

**5A 200V**

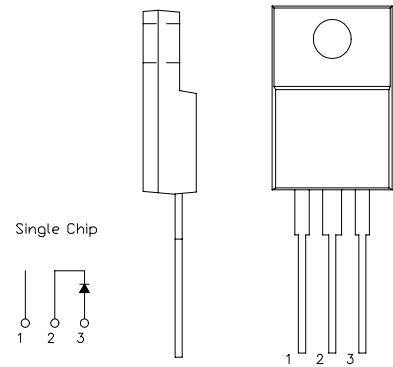
**SBD** Type : **FSH05A20B**

OUTLINE DRAWING

For High Frequency Rectification

**FEATURES**

- \* High VRM SBD
- \* Low Forward Voltage Drop and Low Noise
- \* Fully Molded Isolation



**Maximum Ratings**

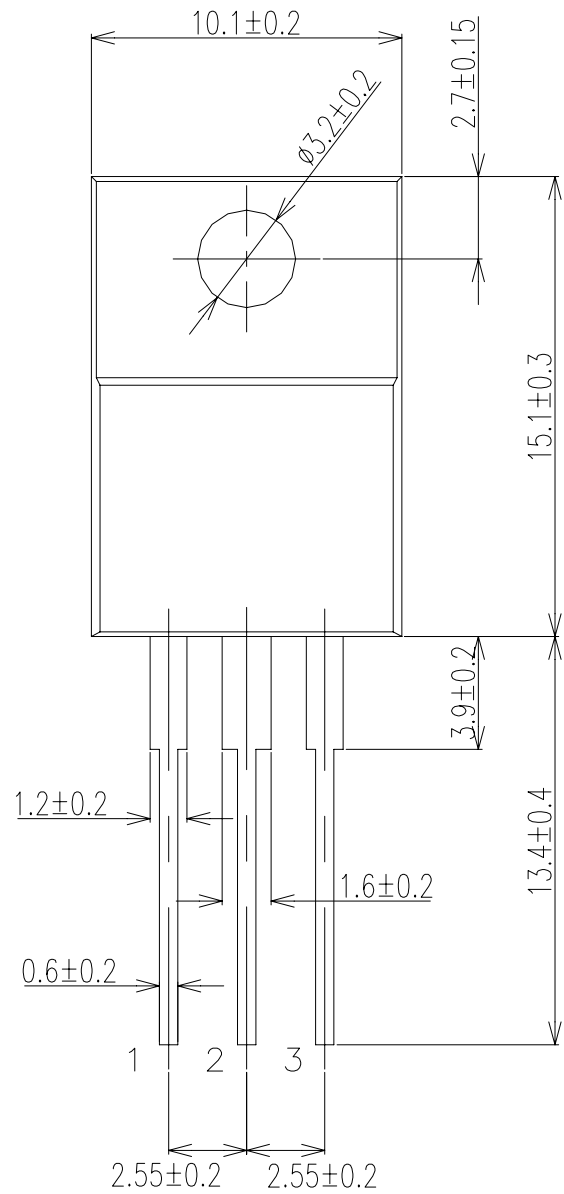
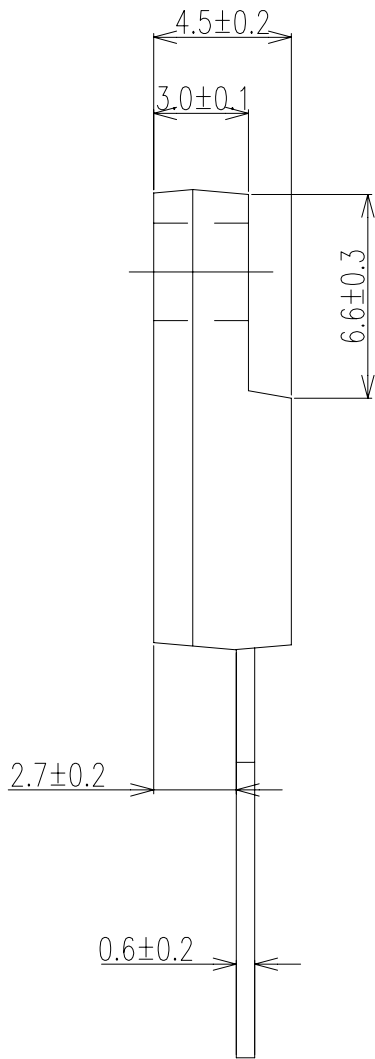
Approx Net Weight:1.75g

