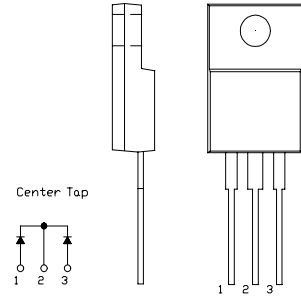


# SBD Type : FCH10A15

OUTLINE DRAWING

**FEATURES**

- \*Similar to TO-220AB Case
- \*Fully Molded Isolation
- \*Dual Diodes – Cathode Common
- \*Low Forward Voltage Drop
- \*Low Power Loss,High Efficiency
- \*High Surge Capability
- \*Tj=150 °C operation



## Maximum Ratings

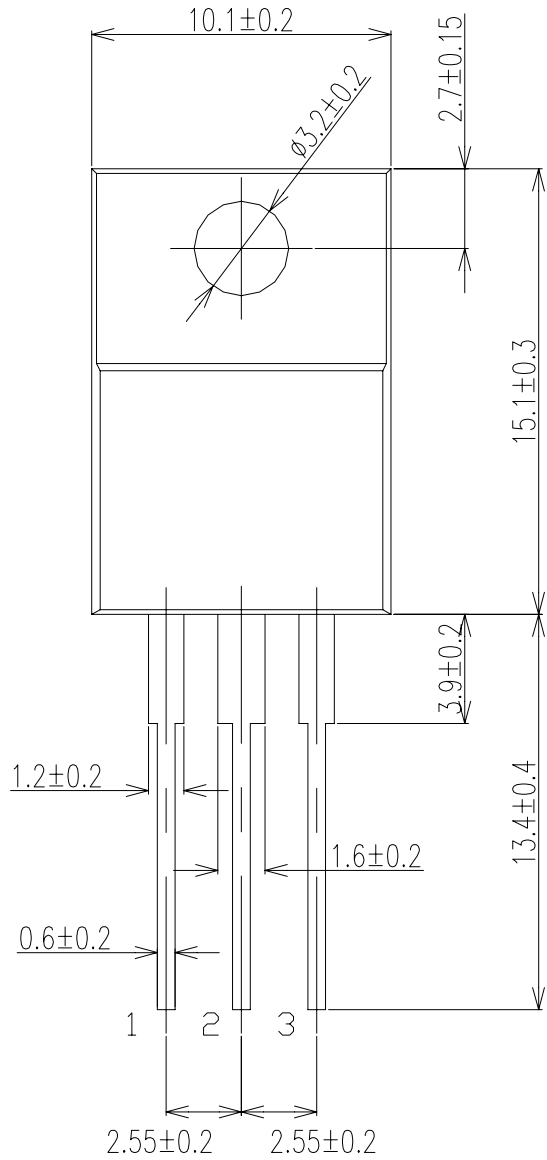
Approx Net Weight: 1.75g

Rating	Symbol	FCH10A15		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	150		V
Average Rectified Output Current	$I_O$	10	$T_c=121^{\circ}C$ 50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	11.1		A
Surge Forward Current	$I_{FSM}$	130	50Hz Full Sine Wave ,1cycle Non-repetitive	A
Operating JunctionTemperature Range	$T_{jw}$	-40 to +150		$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-40 to +150		$^{\circ}C$
Mounting torque	$F_{tor}$	recommended torque = 0.5		N•m

## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^{\circ}C, V_{RM}= V_{RRM}$ per arm	-	-	1	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^{\circ}C, I_{FM}= 5 A$ per arm	-	-	0.88	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^{\circ}C/W$
	$R_{th(c-f)}$	Cace to Fin	-	-	1.5	$^{\circ}C/W$

