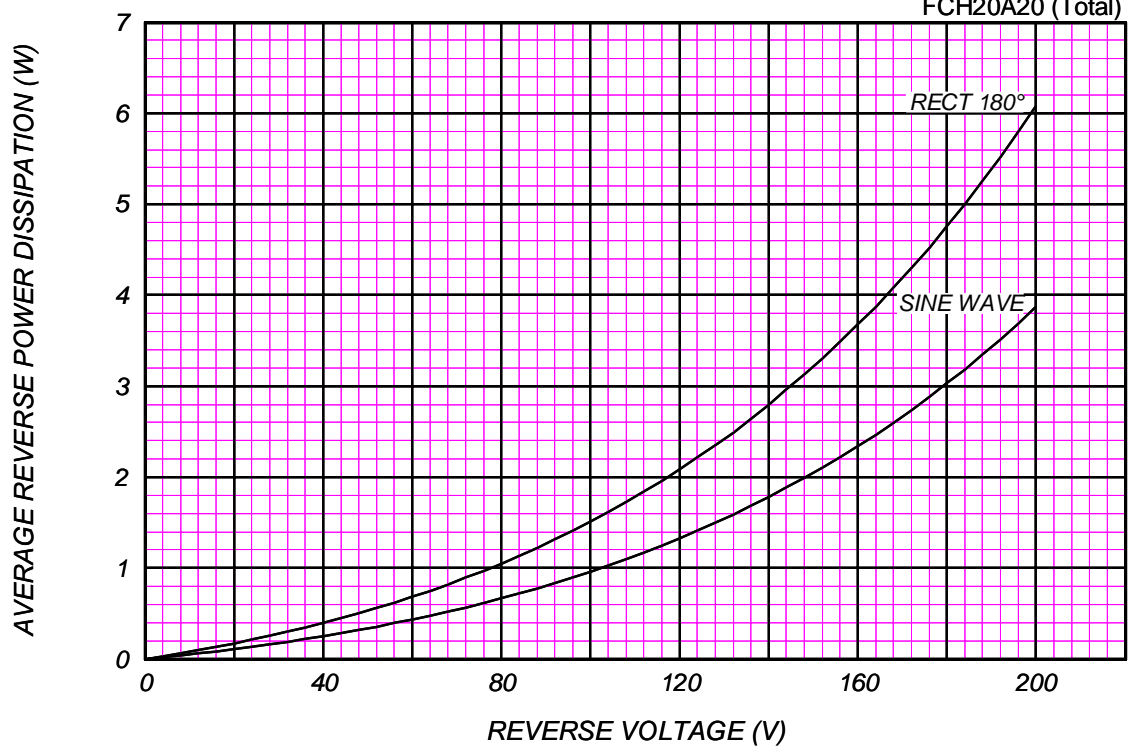
$T_j = 150^\circ\text{C}$

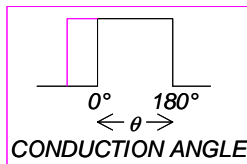
FCH20A20 (per Arm)



