

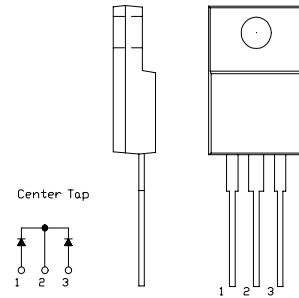
# SBD Type : FCH05A10

## OUTLINE DRAWING

**5A 100V Tj:150°C**

### FEATURES

- \*TO-220AB Case
- \*Fully Molded
- \*Dual Diodes – Cathode Common
- \*Low Forward Voltage Drop
- \*High Surge Capability
- \*Tj=150 °C operation



## Maximum Ratings

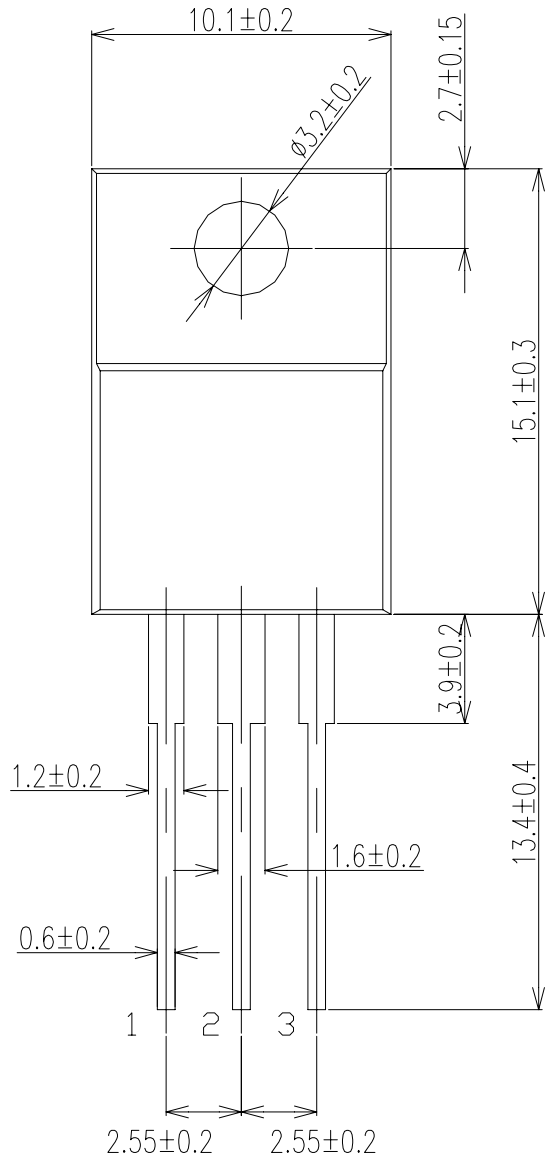
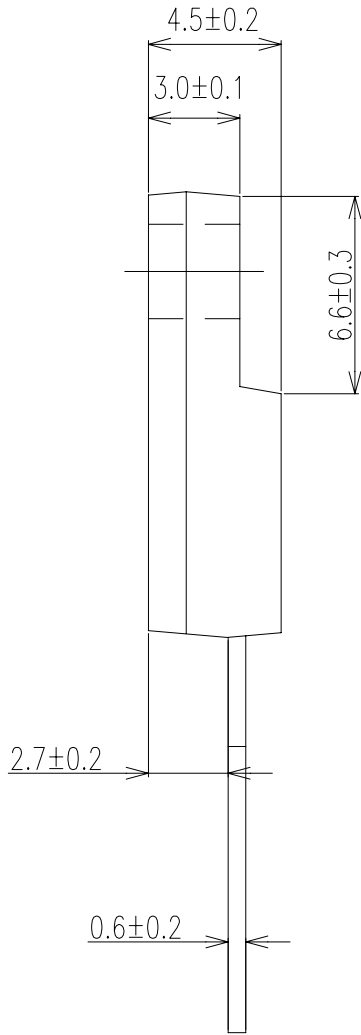
Approx Net Weight: 1.75g

Rating	Symbol	FCH05A10			Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100			V
Average Rectified Output Current	I <sub>O</sub>	5	Tc=127°C	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	I <sub>F(RMS)</sub>	5.5			A
Surge Forward Current	I <sub>FSM</sub>	60	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T <sub>jw</sub>	-40 to +150			°C
Storage Temperature Range	T <sub>stg</sub>	-40 to +150			°C
Mounting torque	F <sub>tor</sub>	recommended torque = 0.5			N•m

