Nihon Inter Electronics Corporation

30A 300V 38ns

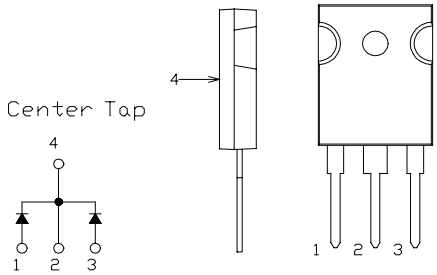
FRD Type : KCU30A30

OUTLINE DRAWING

For Power Factor Improvement High Frequency Rectification

FEATURES

* TO-247 Package
* Dual Diodes – Cathode Common
* Ultra – Fast Recovery
* Low Forward Voltage Drop
* High Surge Capability



Maximum Ratings

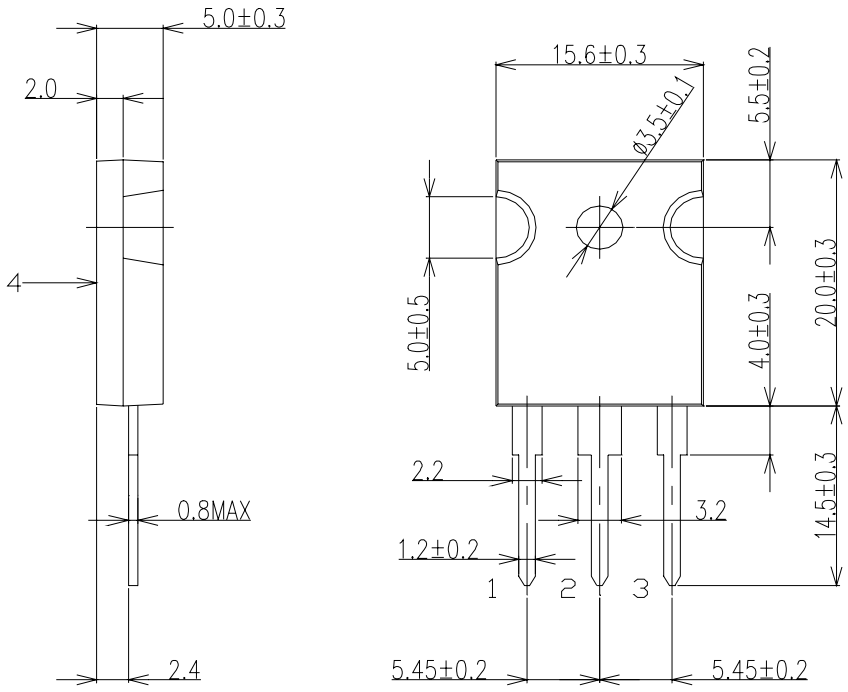
Approx Net Weight:5.55g

Rating	Symbol	KCU30A30			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300			V
Average Rectified Output Current	I_O	30	Tc=64℃	50 Hz,Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3			A
Surge Forward Current	I_{FSM}	150	50 Hz Full Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	Tjw	- 40 to + 150			℃
Storage Temperature Range	Tstg	- 40 to + 150			℃
Mounting torque		0.5	Recommended value		N•m

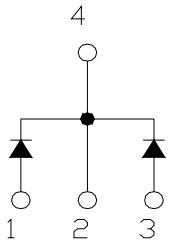
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj=25℃,V_{RM}=V_{RRM} per Arm	-	-	25	μA
Peak Forward Voltage	V_{FM}	Tj=25℃, I_{FM}=15A per Arm	-	1.10	1.30	V
Reverse Recovery Time	trr	I_{FM}= 10 A, -di/dt= 50 A/μs, Ta= 25℃	-	26	38	ns
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	2	℃/W