### AVERAGE REVERSE POWER DISSIPATION

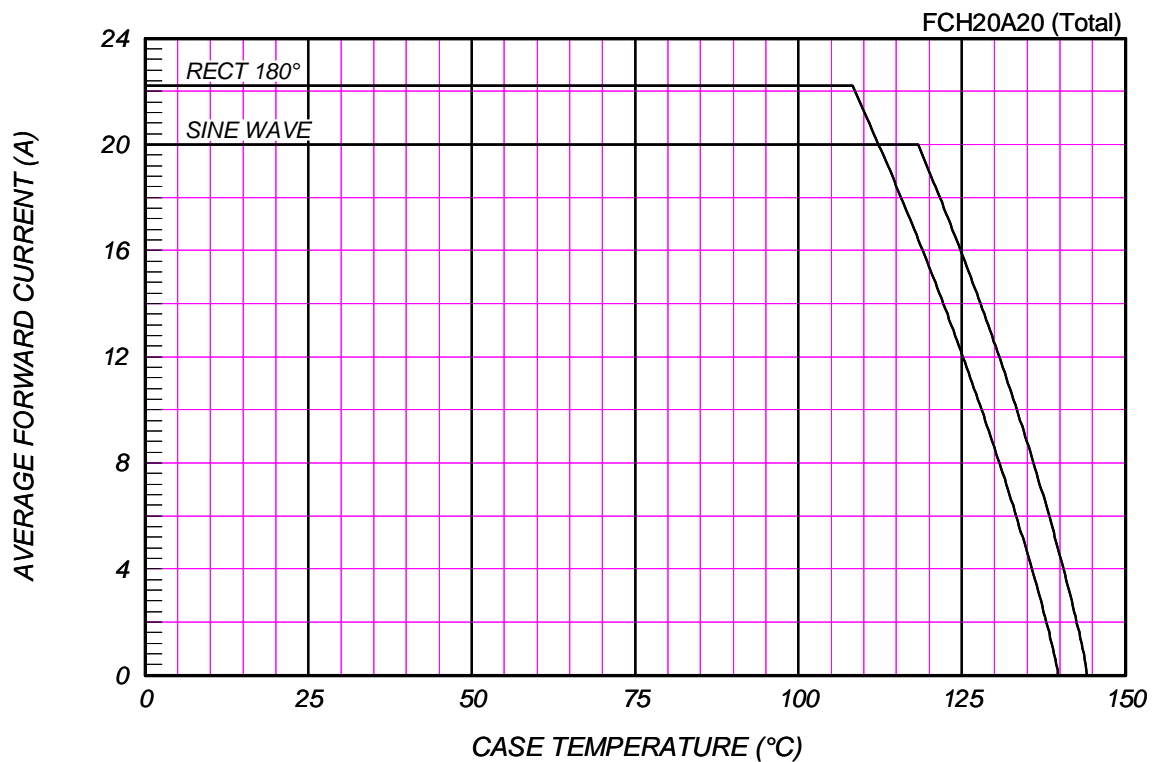
FCH20A20 (Total)





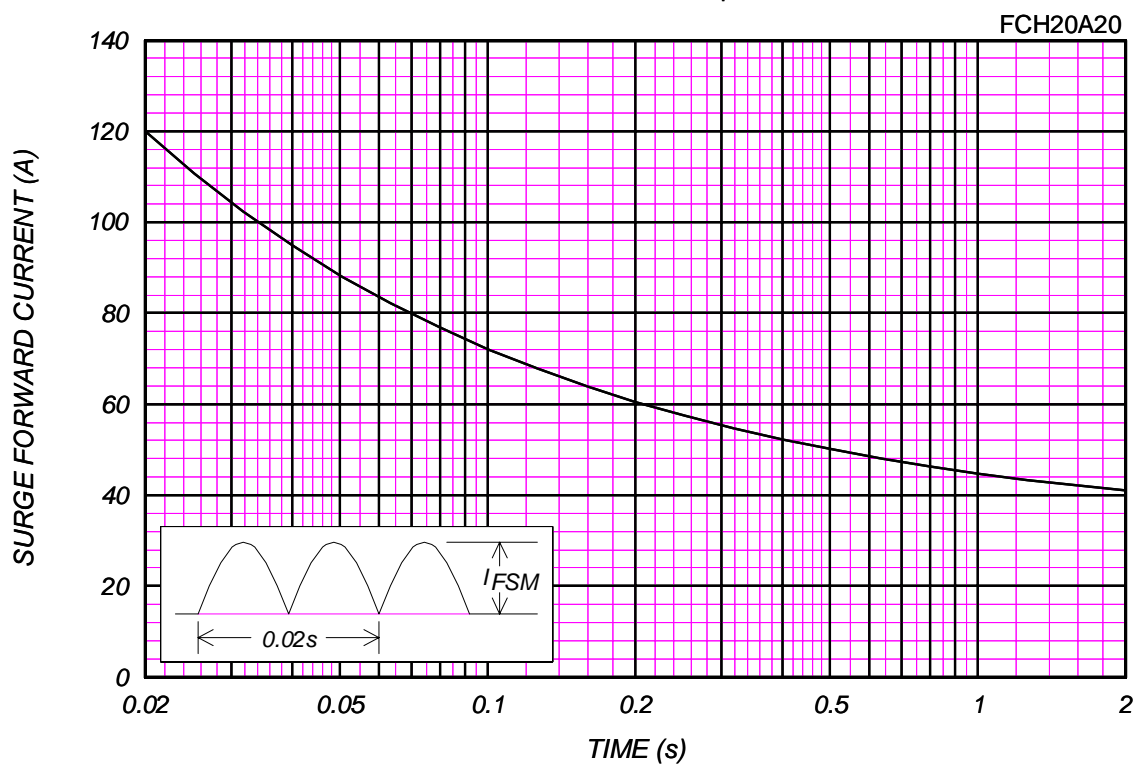
## AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=200V$



## SURGE CURRENT RATINGS

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



# JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCH20A20 (per Arm)

