

10A 200V

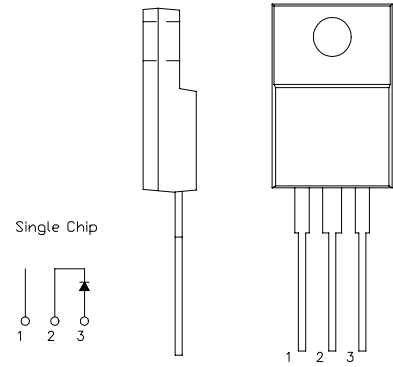
**SBD** Type : **FSH10A20B**

OUTLINE DRAWING

For High Frequency Rectification

FEATURES

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



Maximum Ratings

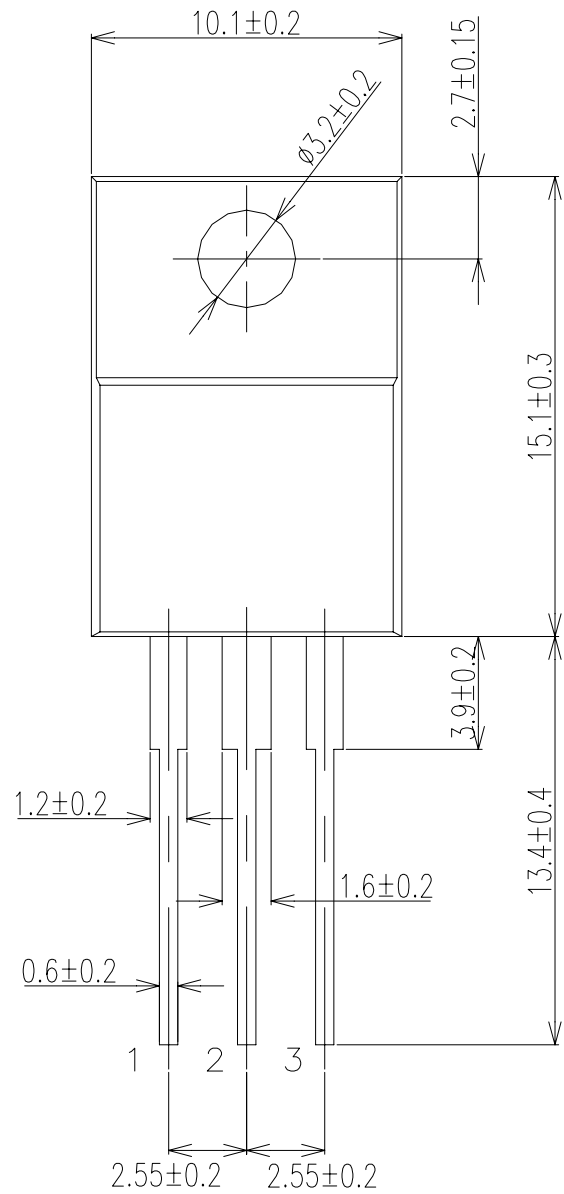
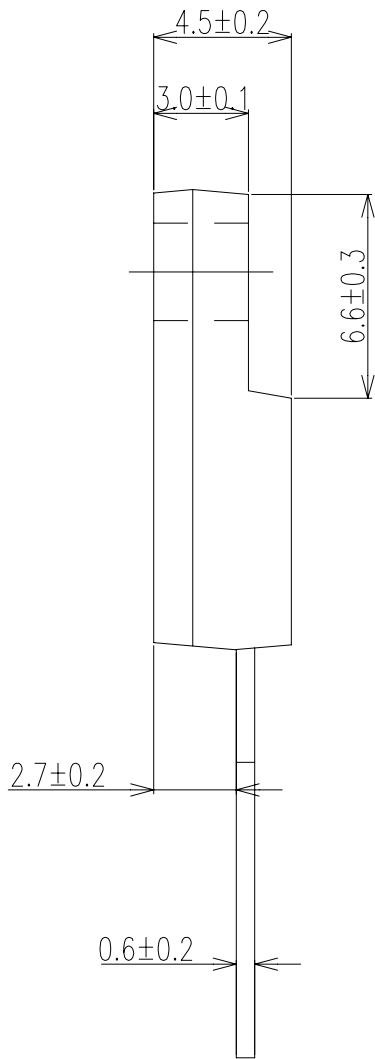
Approx Net Weight:1.75g