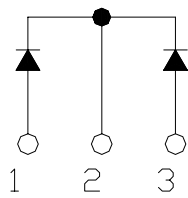
## Electrical • Thermal Characteristics

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	$V_{FM}$	$T_j= 25^{\circ}C$ , $I_{FM}= 2.5 A$ per Arm	-	-	0.87	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5.0	°C /W
	$R_{th(c-f)}$	Cace to Fin	-	-	1.5	°C /W

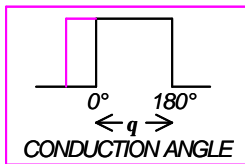
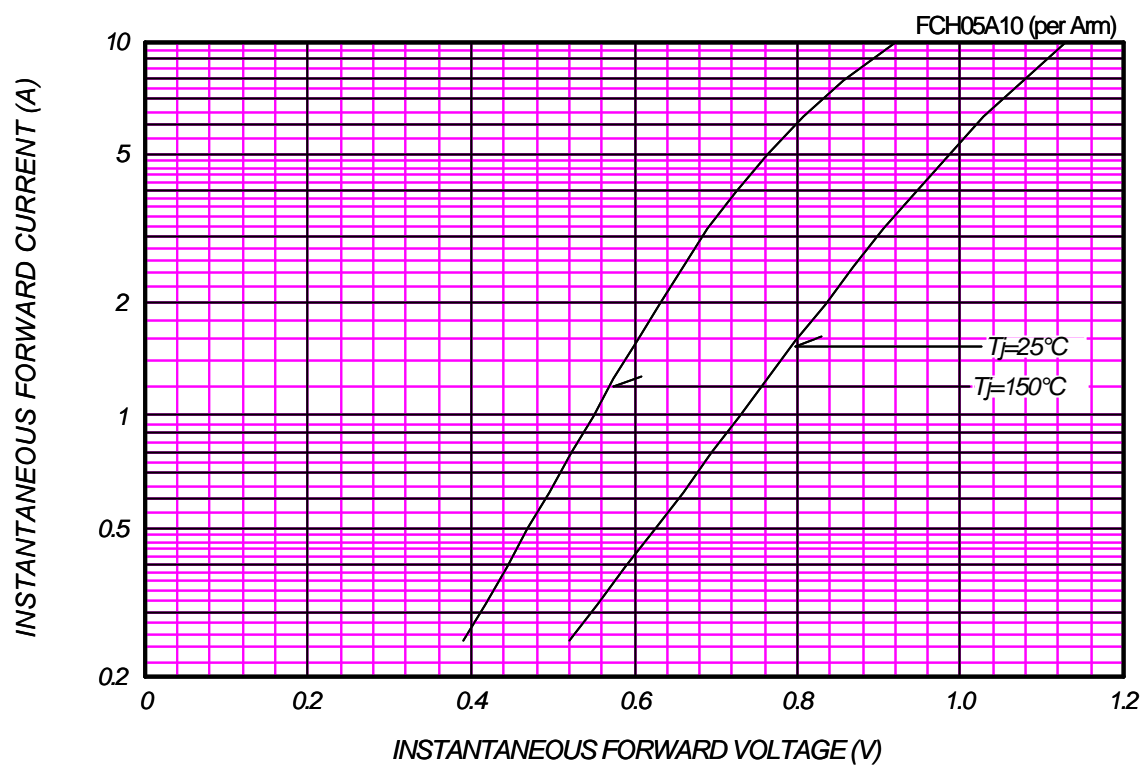
FCH\_A\_ OUTLINE DRAWING (Dimensions in mm)



