

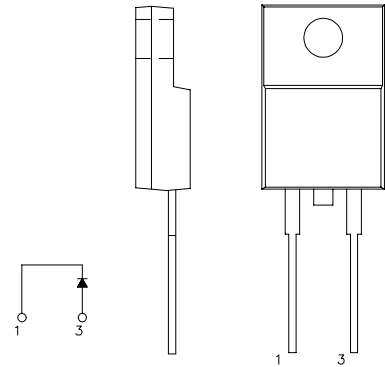
FRD Type : FSU20A60

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

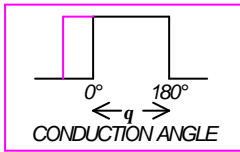
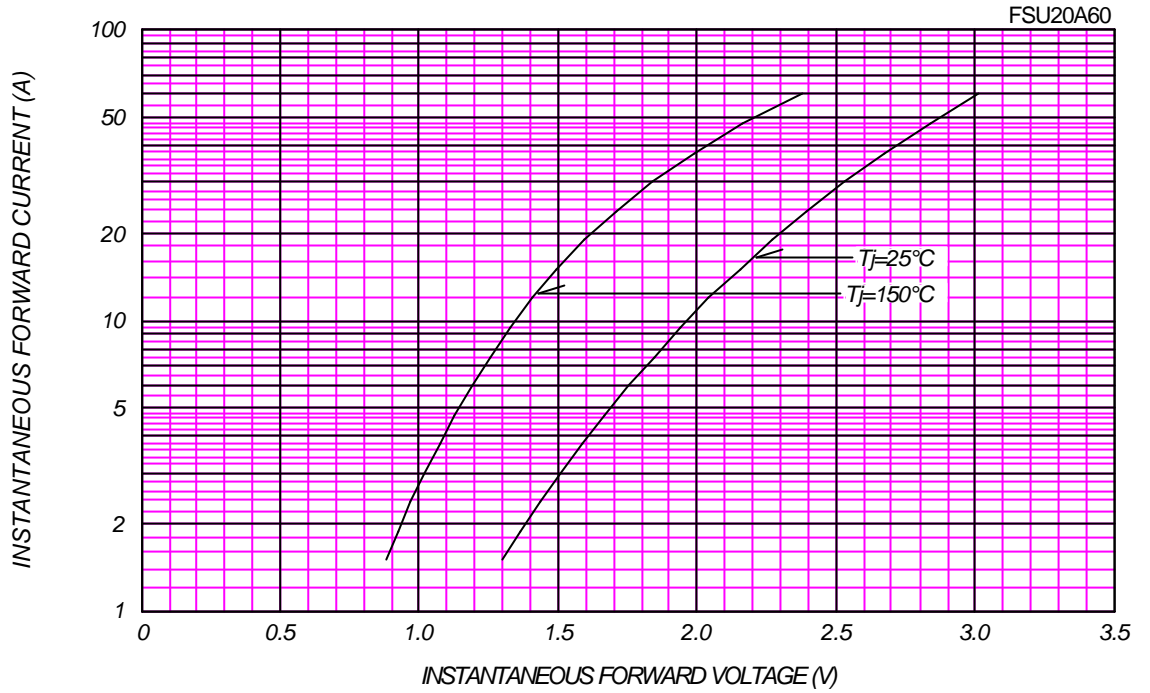
Approx Net Weight:1.7g

Rating	Symbol	FSU20A60		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600		V
Average Rectified Output Current	I_O	15	$T_c=57^\circ\text{C}$ 50 Hz Half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	23.5		A
Surge Forward Current	I_{FSM}	170	50 Hz Half Sine Wave, 1cycle 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

