

10A 300V 35ns

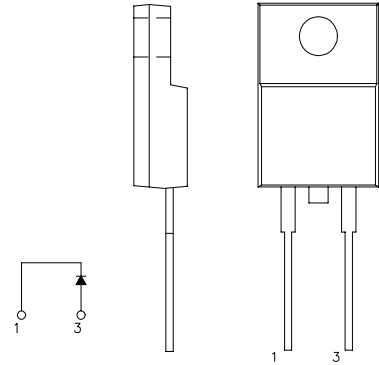
SBD Type : **FSU10A30**

OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

FEATURES

- * Ultra – Fast Recovery
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * Fully Molded Isolation



Maximum Ratings

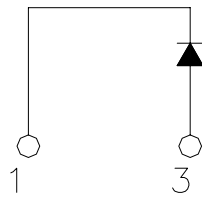
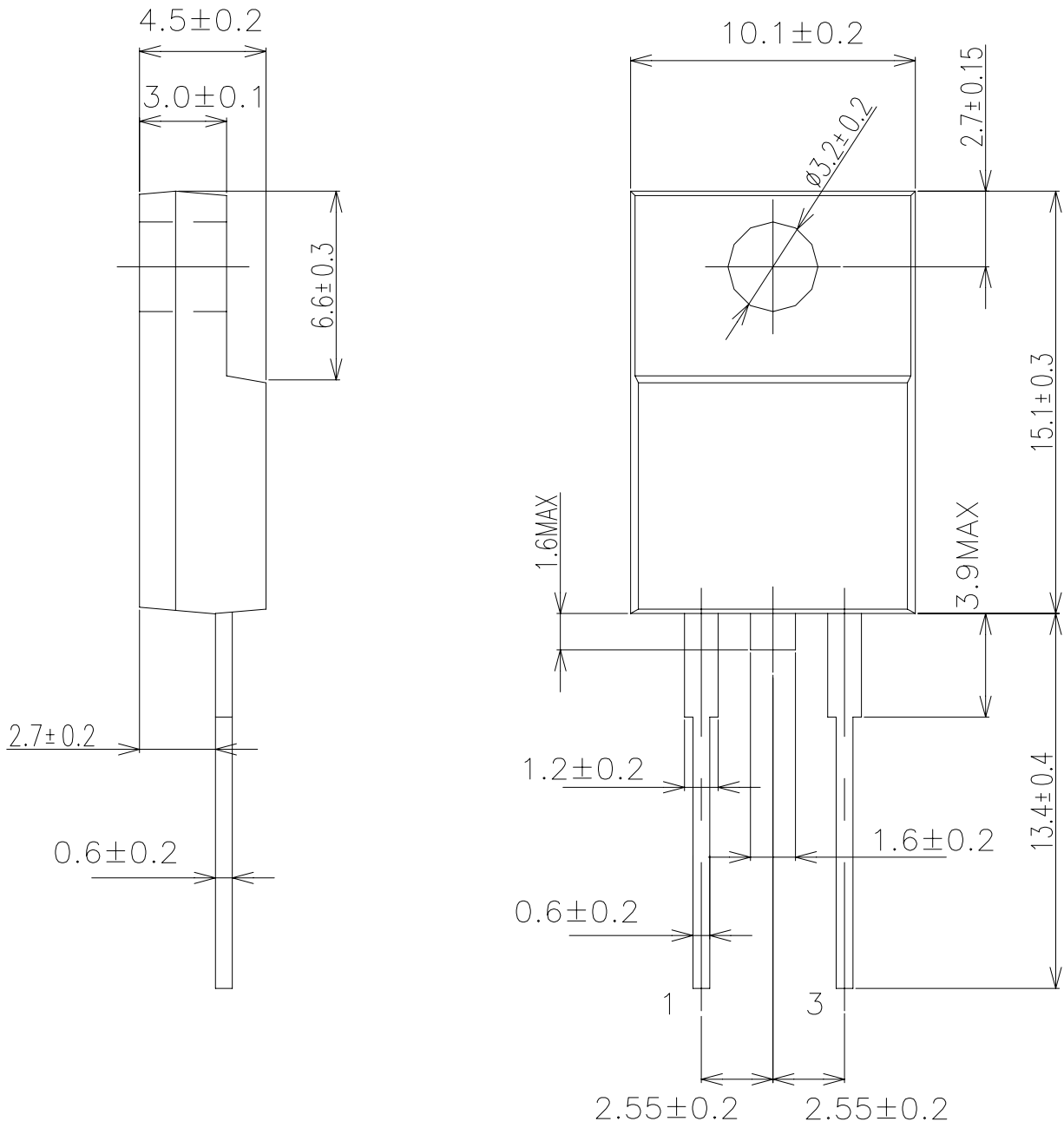
Approx Net Weight:1.70g