Rating	Symbol	FSH10A20B		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	200		V
Average Rectified Output Current	$I_O$	10	$T_c=108^\circ\text{C}$ 50 Hz, Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	15.7		A
Surge Forward Current	$I_{FSM}$	120	50 Hz Half Sine Wave, 1 cycle Non-repetitive	A
Operating Junction Temperature Range	$T_{jw}$	- 40 to + 150		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 40 to + 150		$^\circ\text{C}$
Mounting torque		0.5	Recommended value	N•m

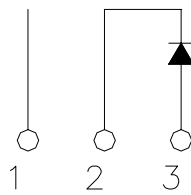
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$	-	-	200	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j=25^\circ\text{C}, I_{FM}=10\text{A}$	-	-	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	

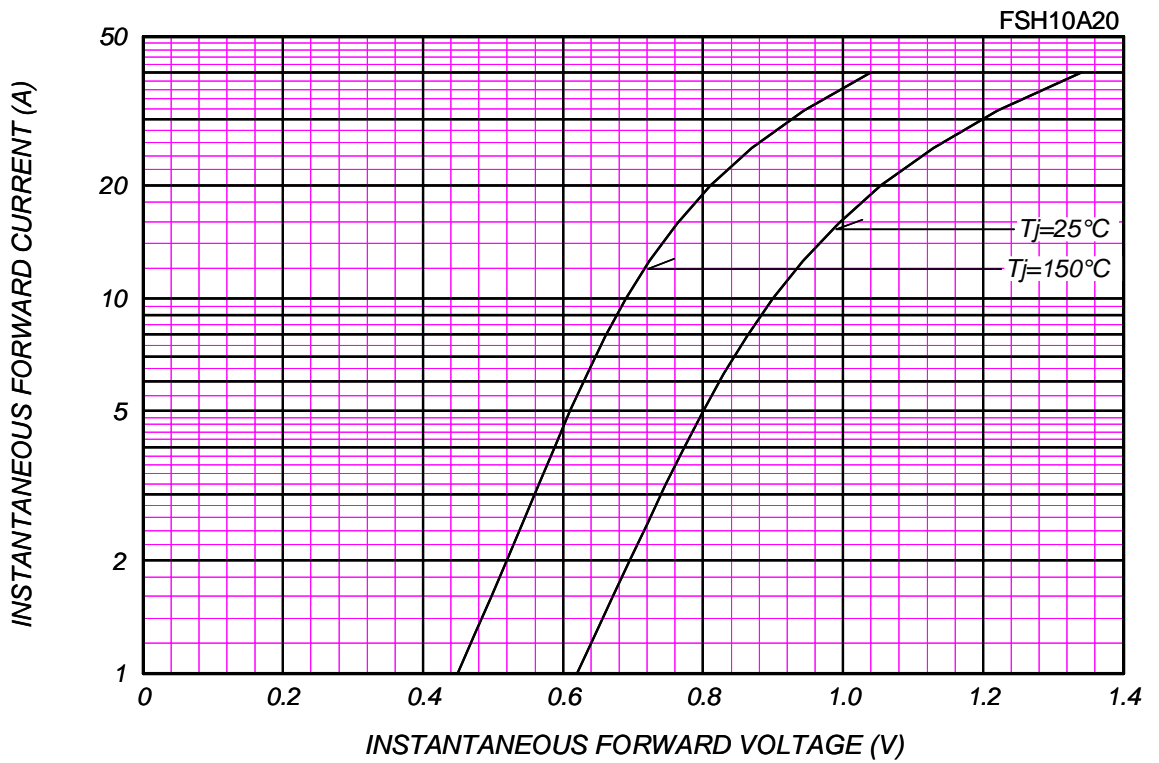
FSH\_A\_B OUTLINE DRAWING (Dimensions in mm)