Rating	Symbol	FSH05A20B		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	200		V
Average Rectified Output Current	$I_O$	5	$T_c=123^{\circ}C$ 50 Hz, Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	7.85		A
Surge Forward Current	$I_{FSM}$	100	50 Hz Half Sine Wave, 1 cycle 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

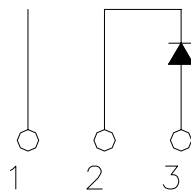
**Electrical • Thermal Characteristics**

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$	-	-	200	$\mu A$
Peak Forward Voltage	$V_{FM}$	$T_j=25^{\circ}C, I_{FM}=5A$	-	-	0.90	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	5	$^{\circ}C/W$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

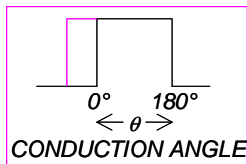
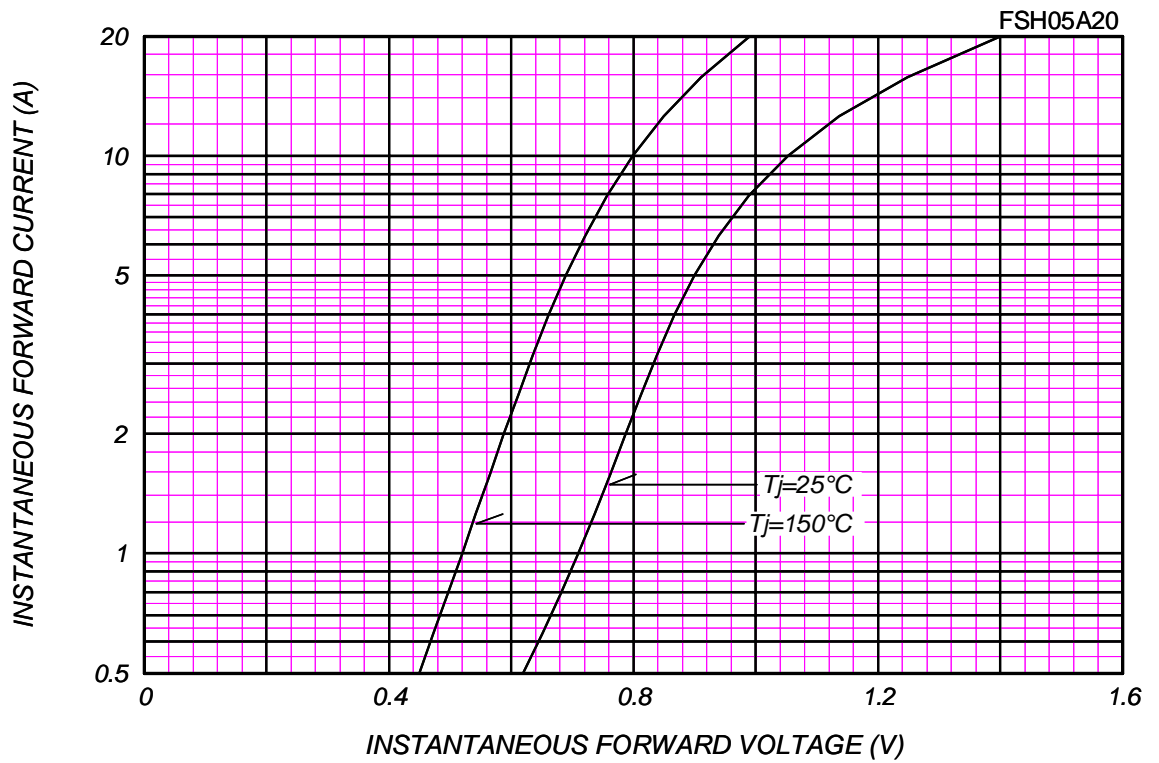
FSH\_A\_B OUTLINE DRAWING (Dimensions in mm)