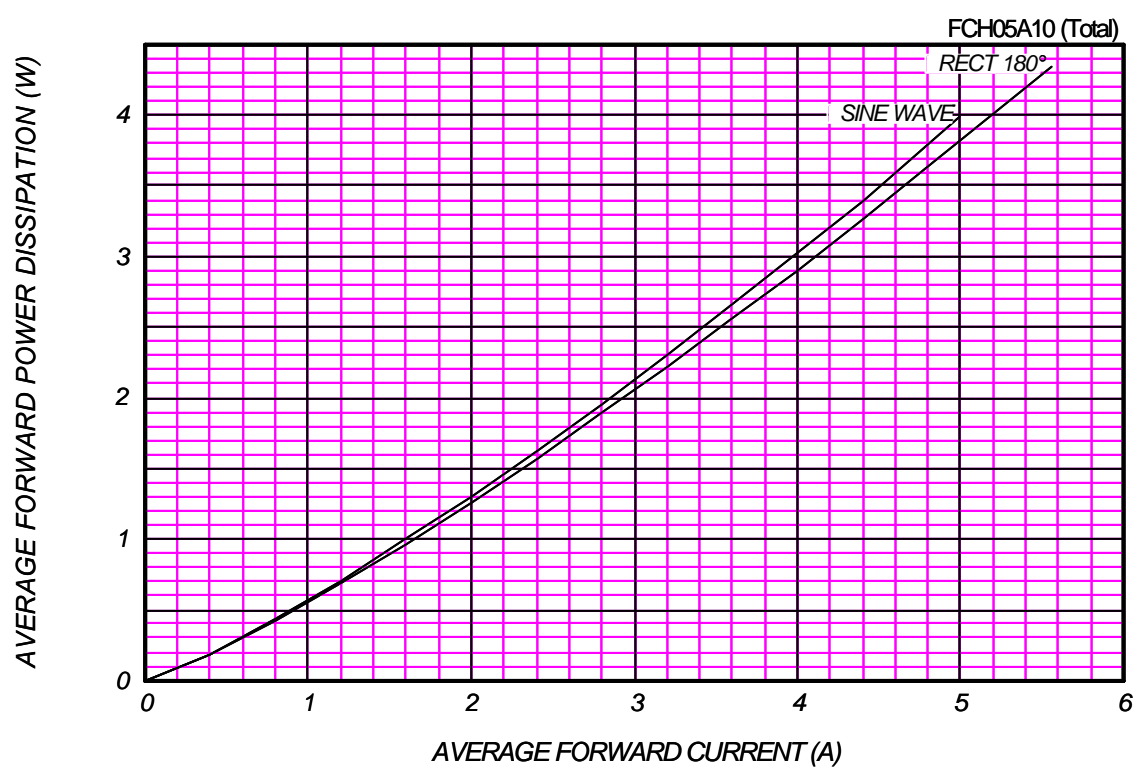
Center Tap



FORWARD CURRENT VS. VOLTAGE



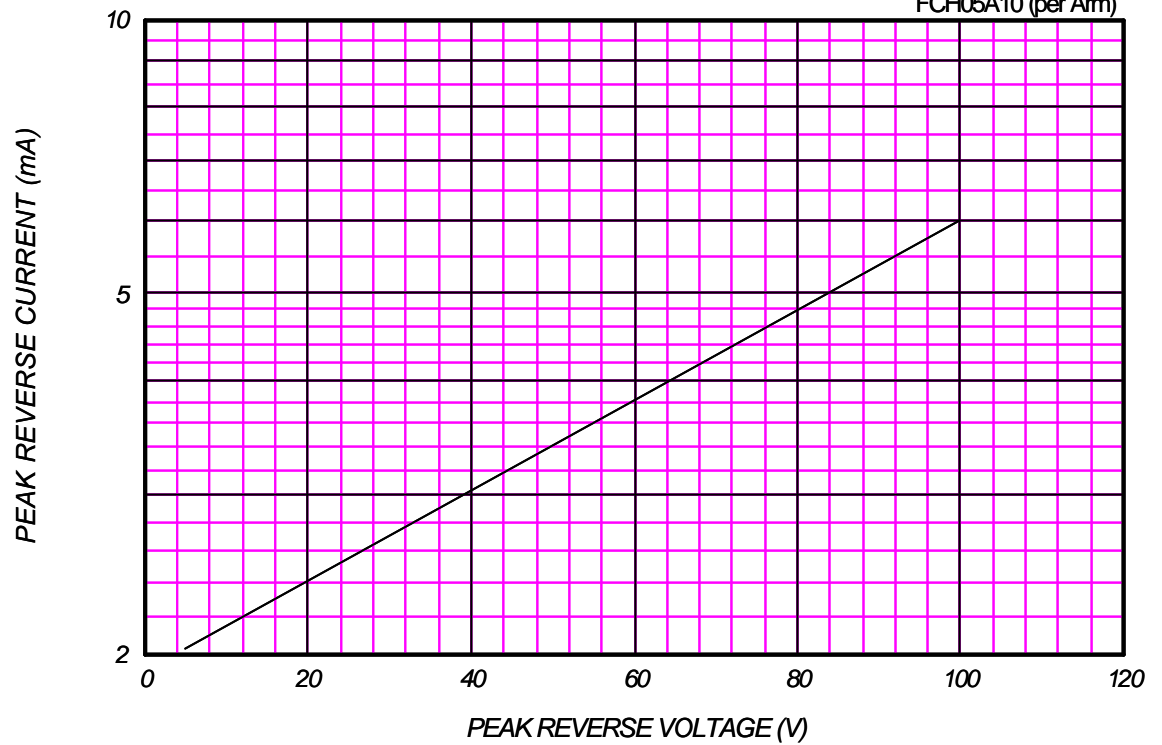
AVERAGE FORWARD POWER DISSIPATION



### PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

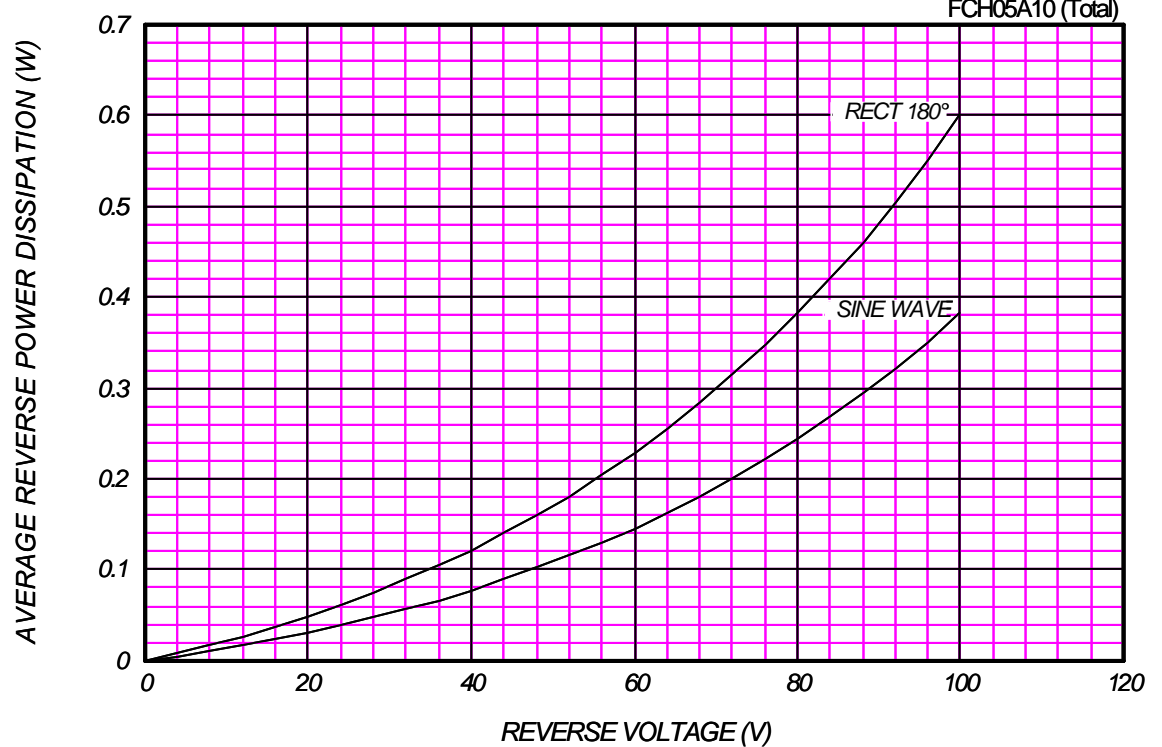
$T_J = 150^\circ\text{C}$

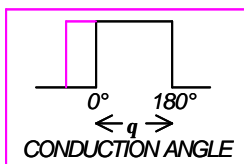
FCH05A10 (per Arm)



