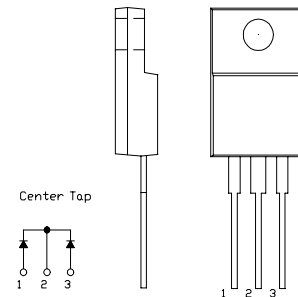


# SBD Type : FCL20A015

OUTLINE DRAWING

**FEATURES**

- \*TO-220AB Case
- \*Fully Molded
- \*Dual Diodes – Cathode Common
- \*Extremely Low Forward Voltage Drop
- \*Oring Diode
- \*High Surge Capability



## Maximum Ratings

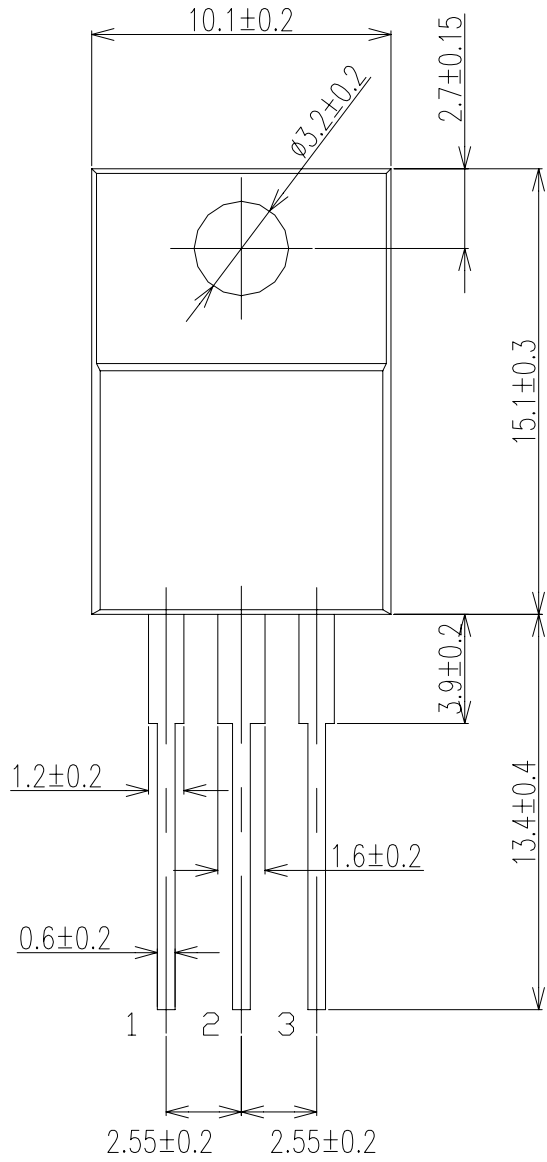
Approx Net Weight: 1.75g

Rating	Symbol	FCL20A015			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	15			V
Average Rectified Output Current	$I_O$	20	$T_c=96^{\circ}\text{C}$	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	22.2			A
Surge Forward Current	$I_{FSM}$	180	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	$T_{jw}$	-40 to +125			$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to +125			$^{\circ}\text{C}$
Mounting torque	$F_{tor}$	recommended torque = 0.5			N•m

## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}\text{C}$ , $V_{RM}= V_{RRM}$ per arm	-	-	10	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^{\circ}\text{C}$ , $I_{FM}= 10\text{ A}$ per arm	-	-	0.4	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^{\circ}\text{C}/\text{W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	$^{\circ}\text{C}/\text{W}$