Rating	Symbol	FSU10A30		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300		V
Average Rectified Output Current	I_O	10	$T_c=90^\circ\text{C}$ 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,1cycle Non-repetitive	A
Operating JunctionTemperature 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

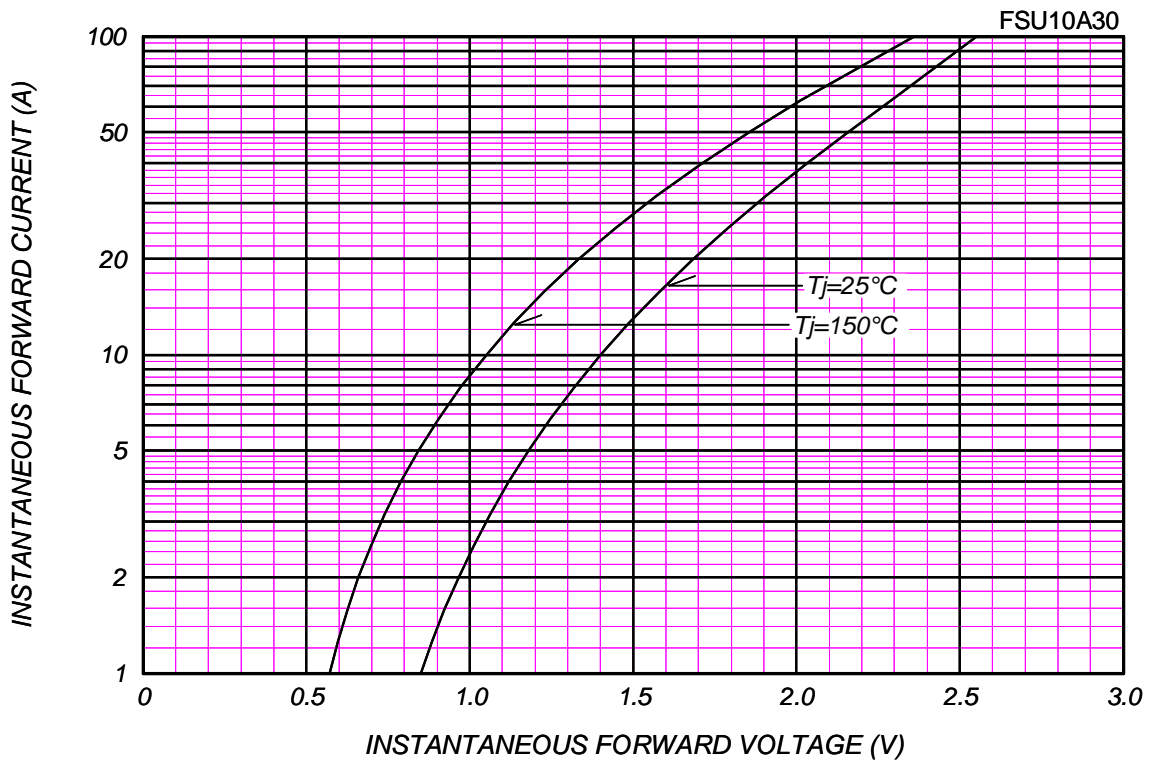
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^\circ\text{C}, V_{RM}=V_{RRM}$	-	-	25	μA
Peak Forward Voltage	V_{FM}	$T_j=25^\circ\text{C}, I_{FM}=10\text{A}$	-	1.2	1.4	V
Reverse Recovery Time	trr	$I_{FM}= 10\text{A},$ $-di/dt= 50 \text{ A}/\mu\text{s}, T_a= 25^\circ\text{C}$	-	23	35	ns
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	4	$^\circ\text{C}/\text{W}$
	Rth(c-f)	Case to Fin	-	-	1.5	