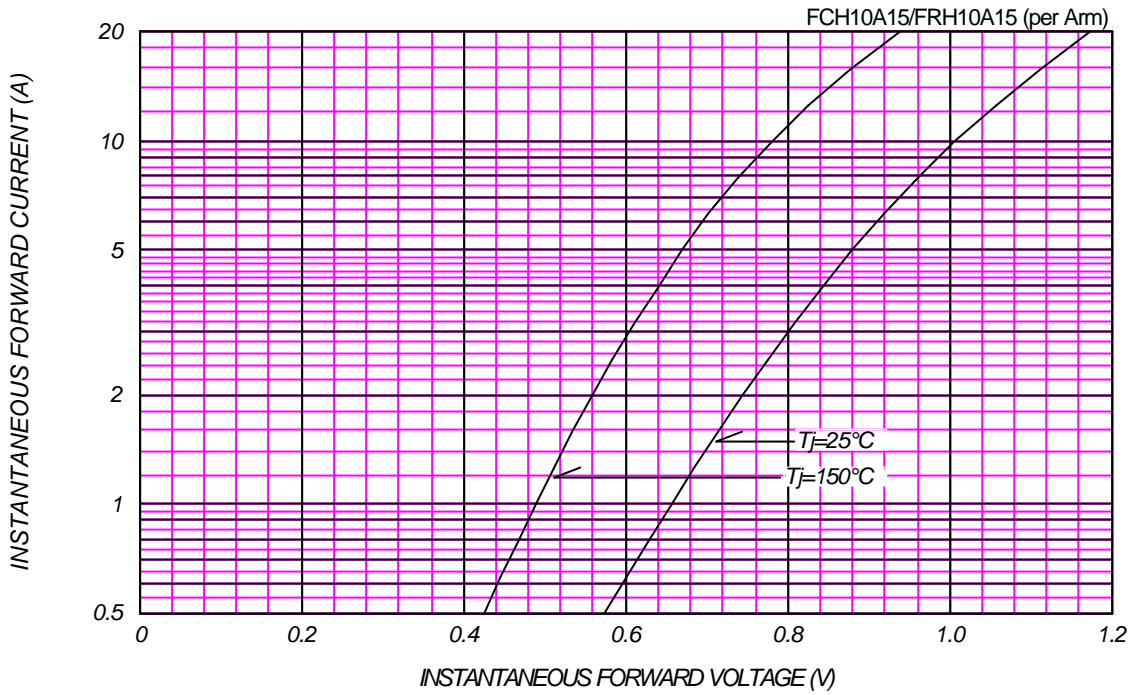
FCH\_A\_OUTLINE DRAWING (Dimensions in mm)



