

20A 300V 35ns

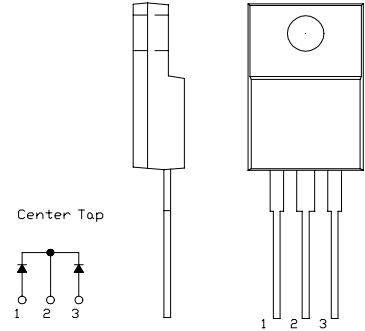
FRD Type : **FCU20A30**

OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

FEATURES

- * Fully Molded Isolation
- * Dual Diodes – Cathode Common
- * Ultra – Fast Recovery
- * Low Forward Voltage Drop
- * High Surge Capability



Maximum Ratings

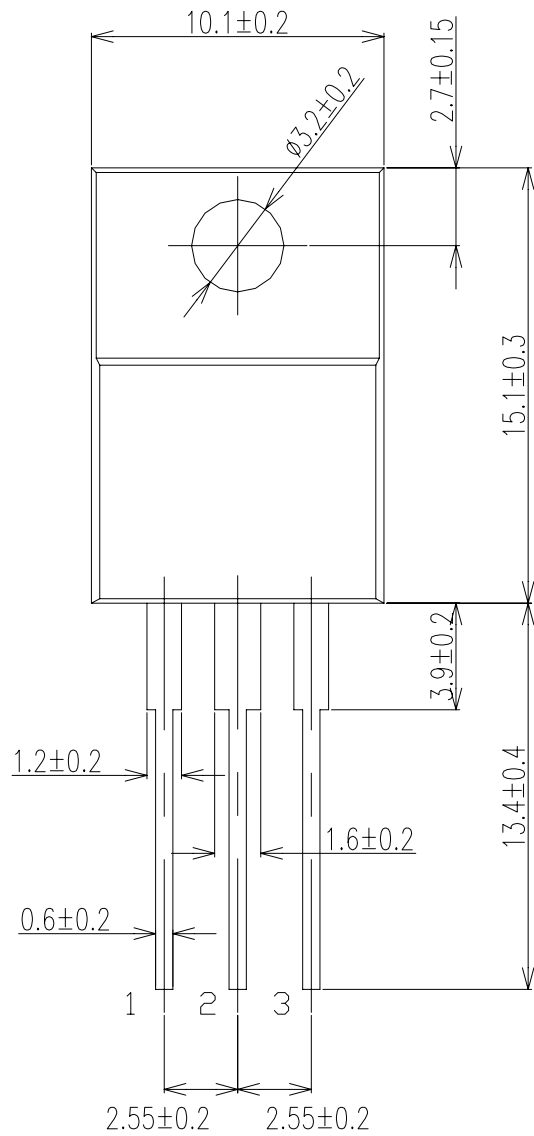
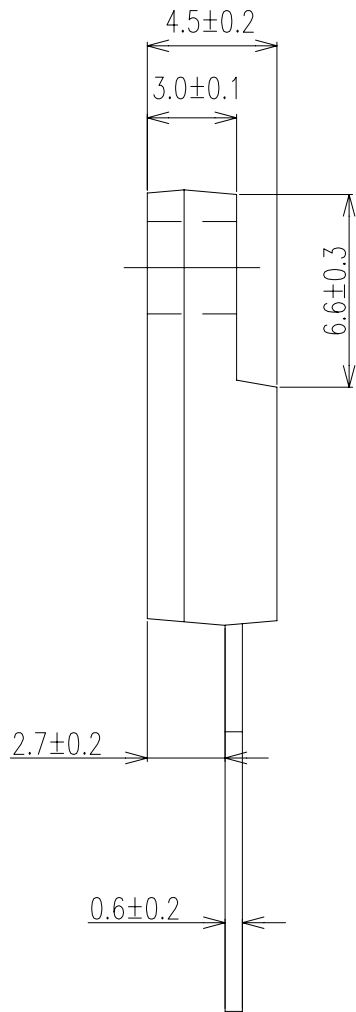
Approx Net Weight:1.75g

Rating	Symbol	FCU20A30		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300		V
Average Rectified Output Current	I_o	20	$T_c=90^{\circ}C$ 50 Hz, Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	22.2		A
Surge Forward Current	I_{FSM}	120	50 Hz Full Sine Wave, 1cycle 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