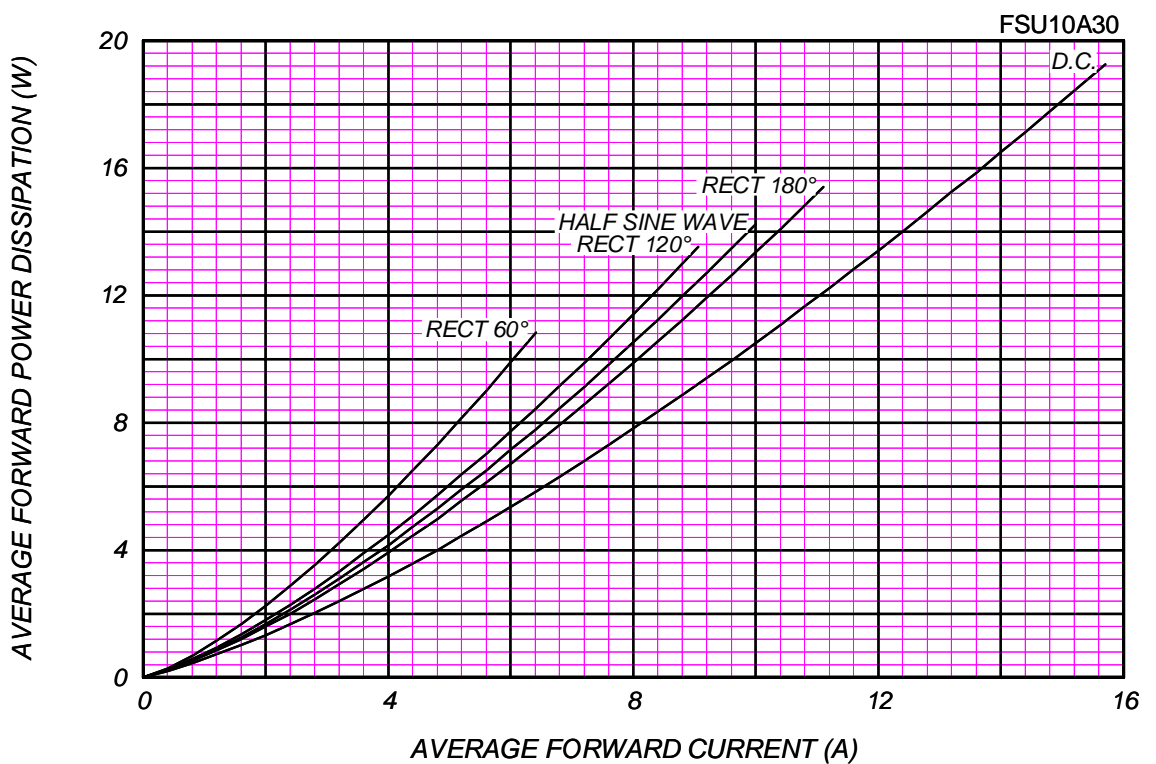
FSU_A_ OUTLINE DRAWING (Dimensions in mm)