### AVERAGE REVERSE POWER DISSIPATION

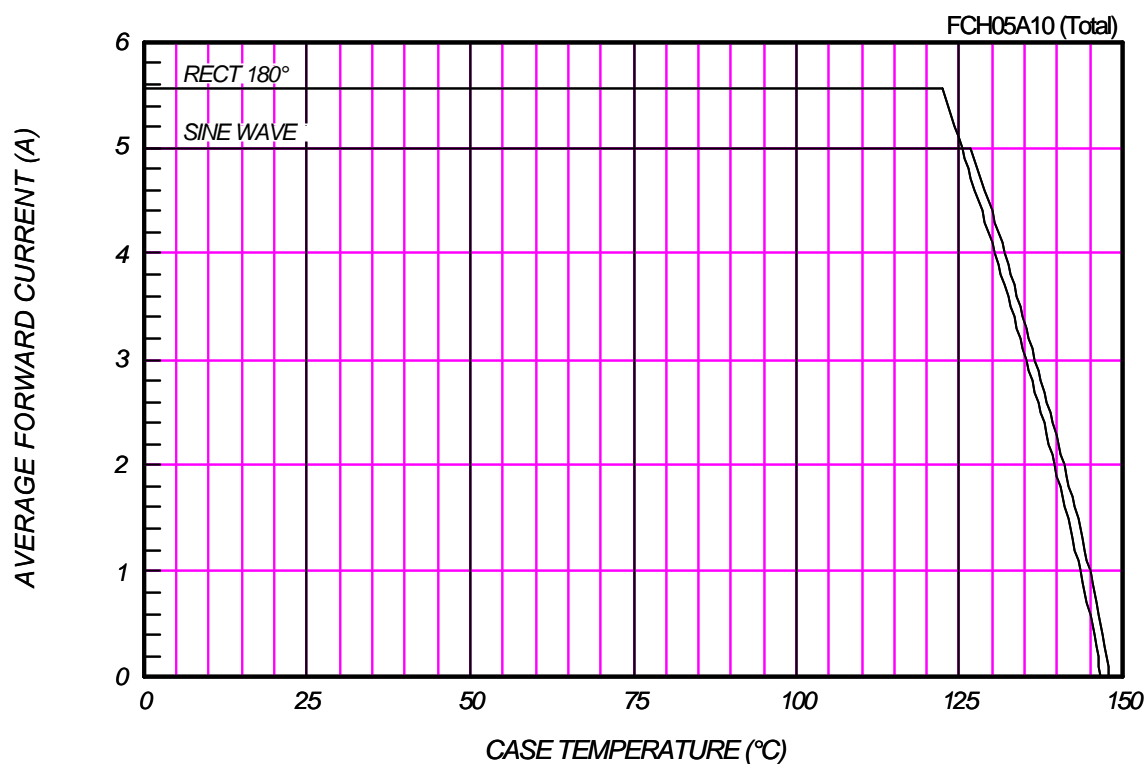
FCH05A10 (Total)





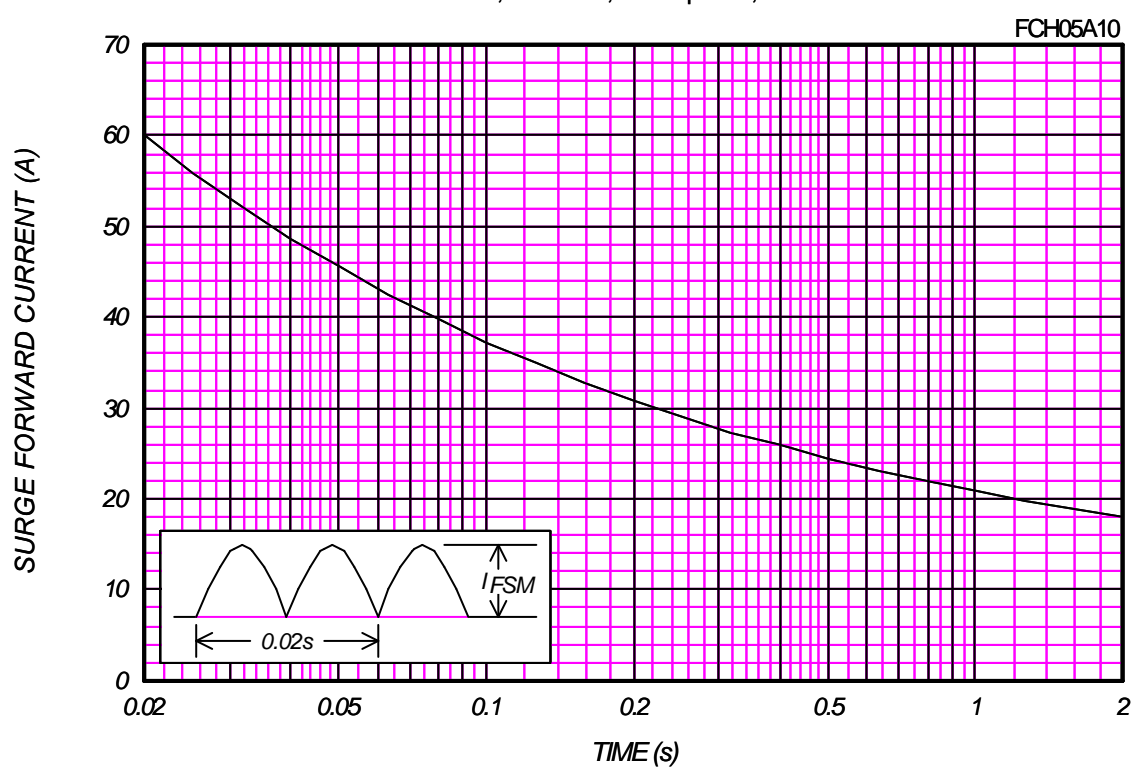
## AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=100V$



## SURGE CURRENT RATINGS

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



# JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCH05A10 (per Arm)