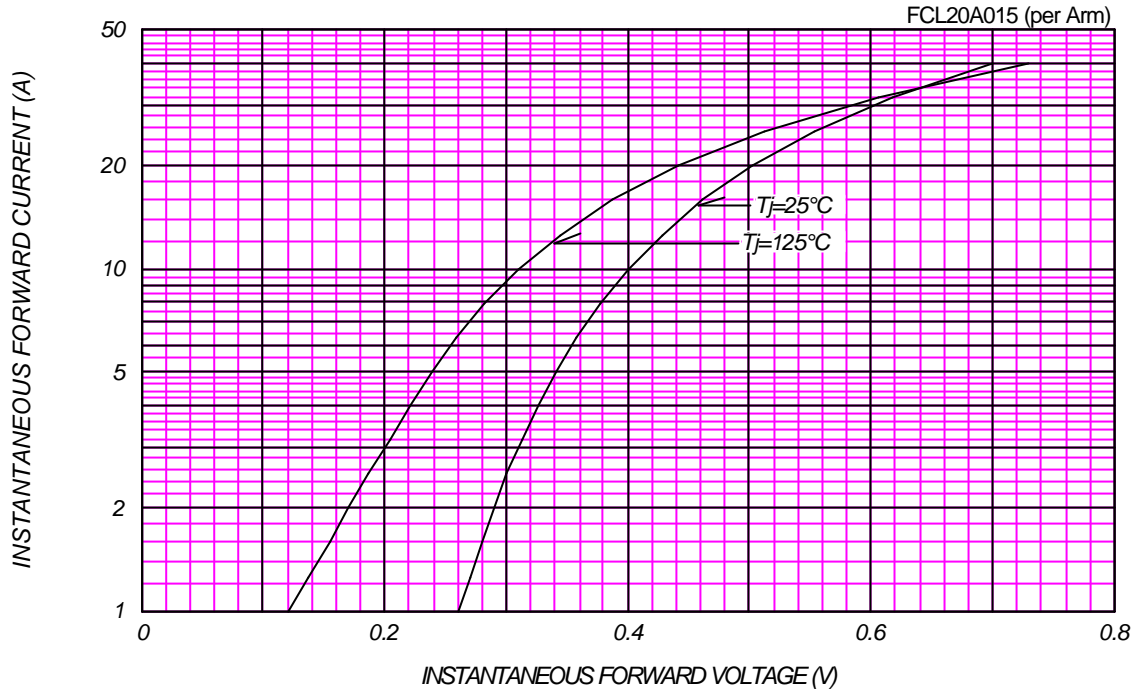
FCL\_A\_ OUTLINE DRAWING (Dimensions in mm)