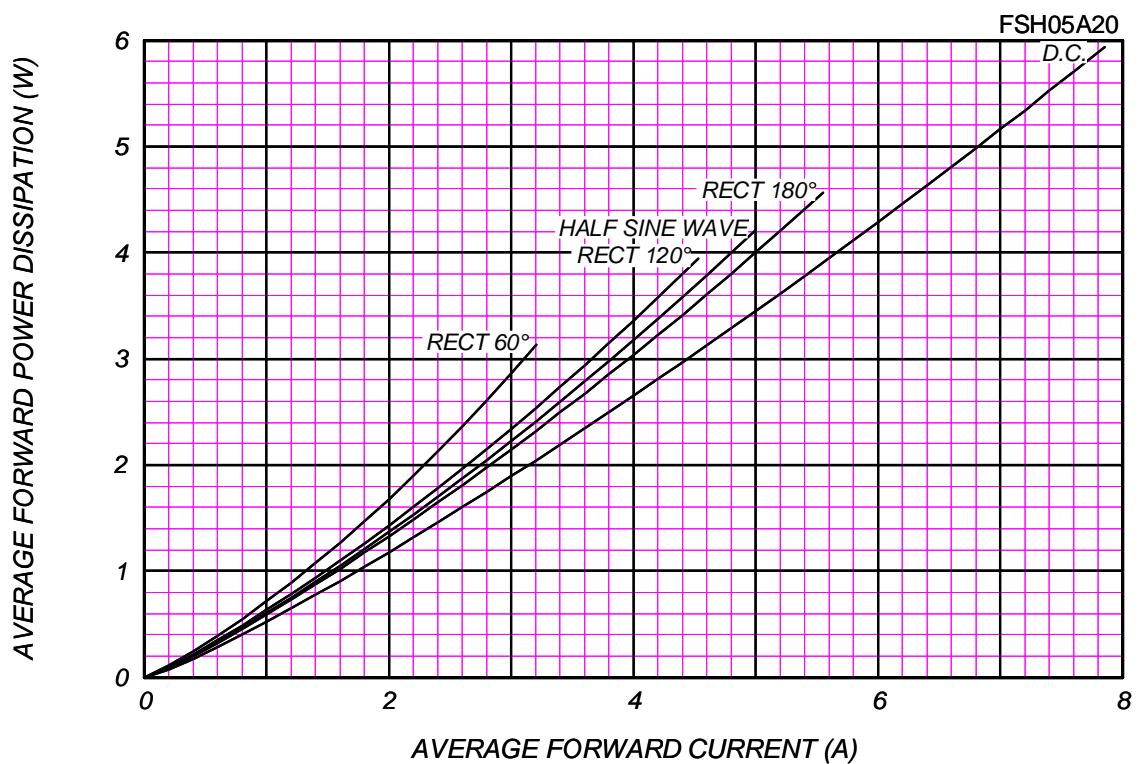
Single Chip



### FORWARD CURRENT VS. VOLTAGE



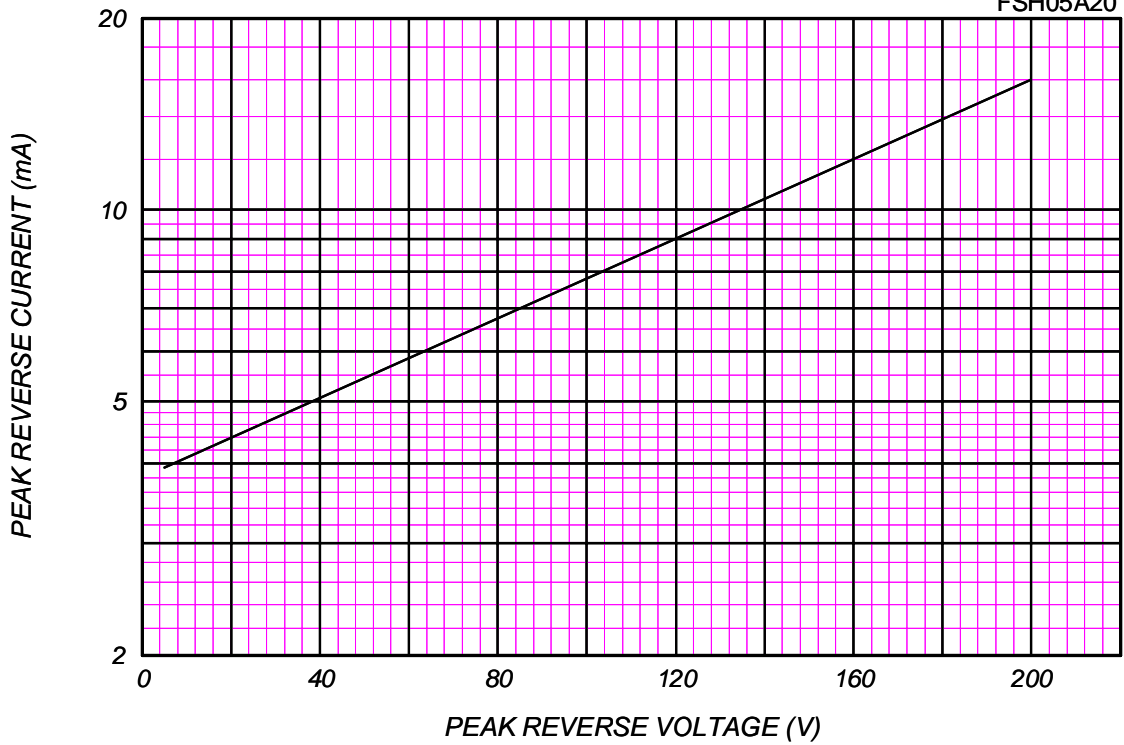
### AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

