

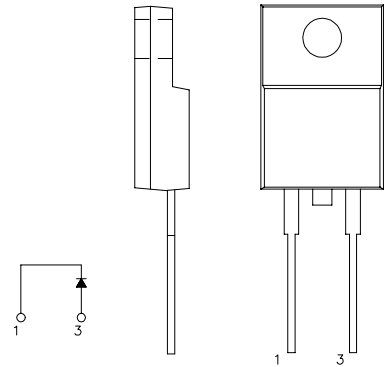
# FRD Type : FSU20B60

## OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

### FEATURES

- \* Fully Molded Isolation Case
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability



### Maximum Ratings

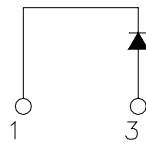
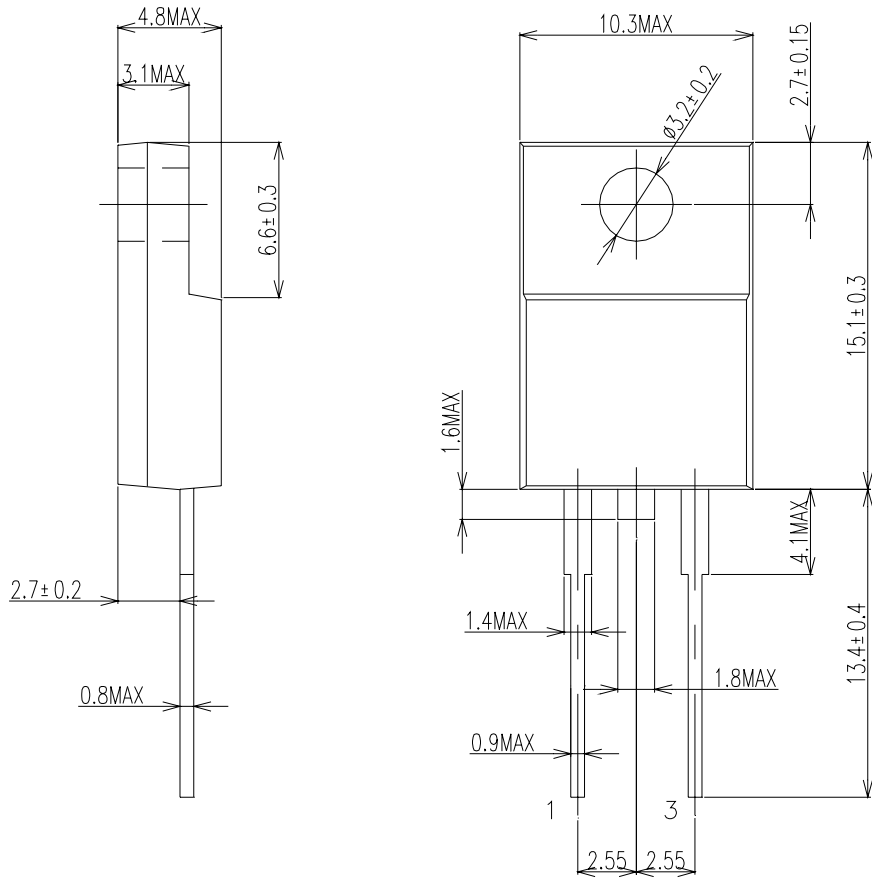
Approx Net Weight:1.7g

Rating	Symbol	FSU20B60		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	600		V
Average Rectified Output Current	$I_O$	15	$T_c=51^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	23.5		A
Surge Forward Current	$I_{FSM}$	160	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

