

20A 300V 30ns

FRD Type : TCU20A30-11A

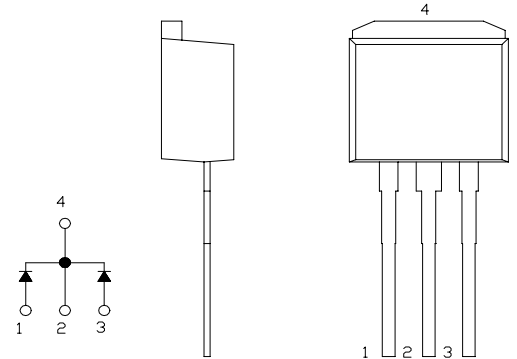
OUTLINE DRAWING

For Power Factor Improvement High Frequency

Rectification

FEATURES

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



Maximum Ratings

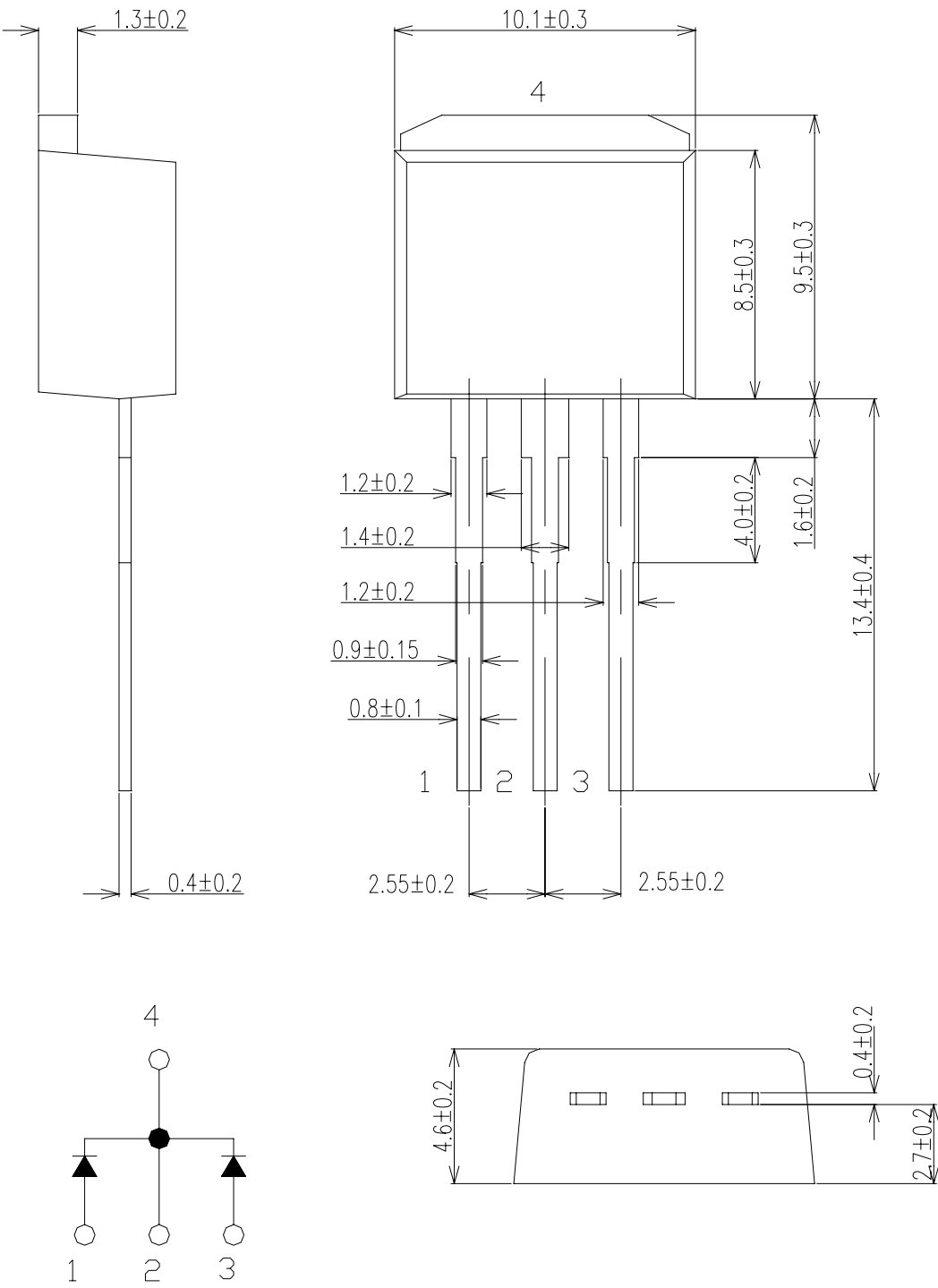
Approx Net Weight:1.45g

Rating	Symbol	TCU20A30-11A			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	300			V
Average Rectified Output Current	I _O	20	Tc=90℃	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 JunctionTemperature Range	T _{jw}	- 40 to + 150			℃
Storage Temperature Range	T _{stg}	- 40 to + 150			℃