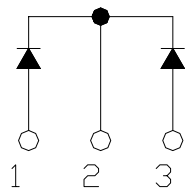
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Arm	-	-	25	μA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C, I_{FM}=10A$ per Arm	-	1.2	1.40	V
Reverse Recovery Time	t_{rr}	$I_{FM}= 10 A,$ $-di/dt= 50 A/\mu s, T_a= 25^{\circ}C$	-	23	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^{\circ}C/W$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	

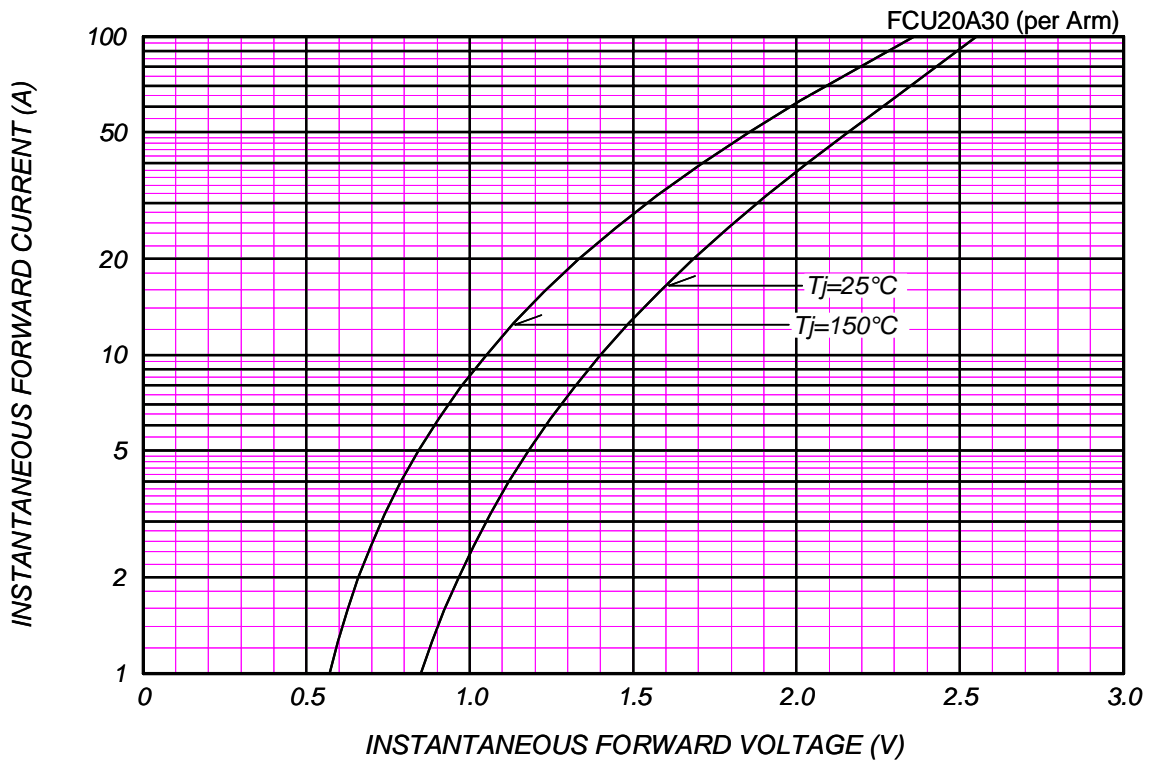
FCU_A_OUTLINE DRAWING (Dimensions in mm)