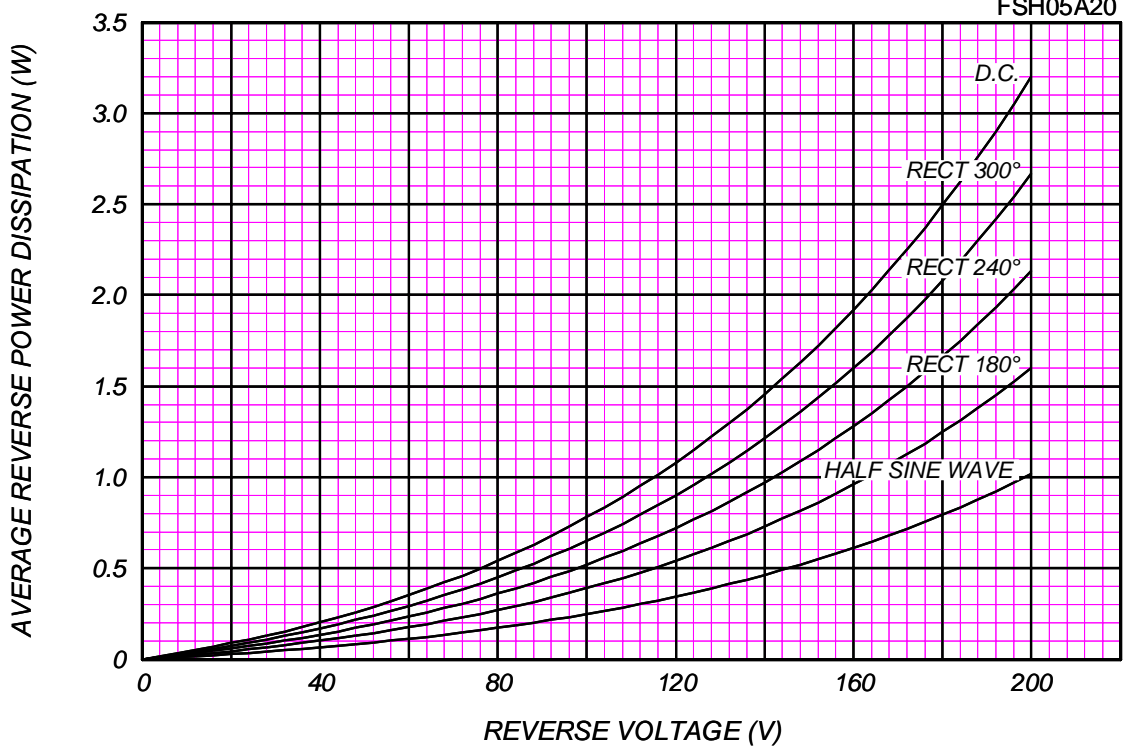
T<sub>j</sub> = 150 °C

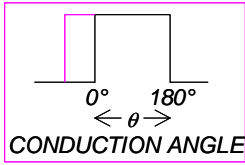
FSH05A20



AVERAGE REVERSE POWER DISSIPATION

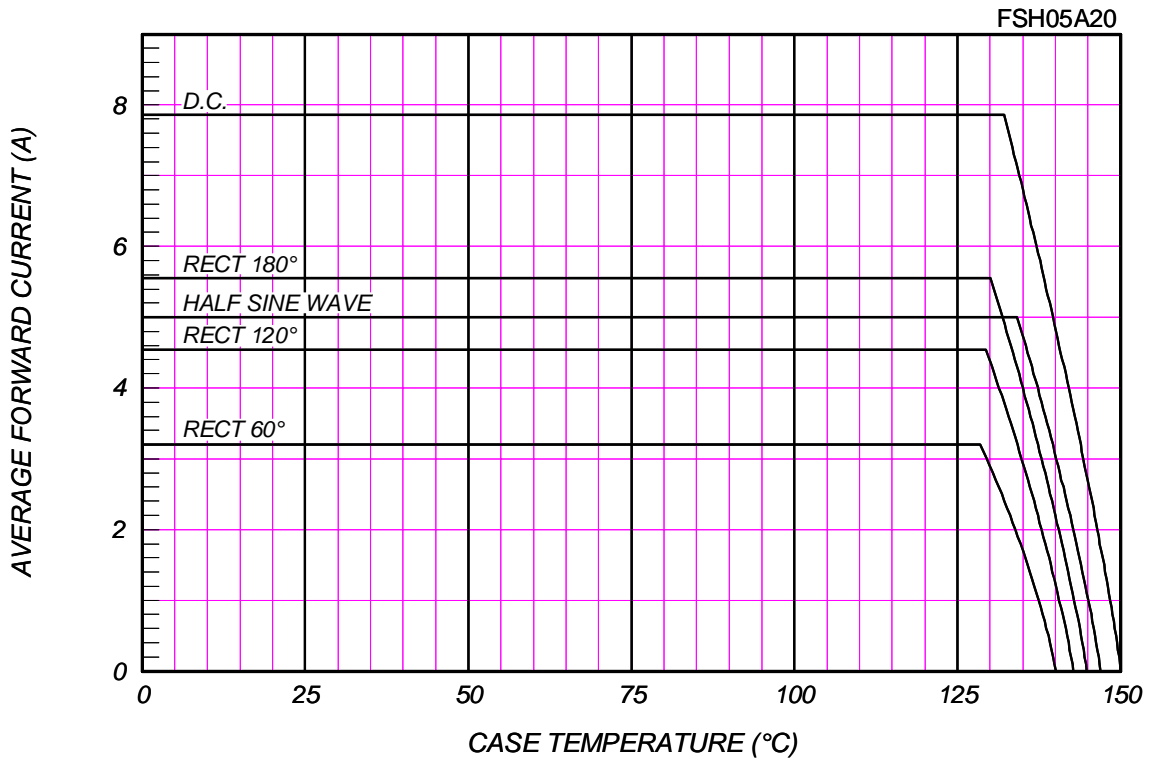