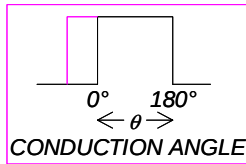
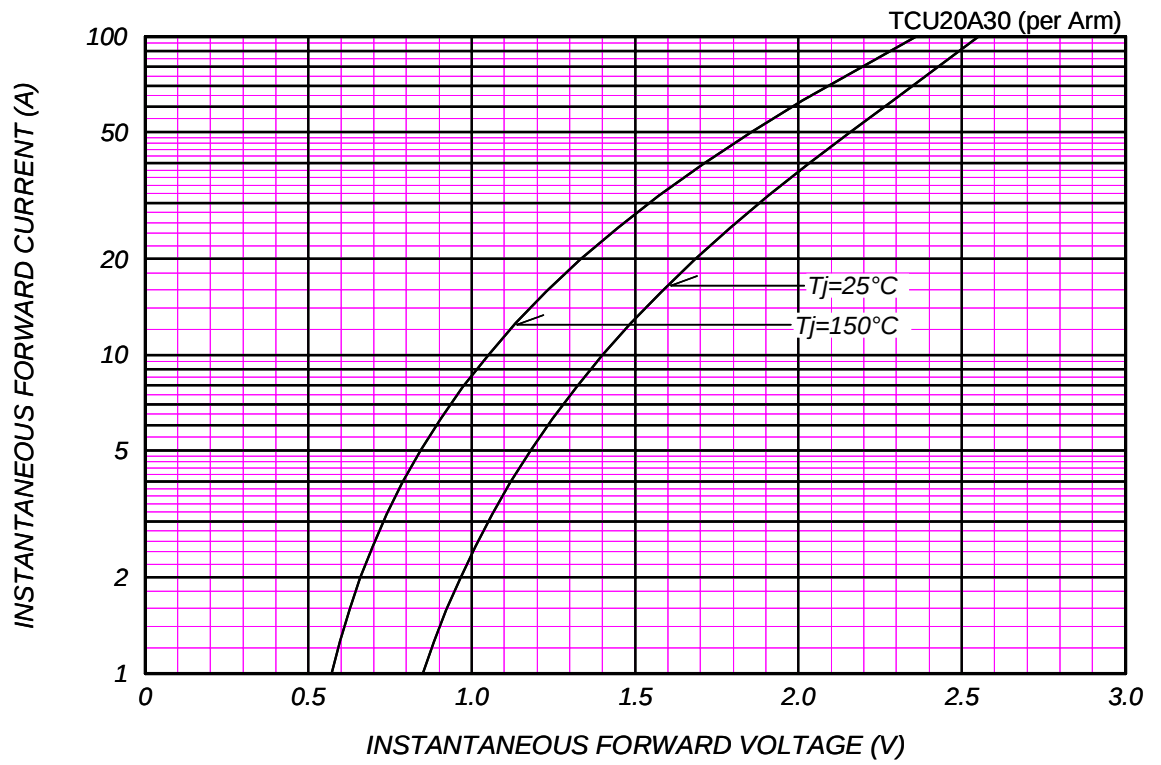
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}\text{C}, V_{RM}=V_{RRM}$ per Arm	-	-	25	μA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}\text{C}, I_{FM}=10\text{A}$ per Arm	-	1.2	1.4	V
Reverse Recovery Time	t_{rr}	$I_{FM}=10\text{A}$, $-di/dt=50\text{A}/\mu\text{s}$, $T_a=25^{\circ}\text{C}$	-	23	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	2	$^{\circ}\text{C}/\text{W}$