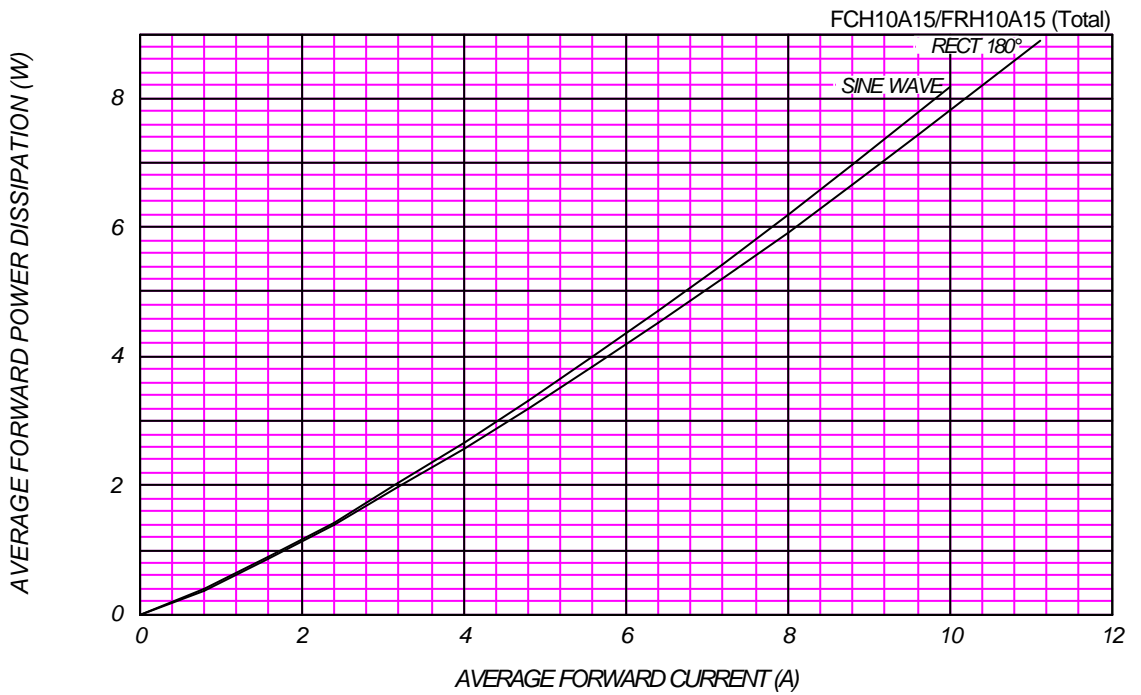
Center Tap



FORWARD CURRENT VS. VOLTAGE



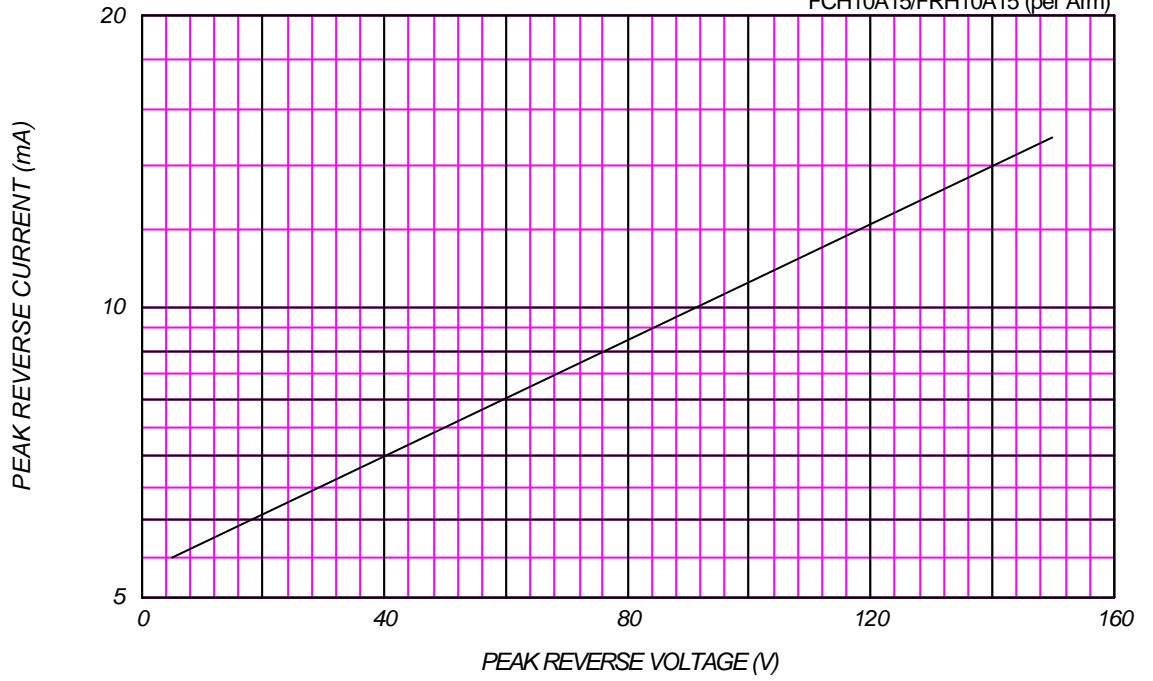
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