FSH05A20





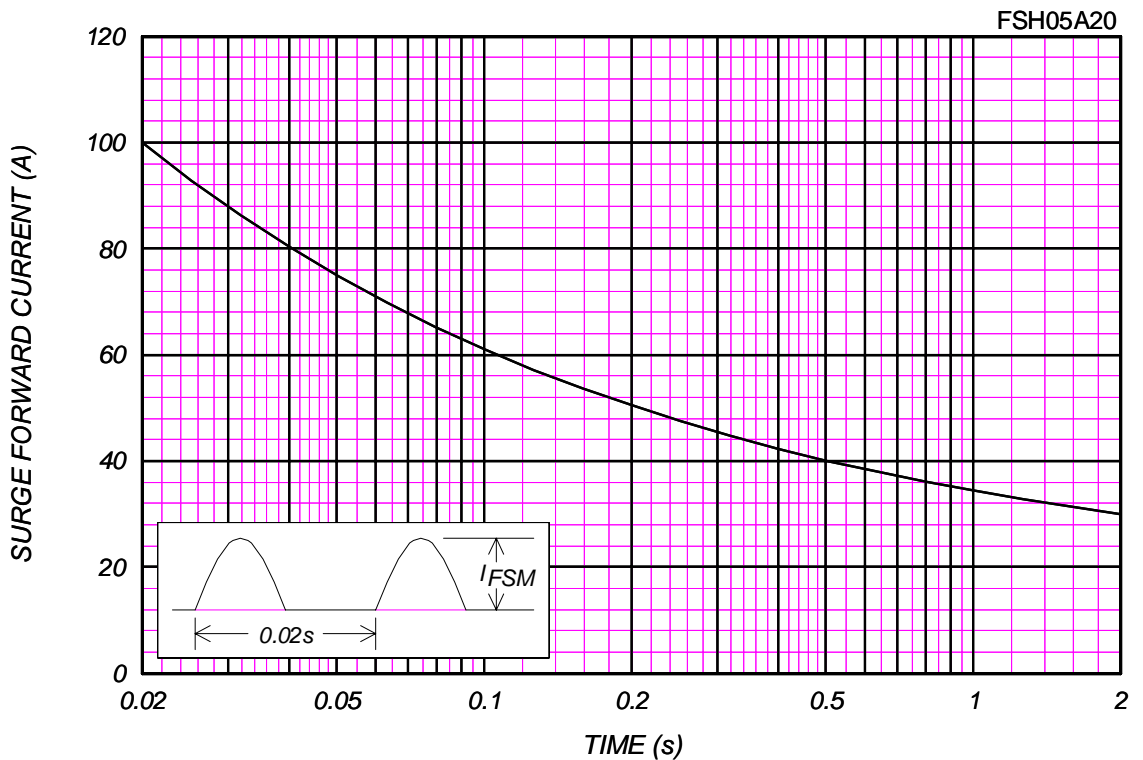
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=200V$



### 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

FSH05A20