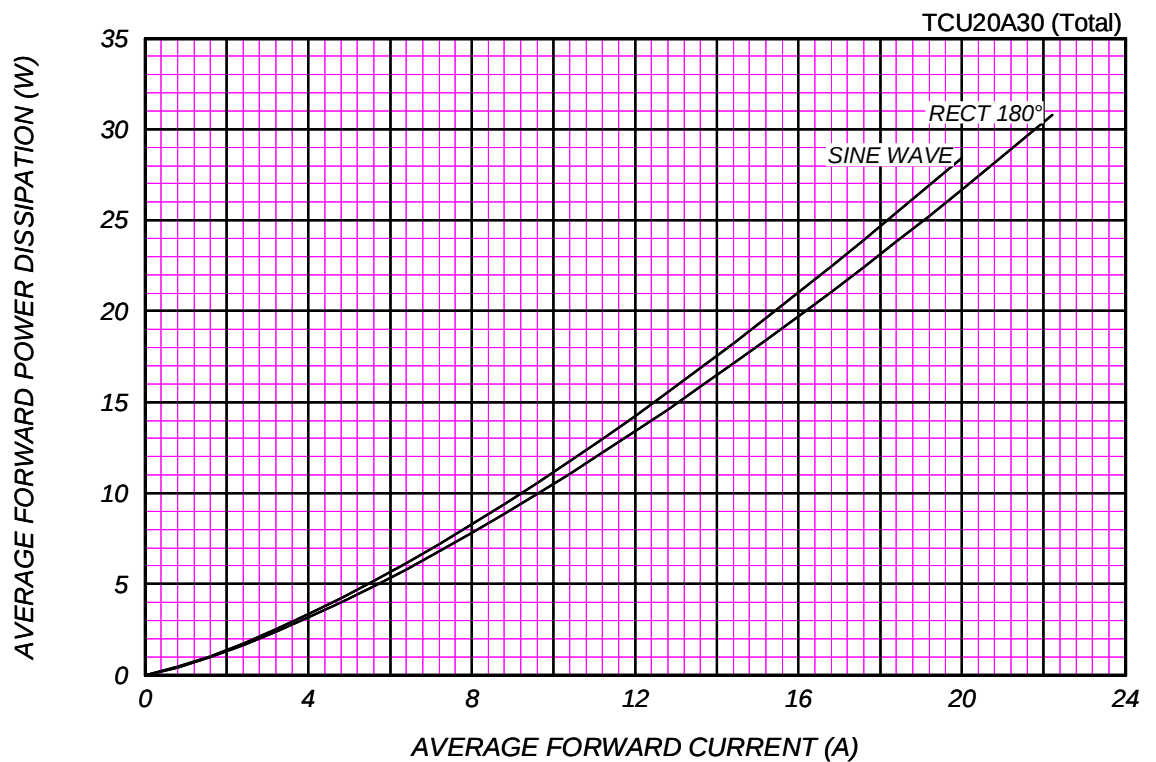
C_T_ 11A OUTLINE DRAWING (Dimensions in mm)