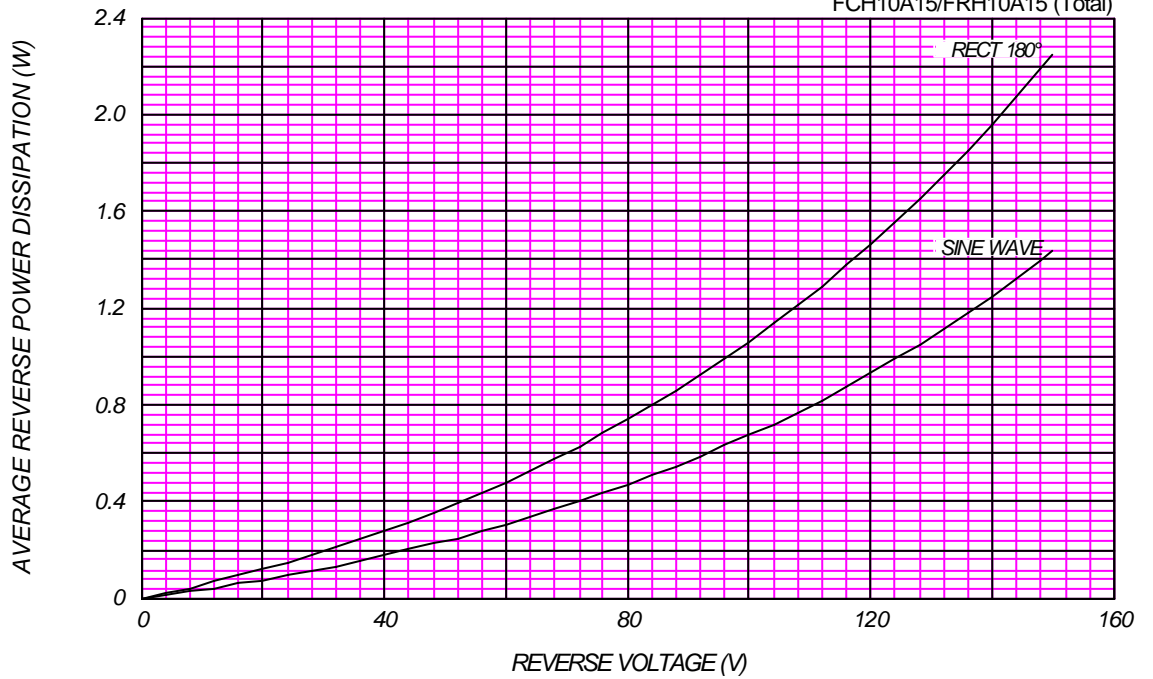
T<sub>j</sub> = 150 °C

FCH10A15/FRH10A15 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

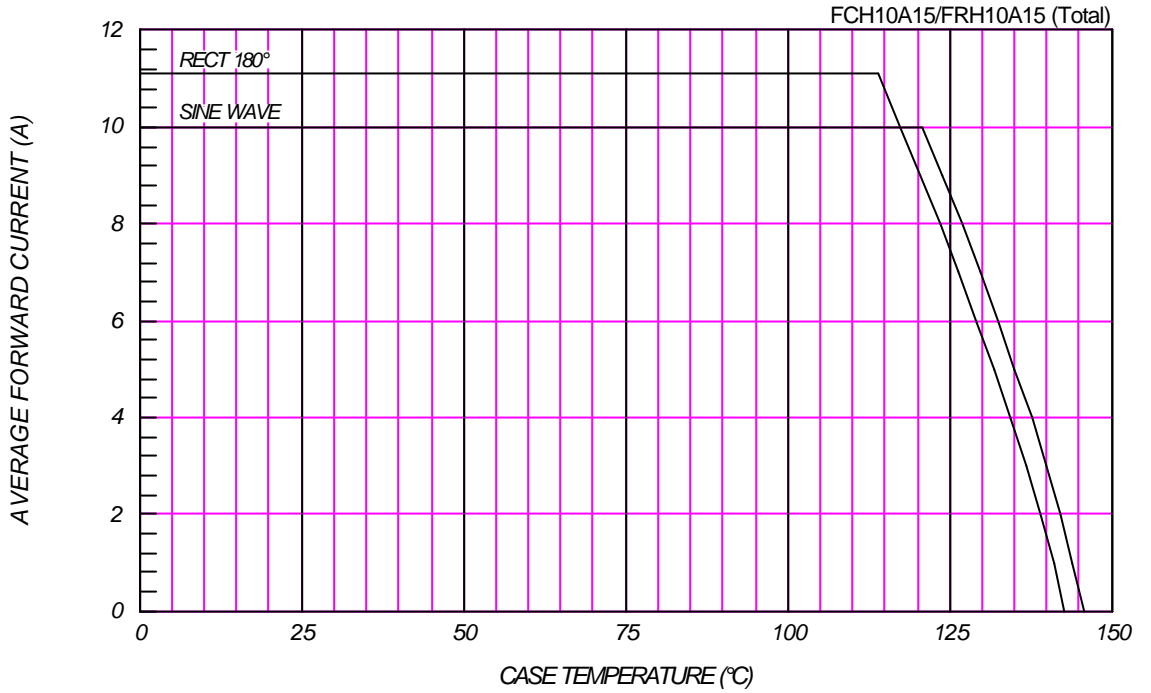
FCH10A15/FRH10A15 (Total)