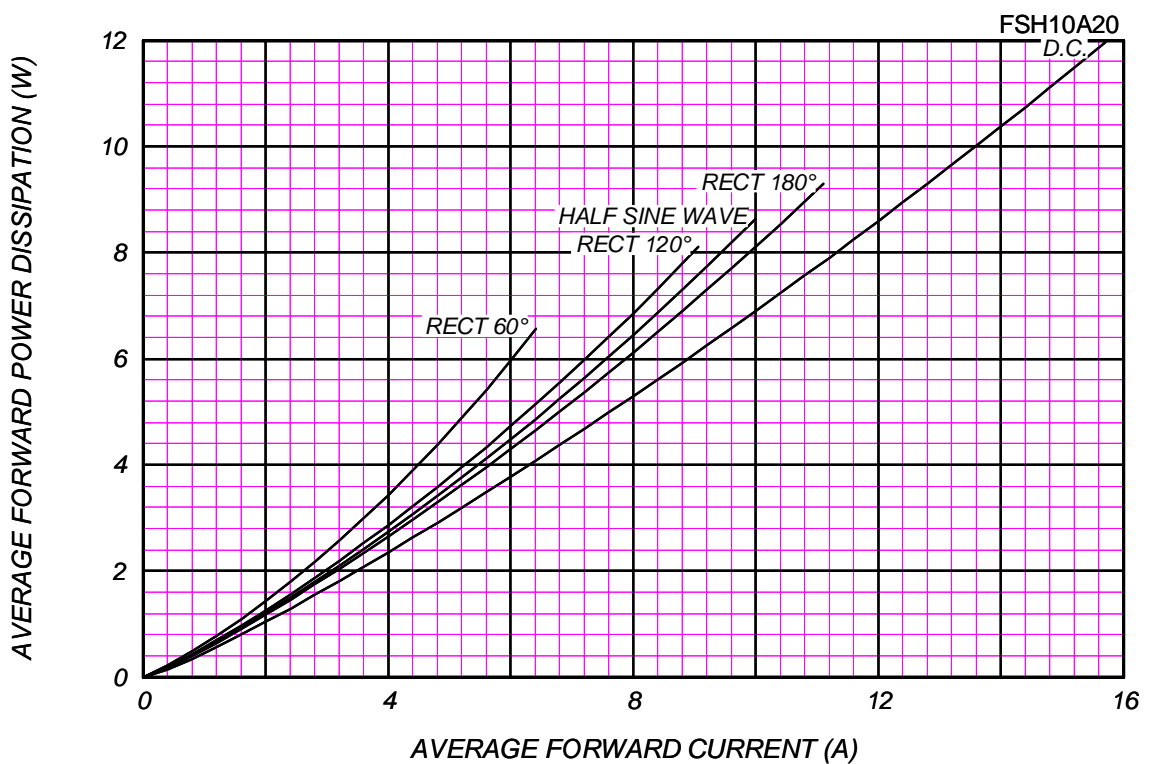
Single Chip



### FORWARD CURRENT VS. VOLTAGE



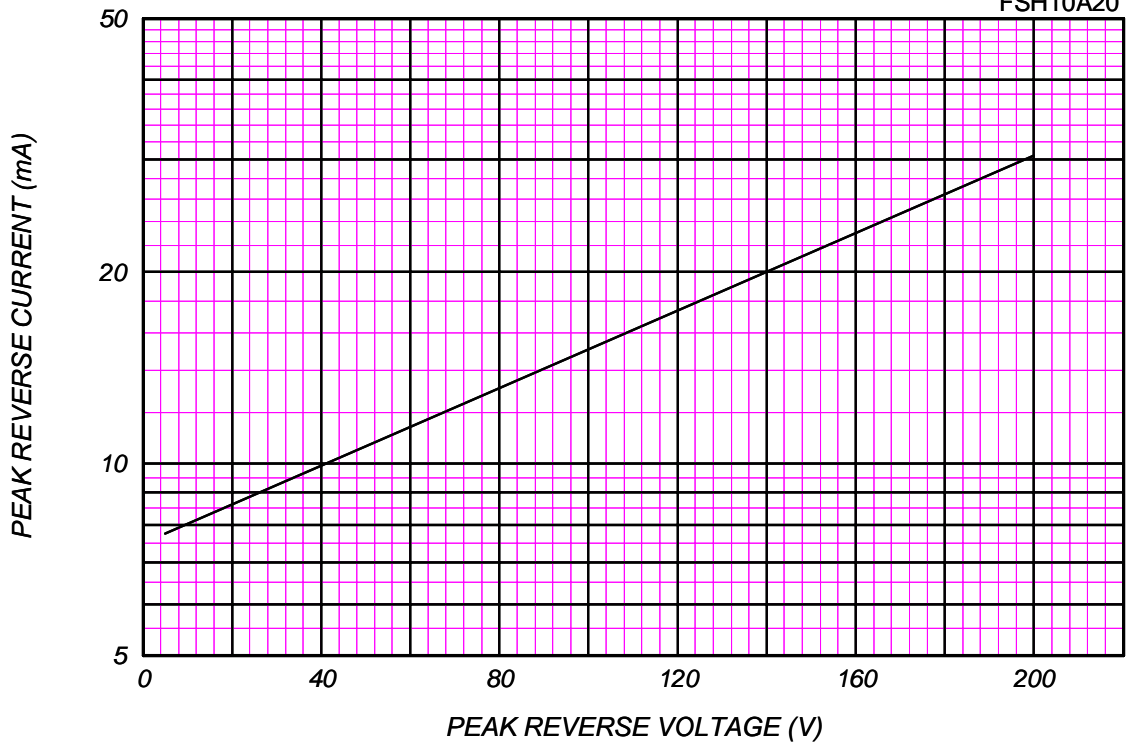
### AVERAGE FORWARD POWER DISSIPATION



### PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

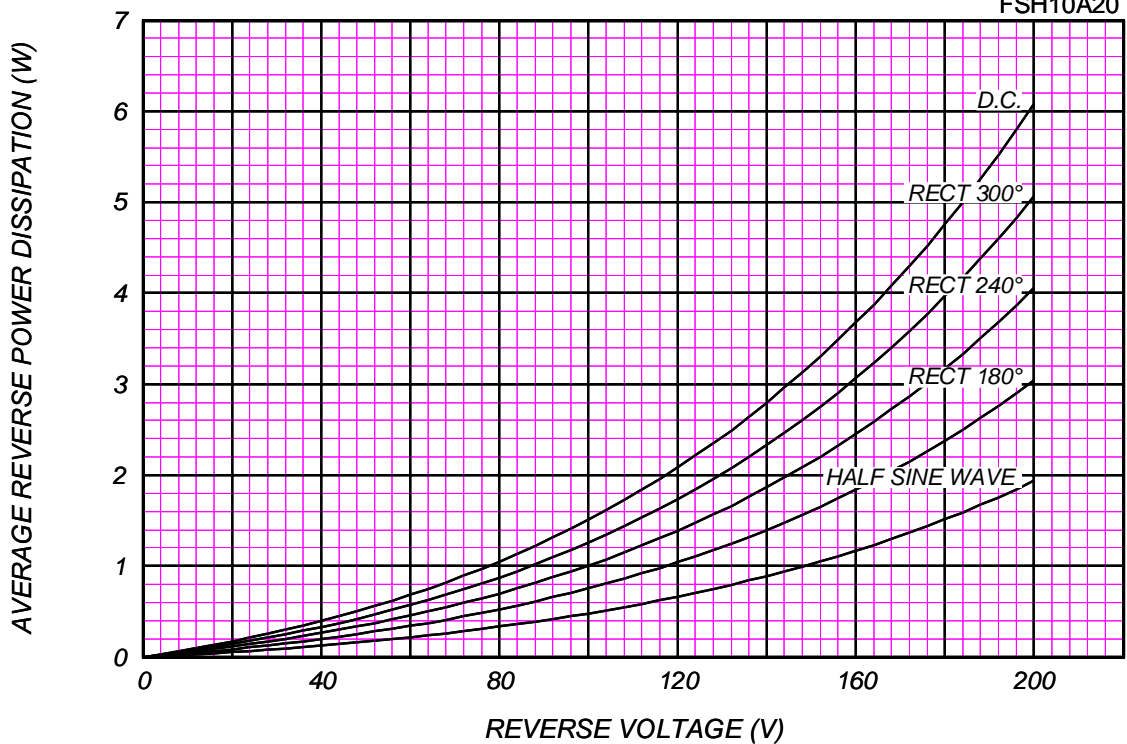