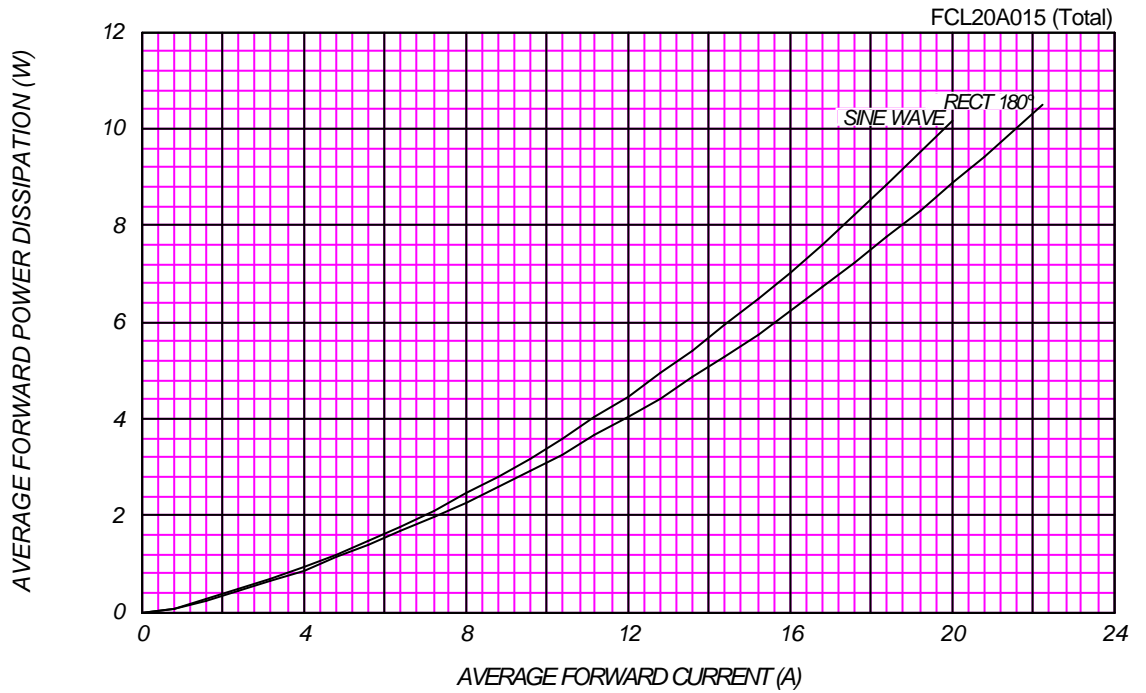
Center Tap



FORWARD CURRENT VS. VOLTAGE



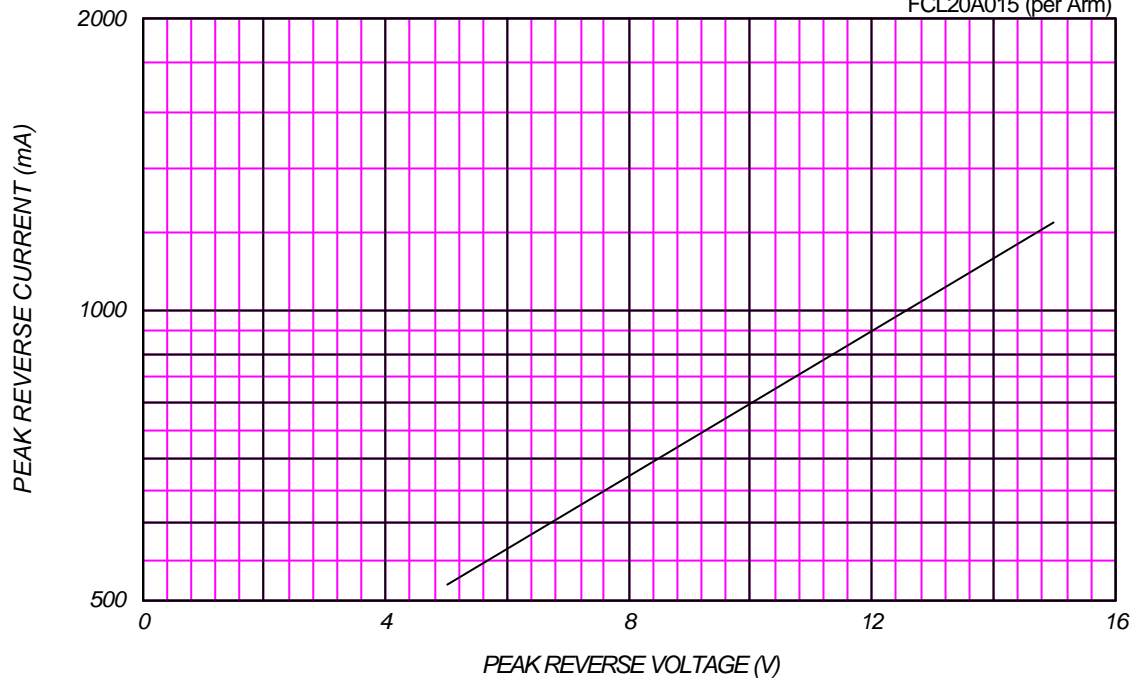
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