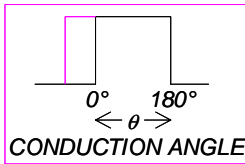


FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION

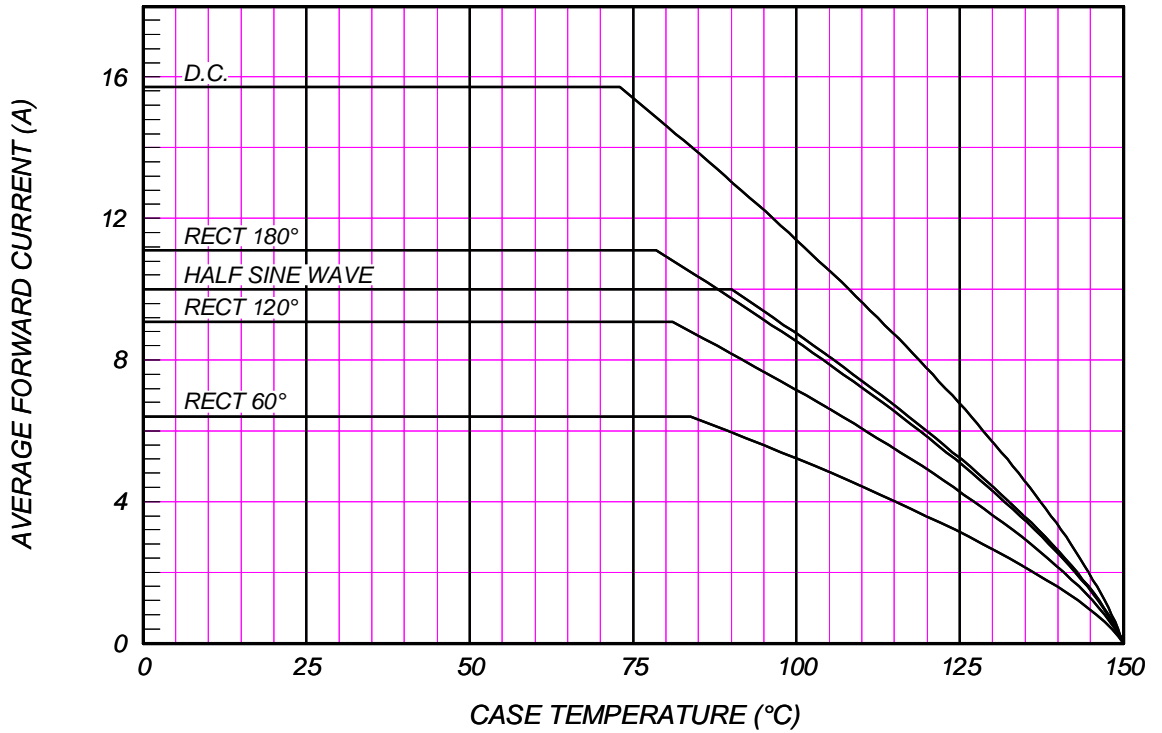




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=300V$

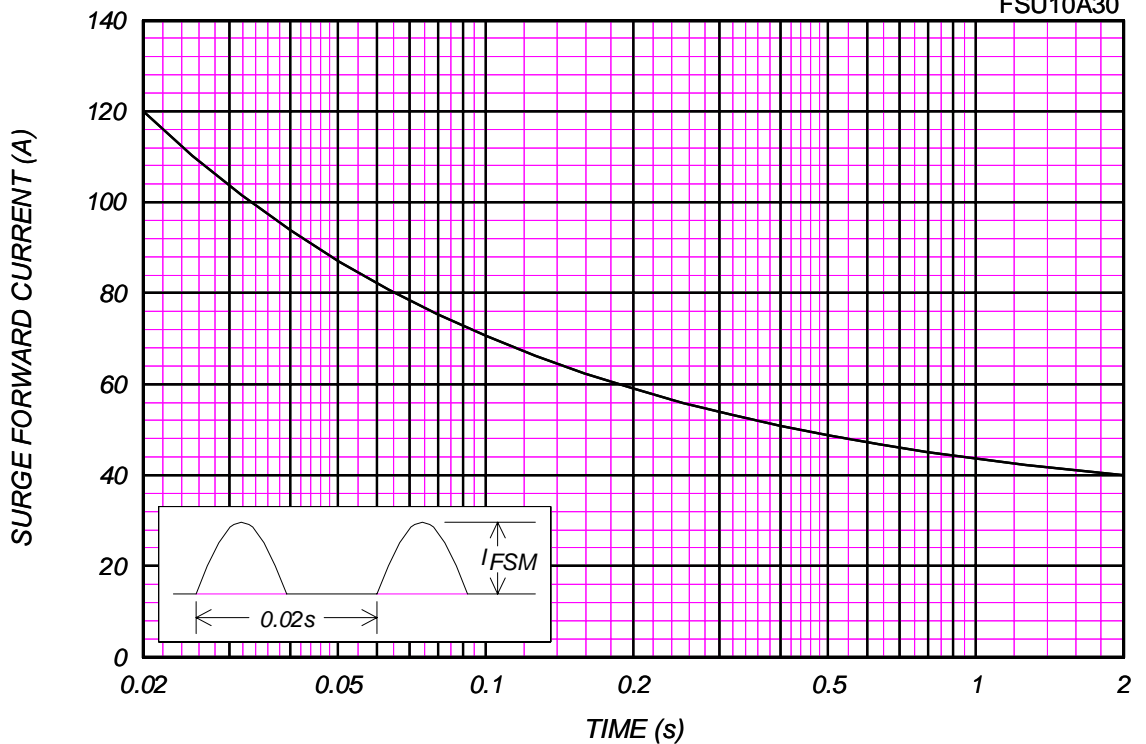
FSU10A30



SURGE CURRENT RATINGS

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

FSU10A30



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

FSU10A30