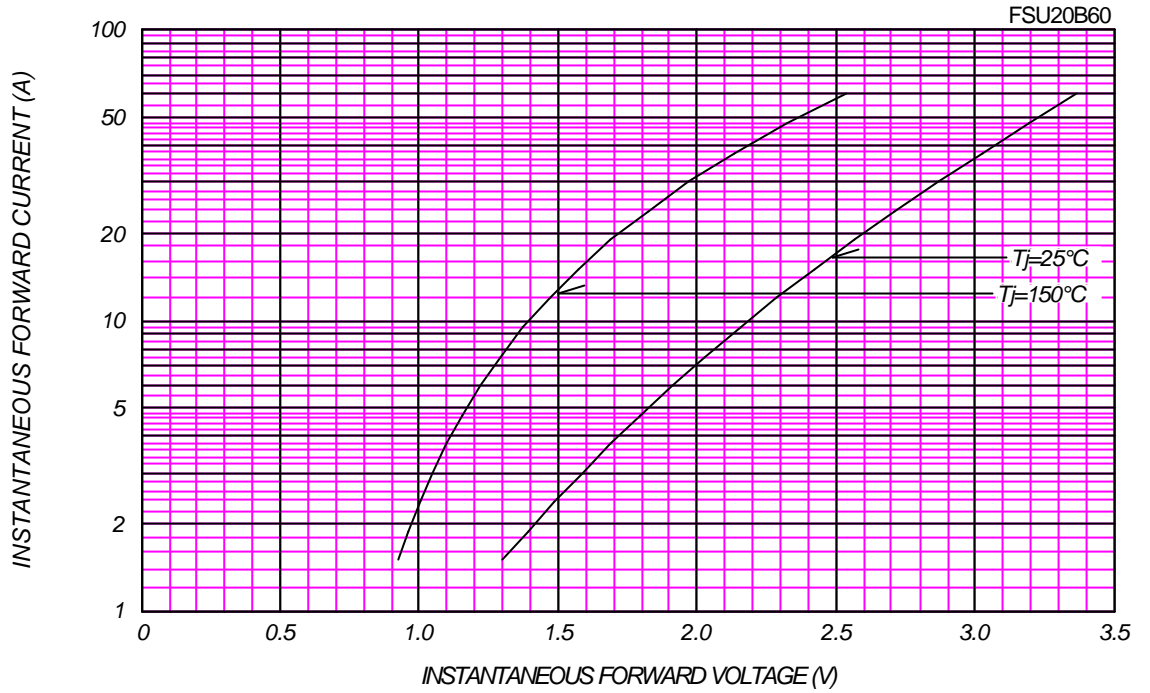
### Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j = 25^\circ\text{C}$ , $V_{RM} = V_{RRM}$	-	-	30	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j = 25^\circ\text{C}$ , $I_{FM} = 15\text{A}$	-	-	2.42	V
		$T_j = 25^\circ\text{C}$ , $I_{FM} = 20\text{A}$			2.60	
Reverse Recovery Time	$t_{rr}$	$I_{FM} = 10\text{A}$ , $-di/dt = 50\text{ A}/\mu\text{s}$ , $T_a = 25^\circ\text{C}$	-	34	50	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

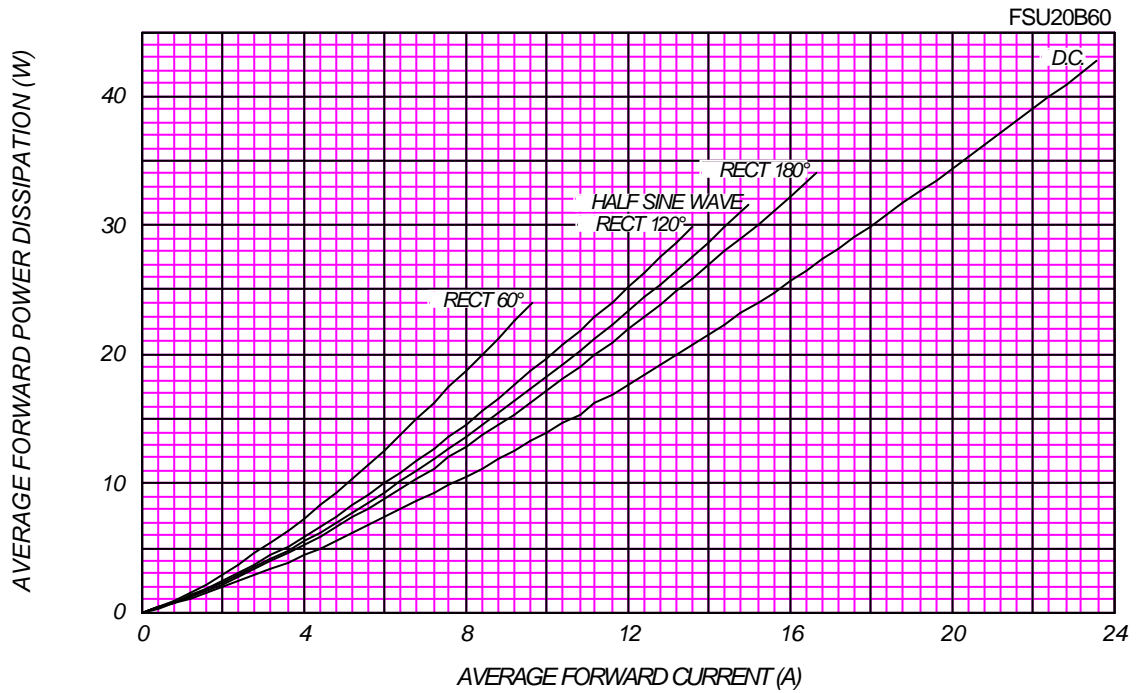
FSU20B60 OUTLINE DRAWING (Dimensions in mm)