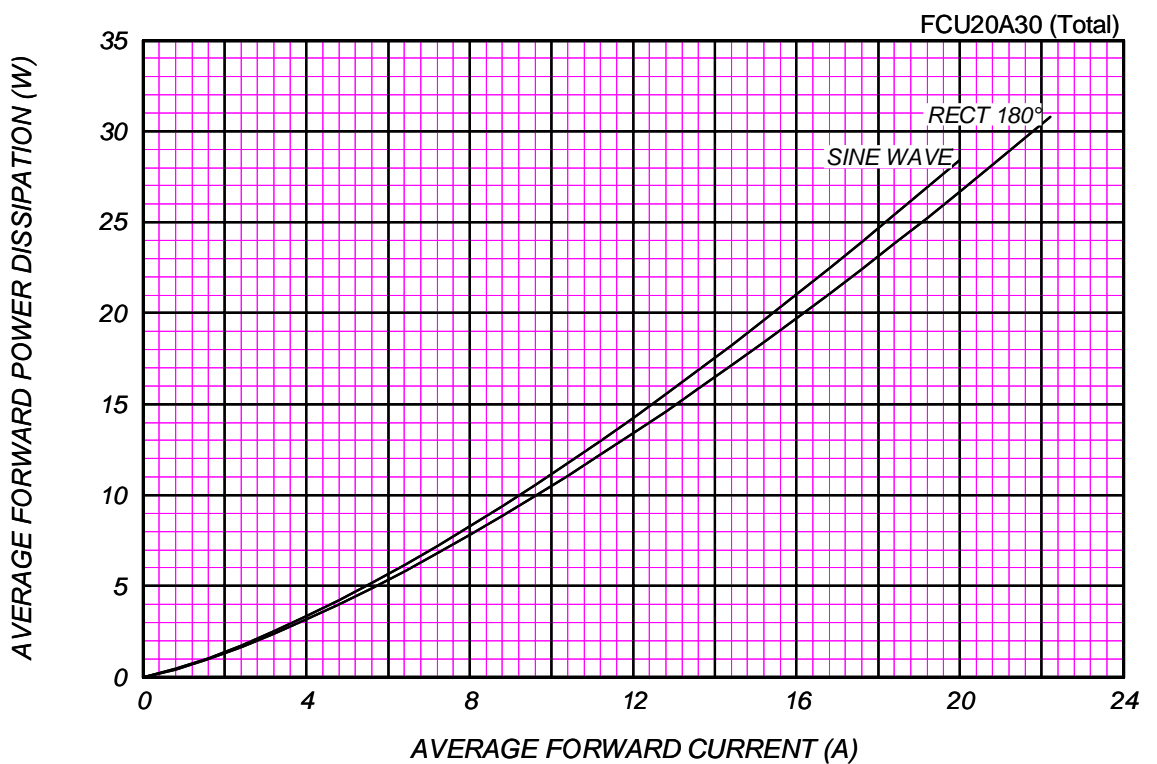
Center Tap

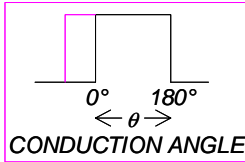


FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION

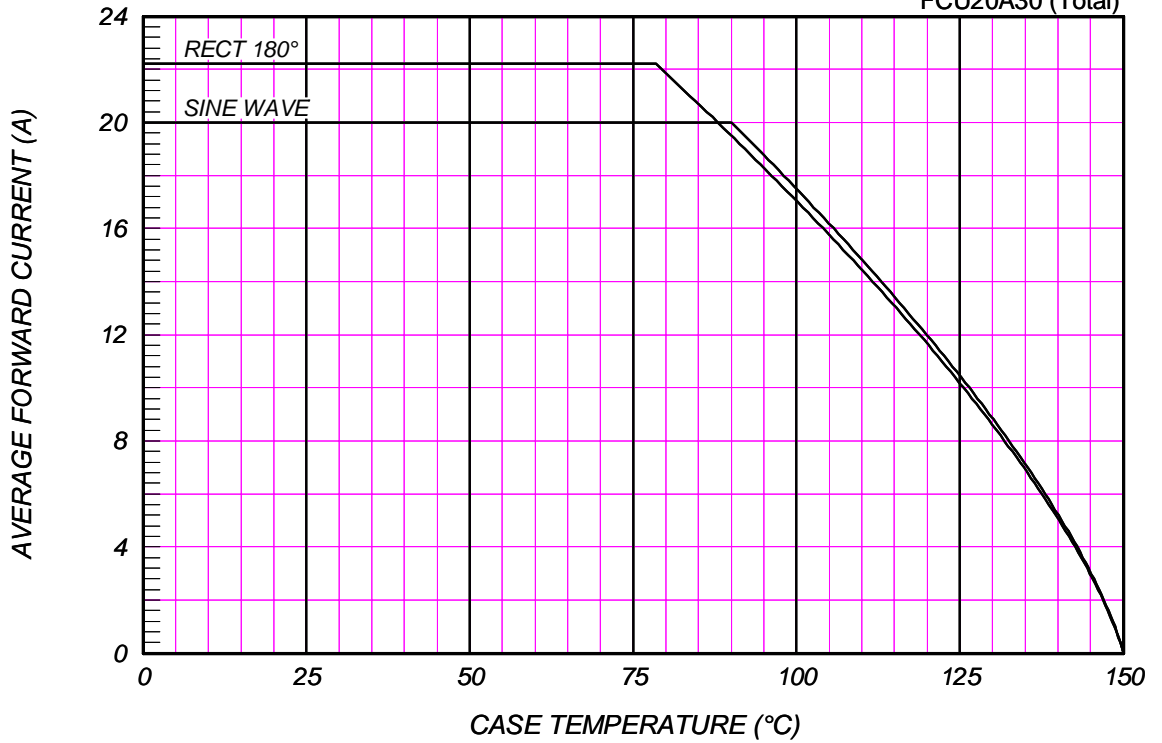




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=300V$