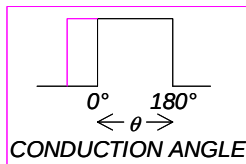


FORWARD CURRENT VS. VOLTAGE



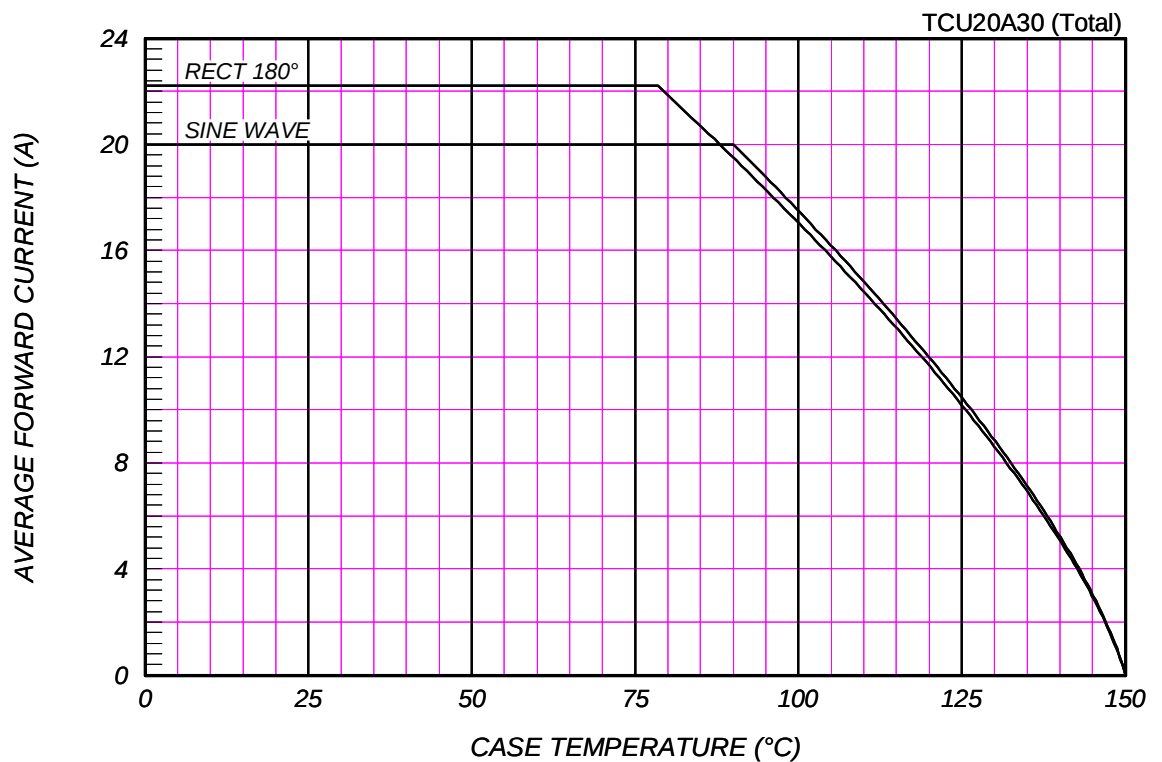
AVERAGE FORWARD POWER DISSIPATION





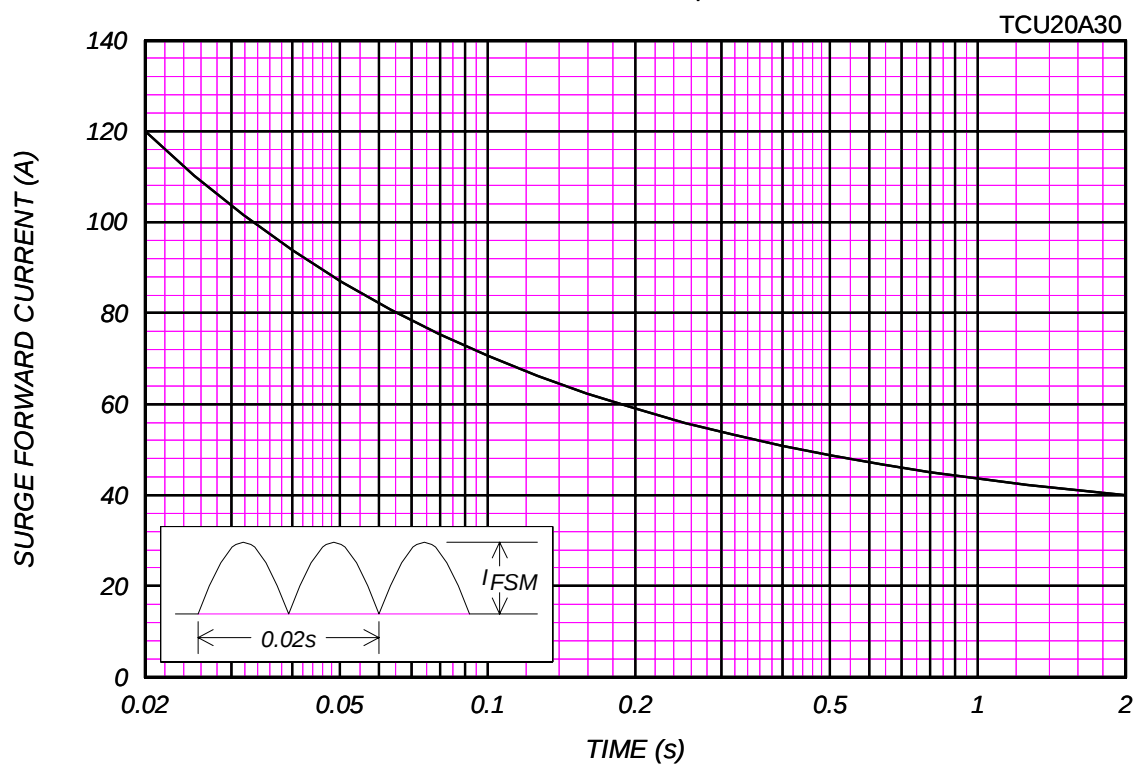
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=300V$



SURGE CURRENT RATINGS

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



RMS SURGE CURRENT RATINGS

Ta=40°C,Non-Repetitive,No Load

TCU20A30