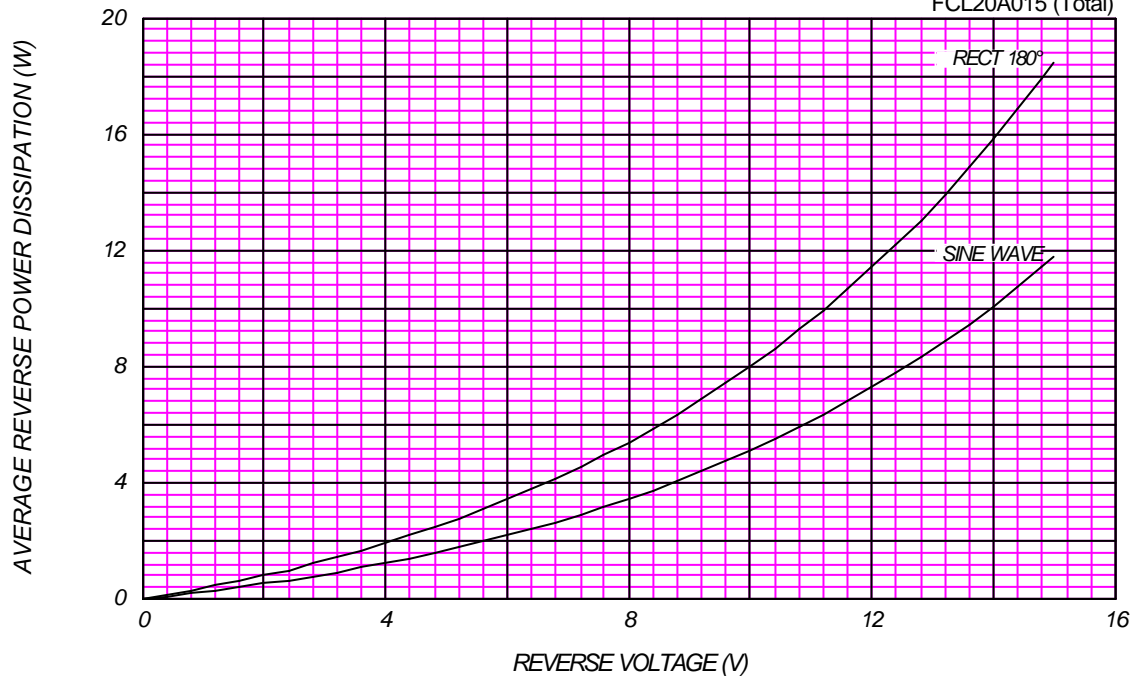
T<sub>j</sub> = 125 °C

FCL20A015 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

FCL20A015 (Total)