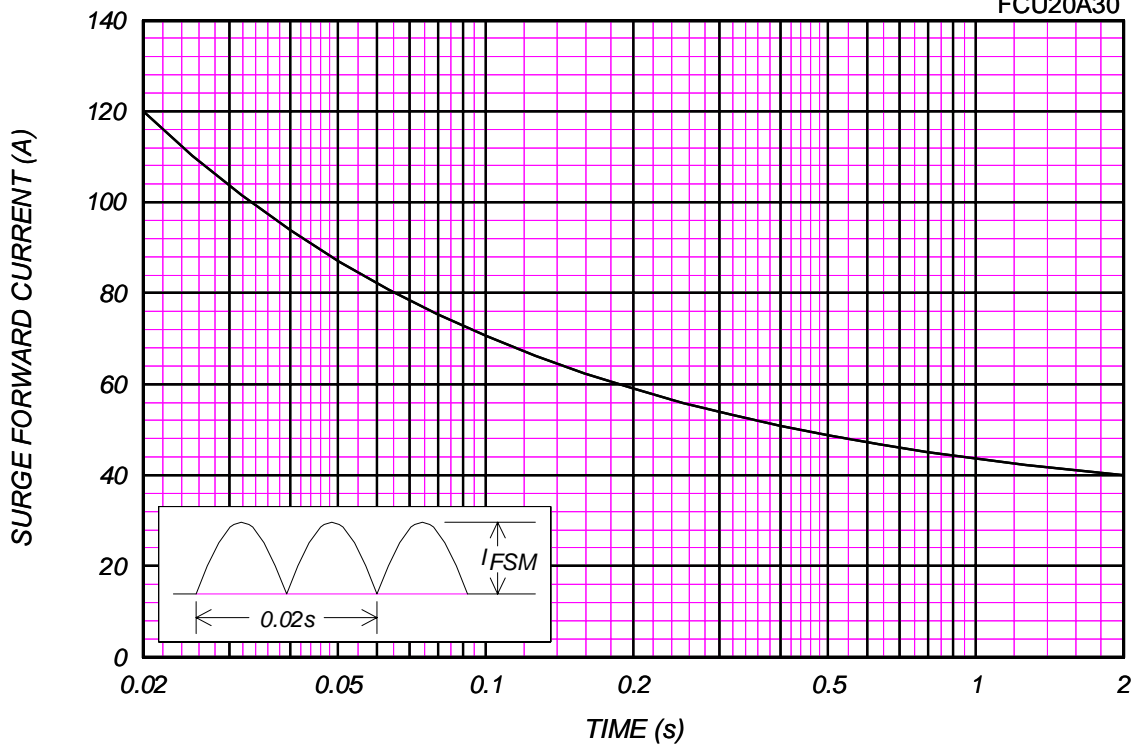
FCU20A30 (Total)



SURGE CURRENT RATINGS

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

FCU20A30



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

FCU20A30