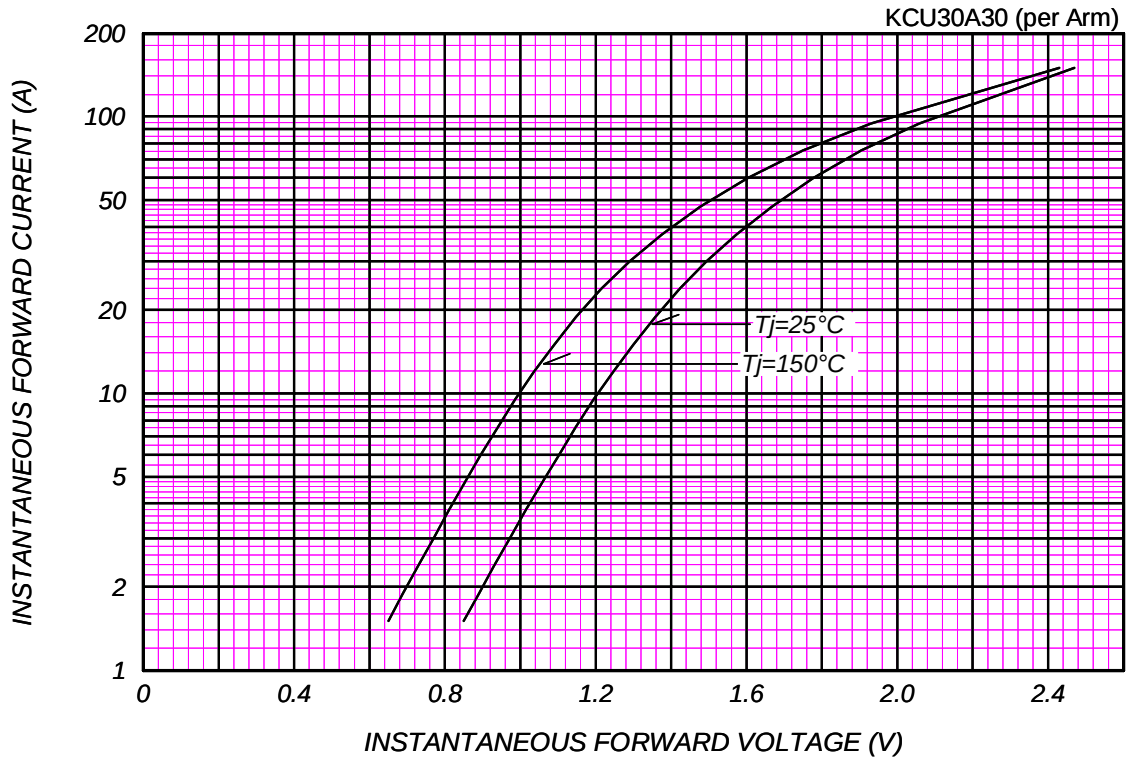
KCU30A30 OUTLINE DRAWING (Dimensions in mm)