### FORWARD CURRENT VS. VOLTAGE

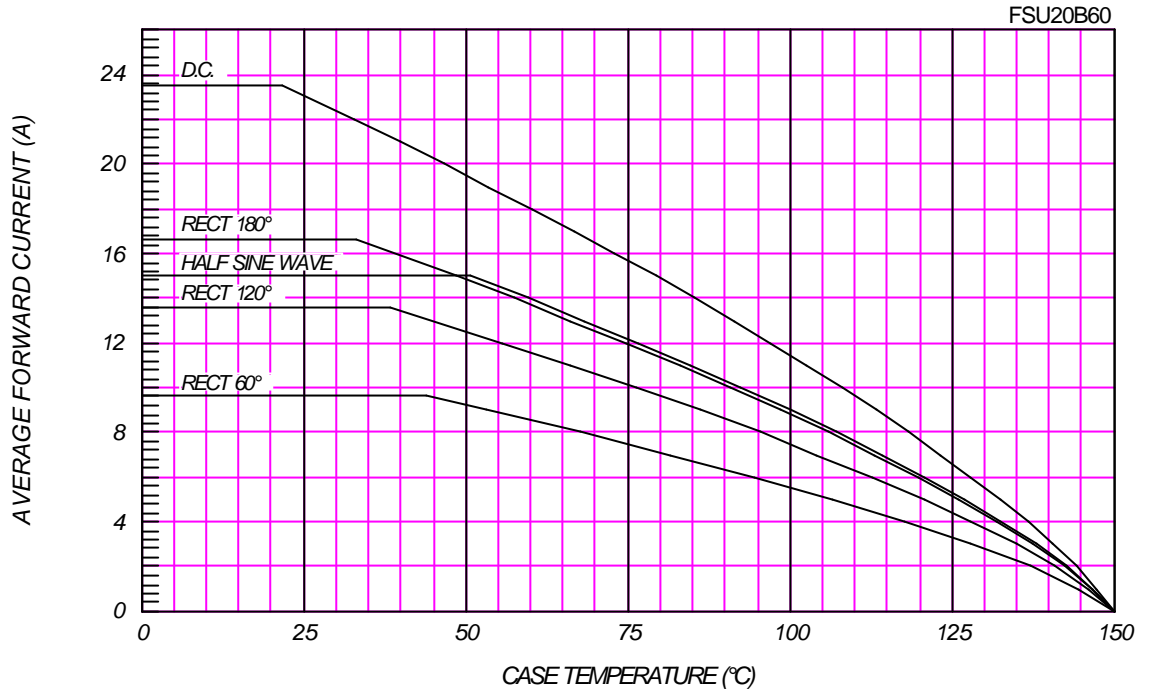


### AVERAGE FORWARD POWER DISSIPATION



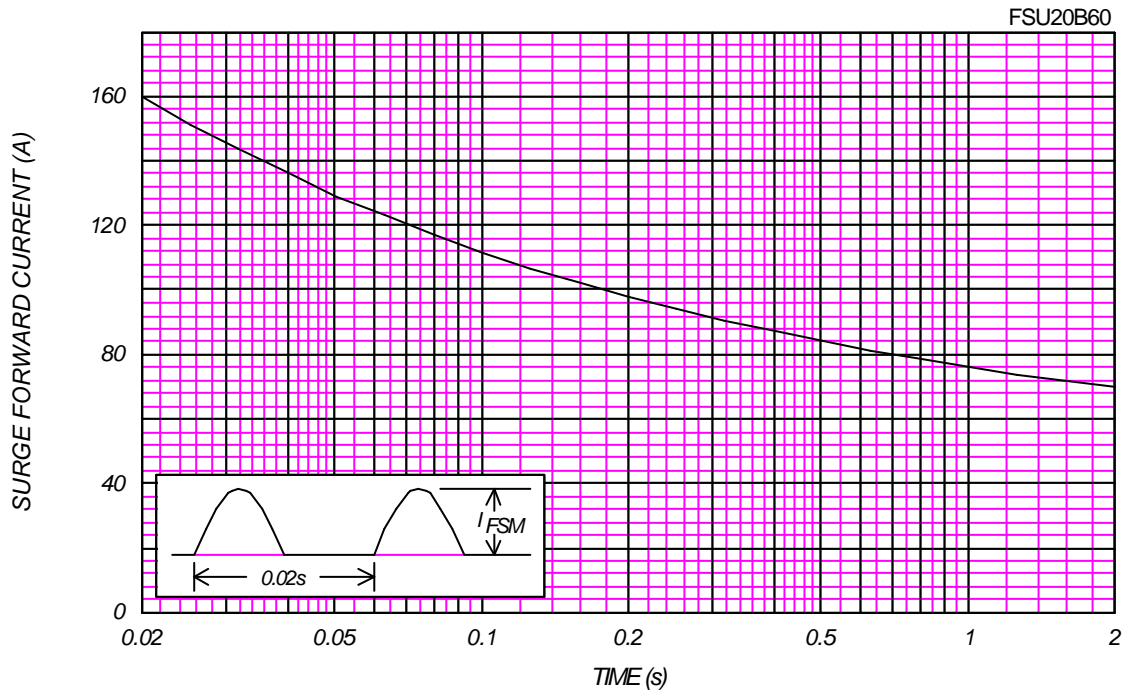


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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



# RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

FSU20B60