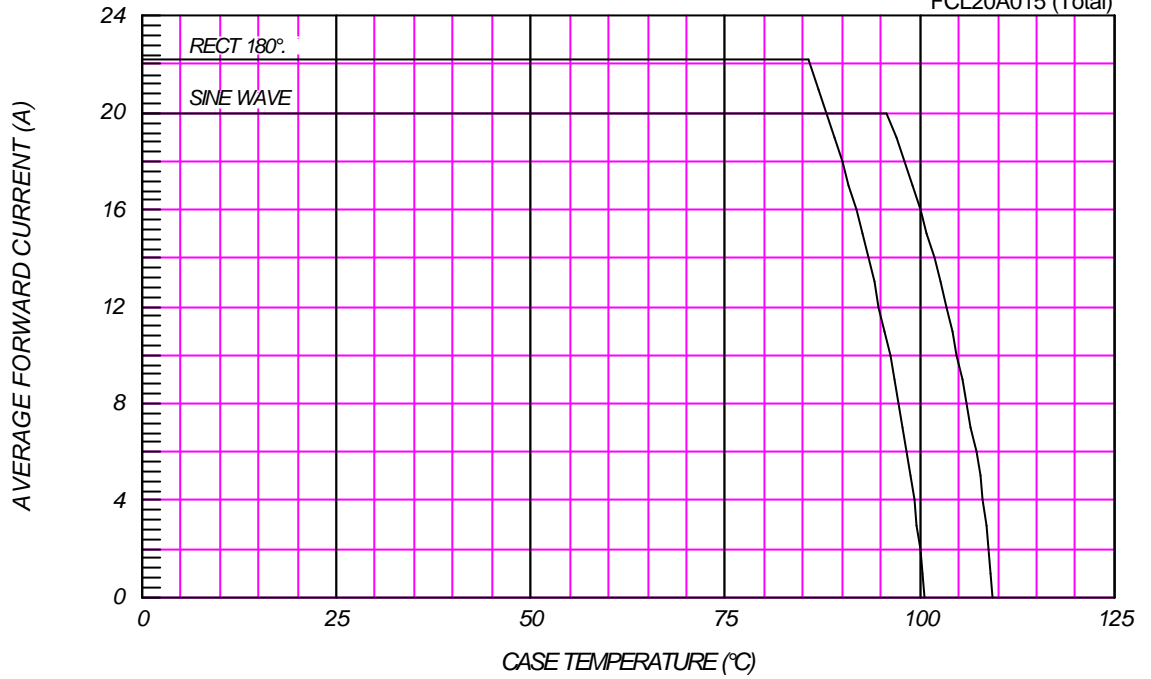




### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=15V$

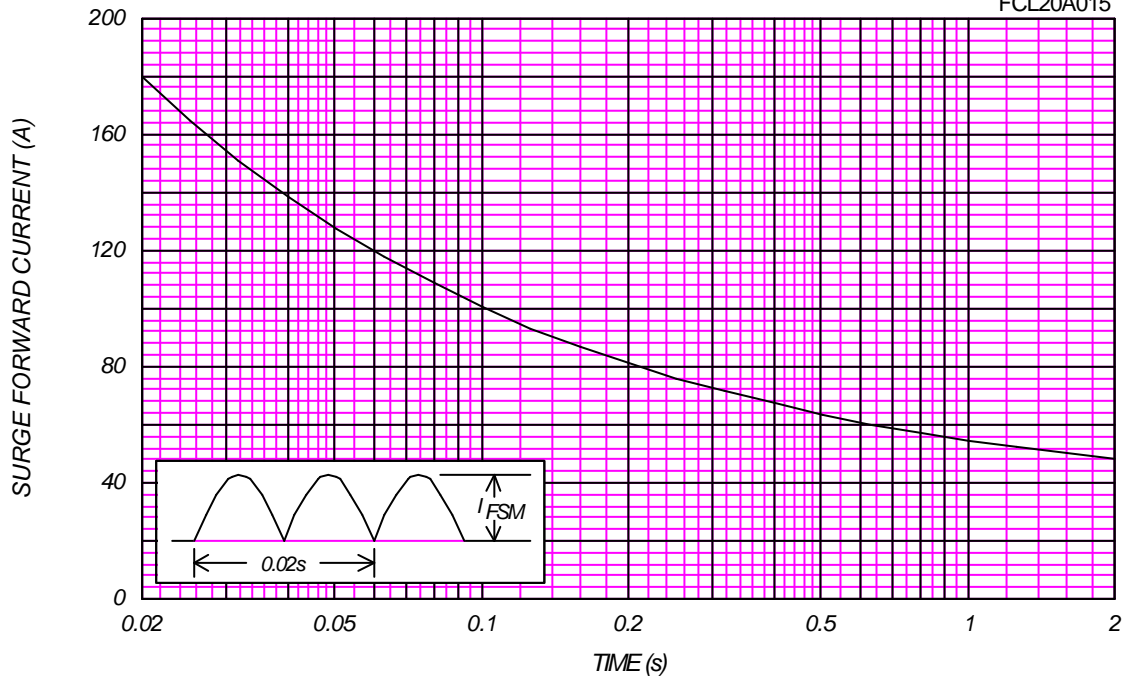
FCL20A015 (Total)



### SURGE CURRENT RATINGS

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

FCL20A015



### JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCL20A015 (per Arm)