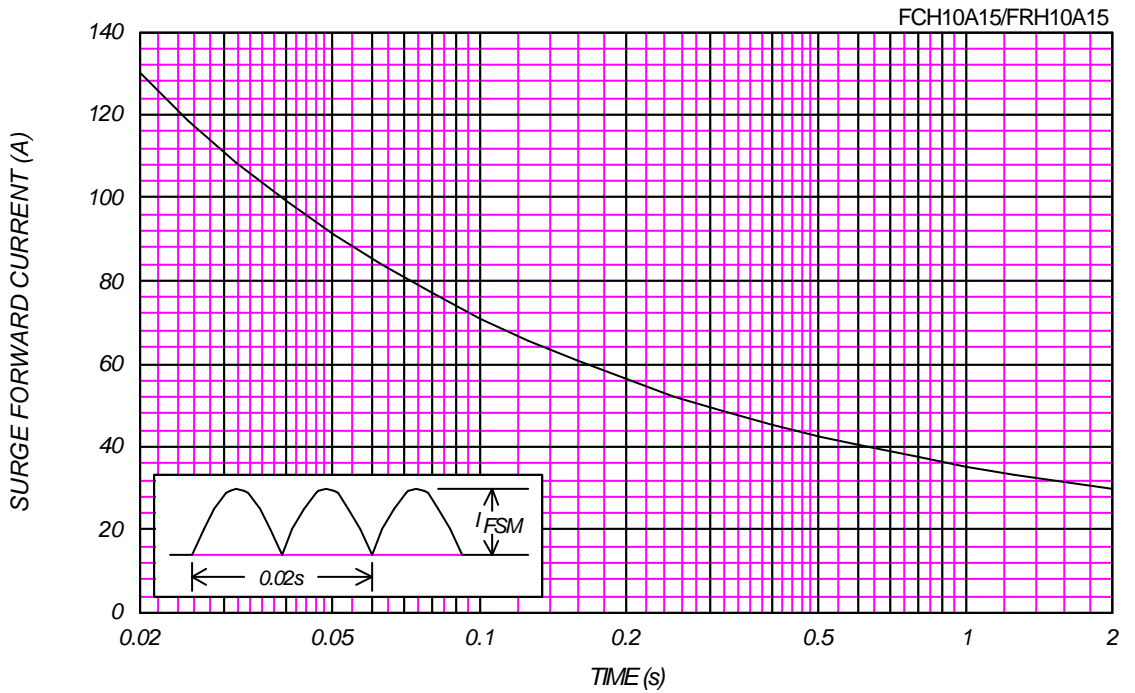
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM} = 150V$



### 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

FCH10A15/FRH10A15 (per Arm)