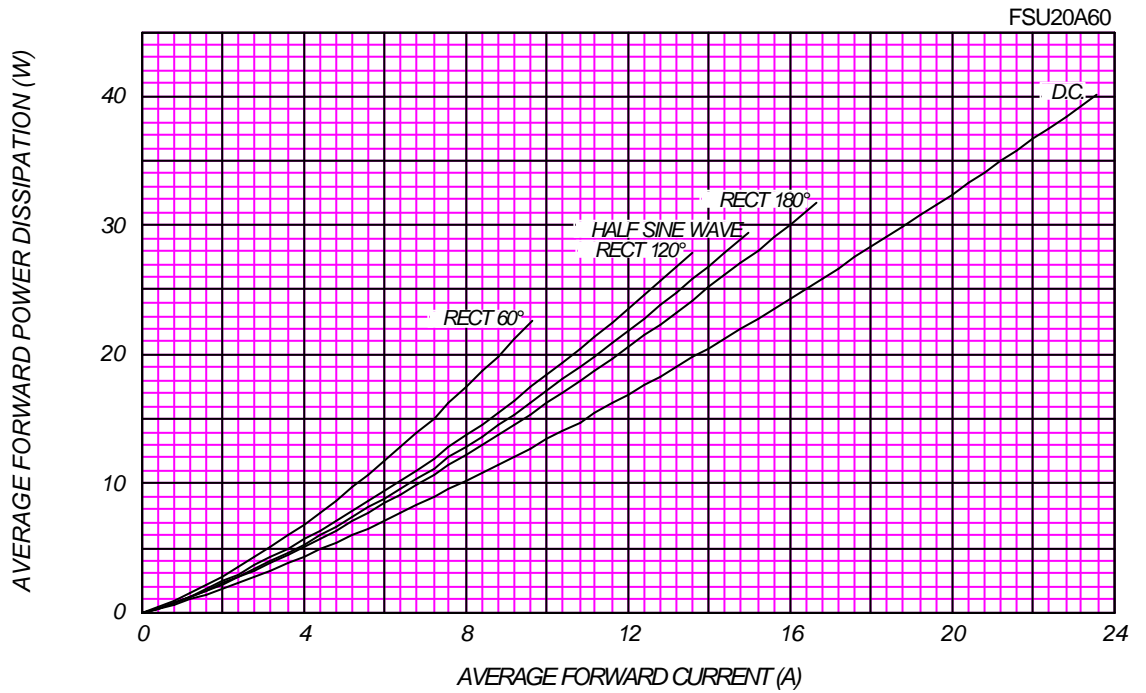
Electrical • Thermal Characteristics

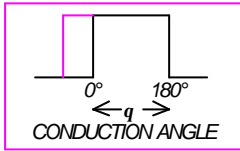
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j = 25^\circ\text{C}$, $V_{RM} = V_{RRM}$	-	-	30	μA
Peak Forward Voltage	V_{FM}	$T_j = 25^\circ\text{C}$, $I_{FM} = 15\text{A}$	-	-	2.15	V
		$T_j = 25^\circ\text{C}$, $I_{FM} = 20\text{A}$			2.30	
Reverse Recovery Time	t_{rr}	$I_{FM} = 10\text{A}$, $-di/dt = 50\text{ A}/\mu\text{s}$, $T_a = 25^\circ\text{C}$	-	39	55	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	