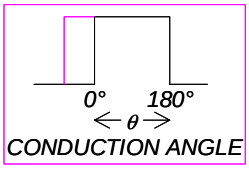


Center Tap

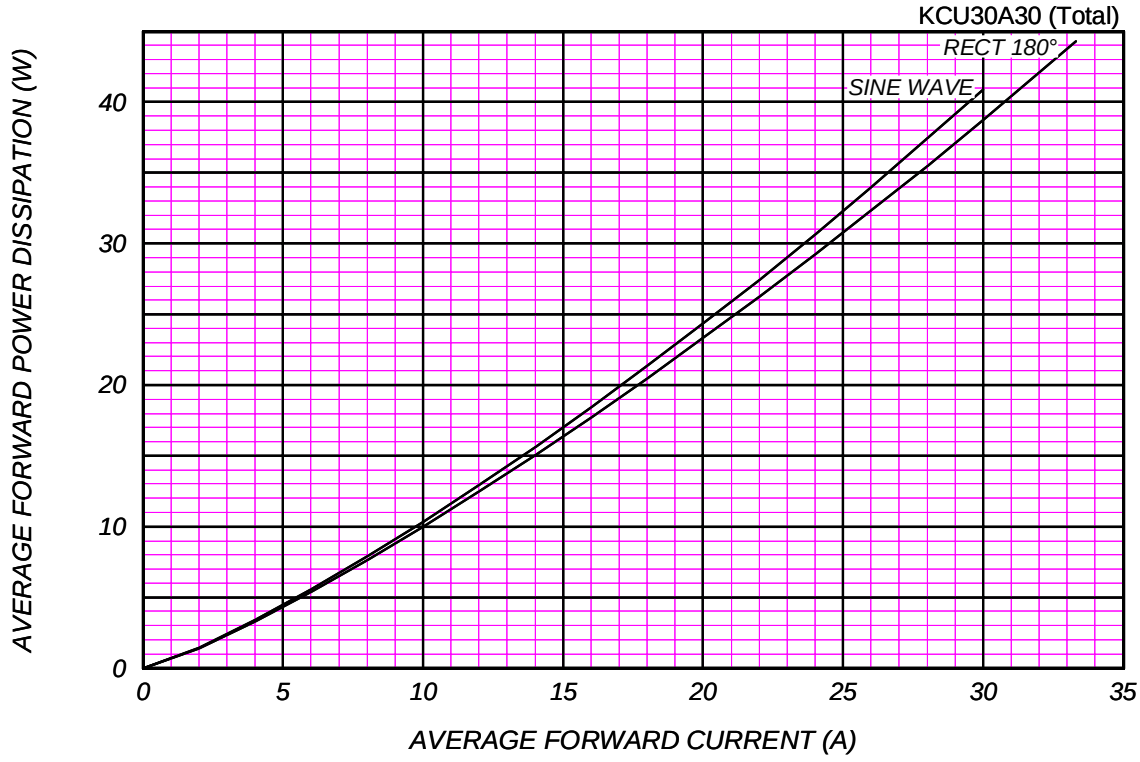


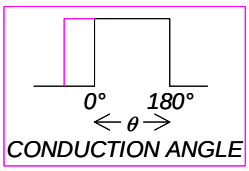
FORWARD CURRENT VS. VOLTAGE





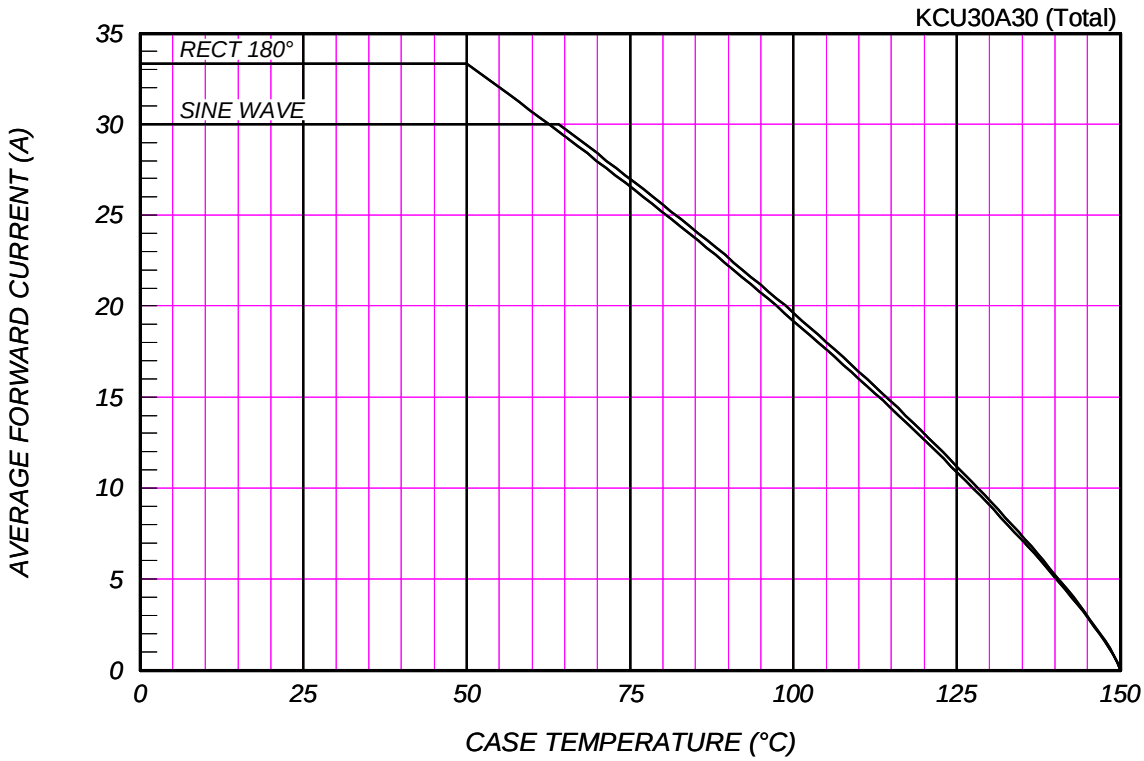