$T_j = 150^\circ\text{C}$

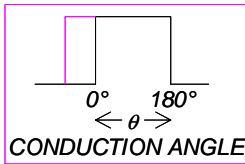
FSH10A20



### AVERAGE REVERSE POWER DISSIPATION

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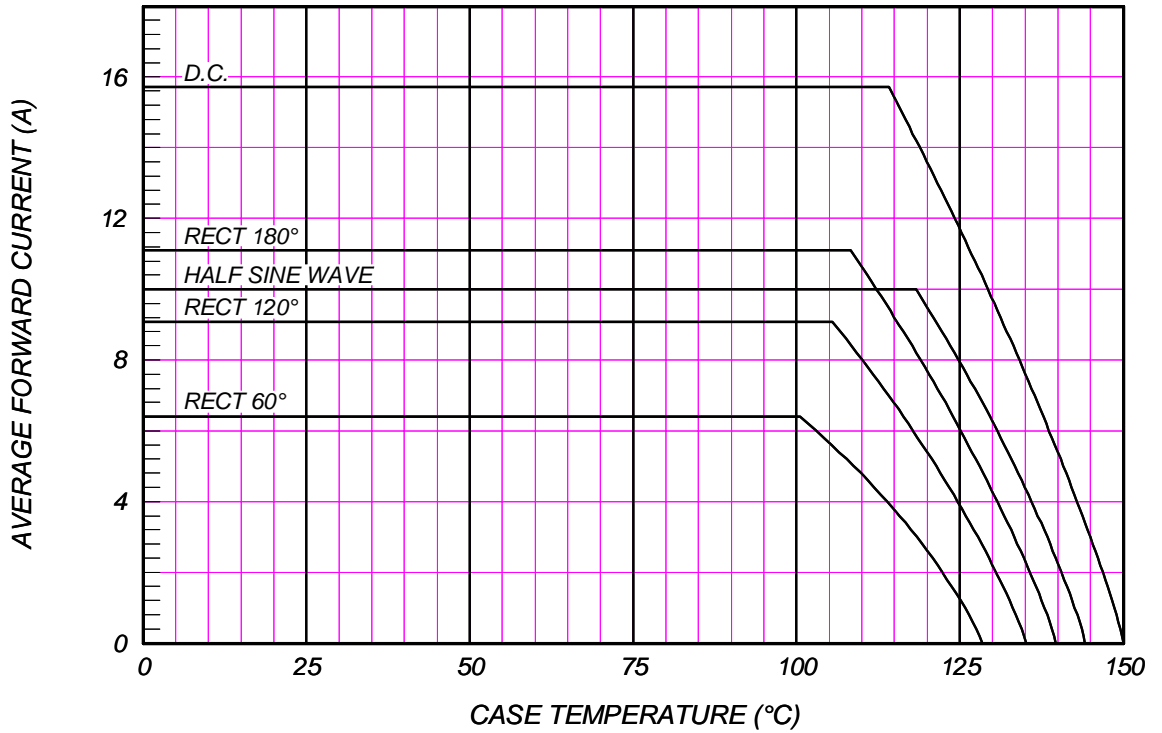




### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=200V$