FORWARD CURRENT VS. VOLTAGE

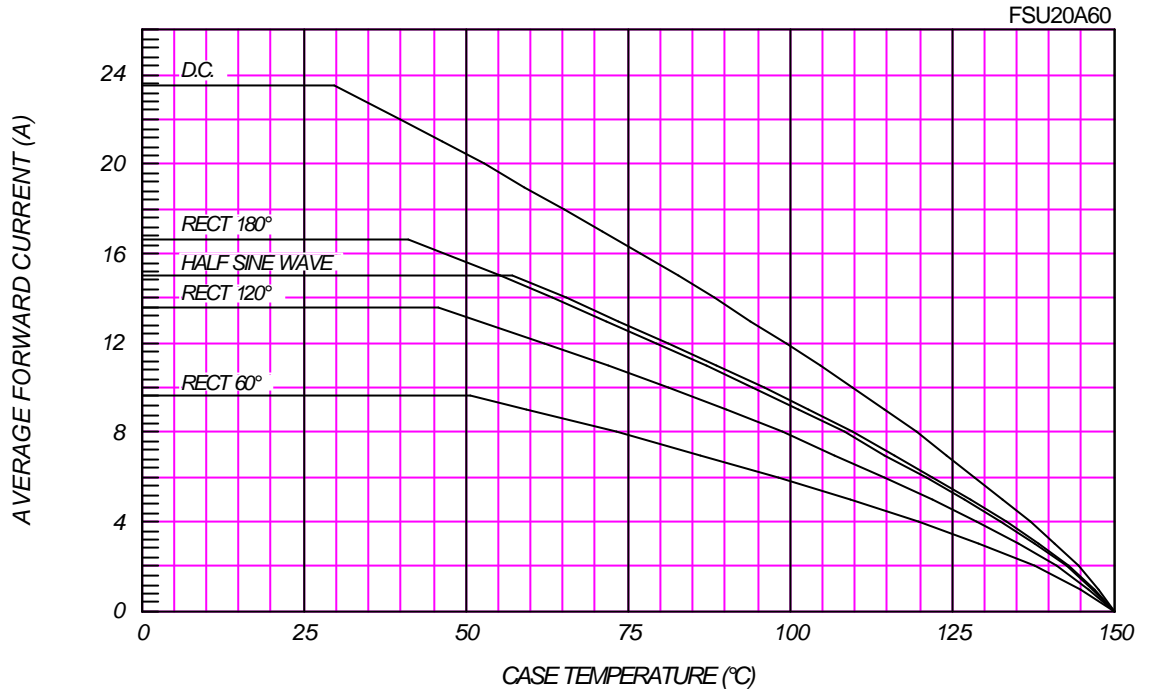


AVERAGE FORWARD POWER DISSIPATION



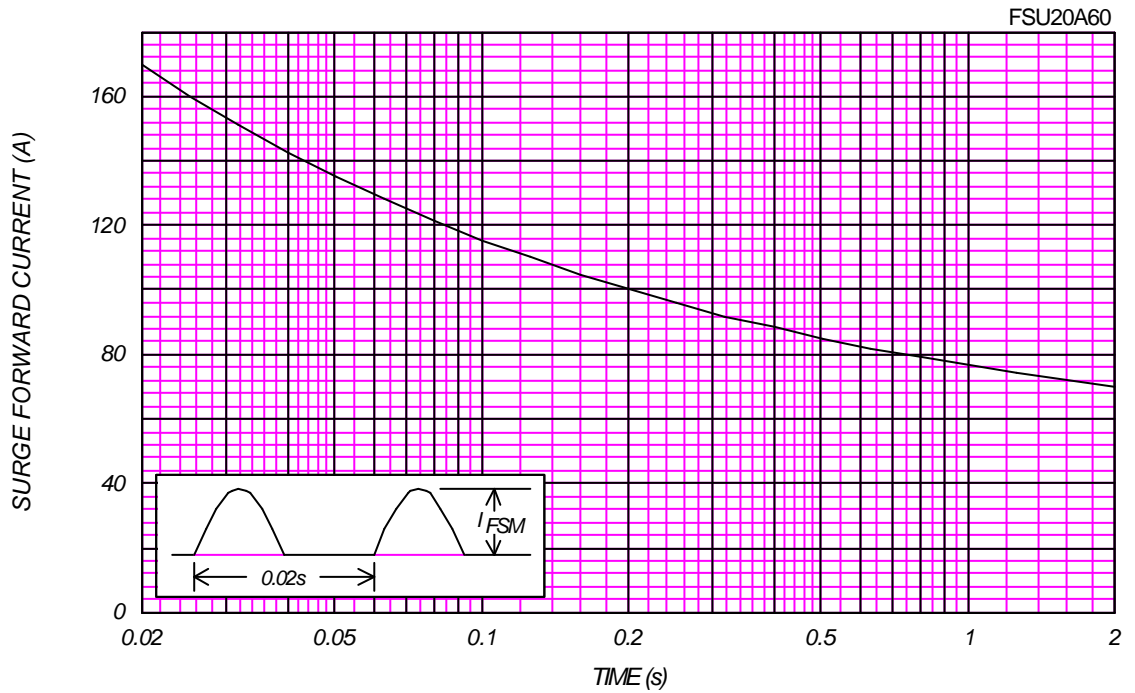


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

FSU20A60