AVERAGE FORWARD POWER DISSIPATION





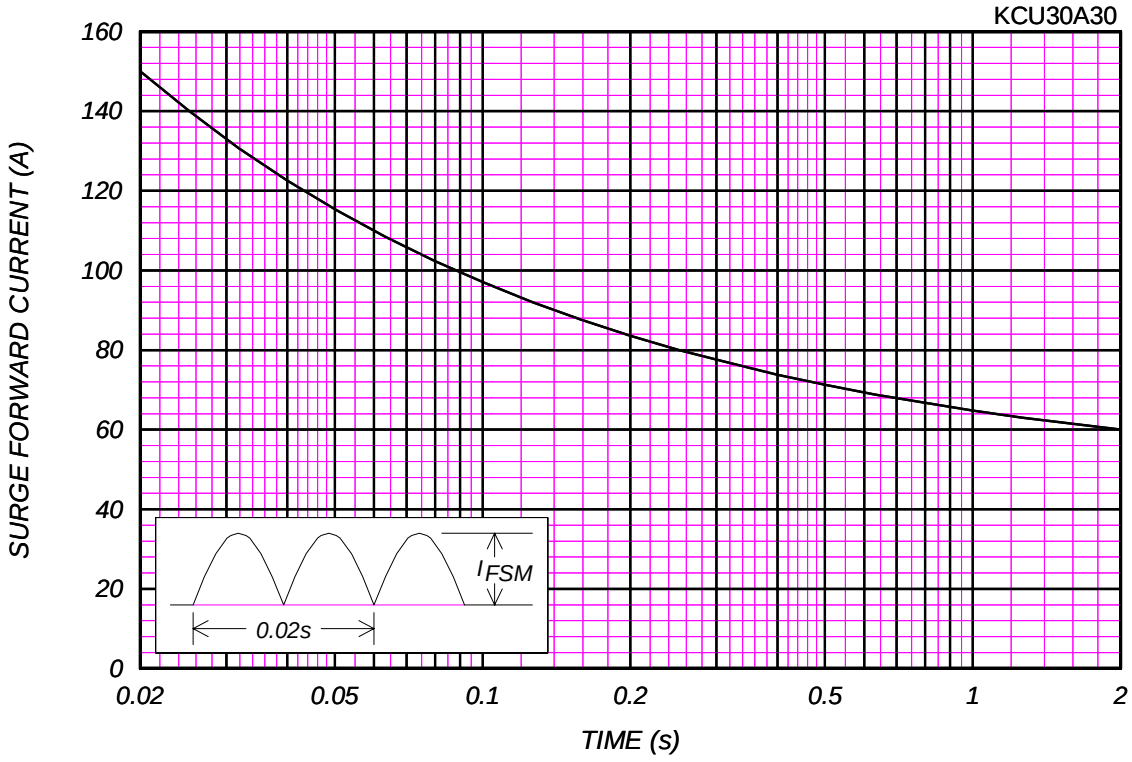
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

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