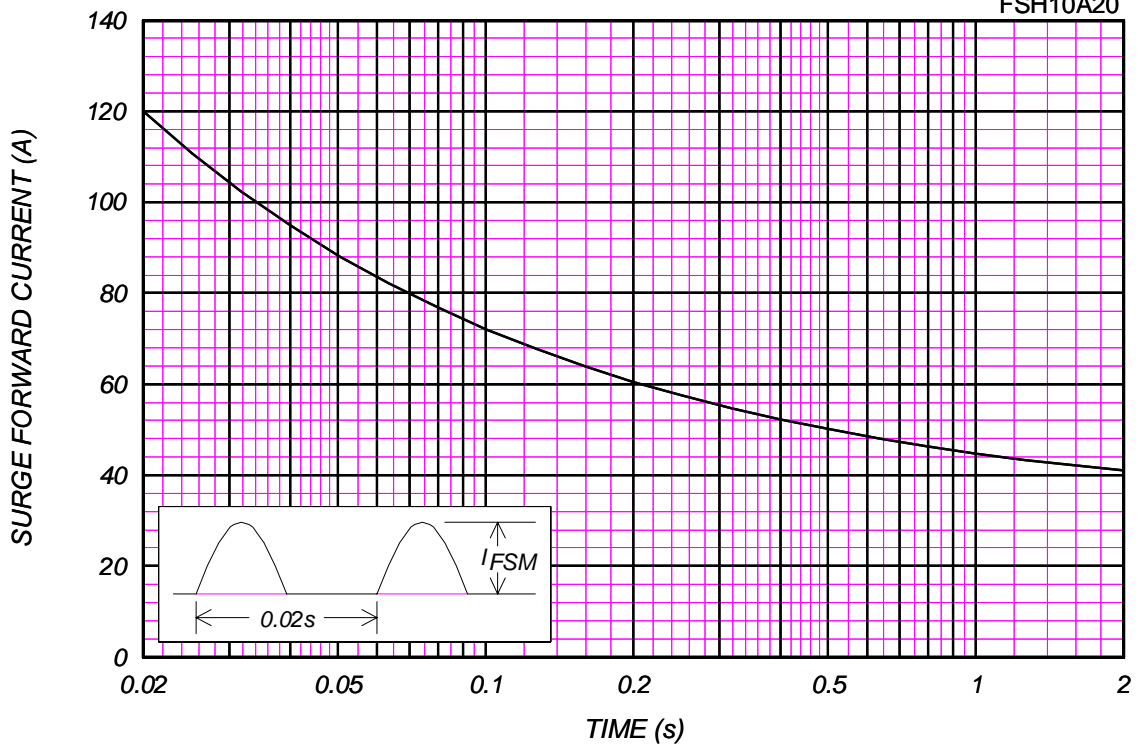
FSH10A20



### SURGE CURRENT RATINGS

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

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# JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FSH10A20

