



30A 300V 38ns

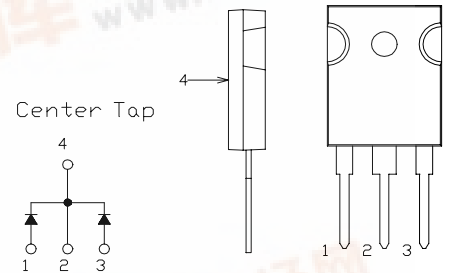
FRD Type : KCU30A30

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

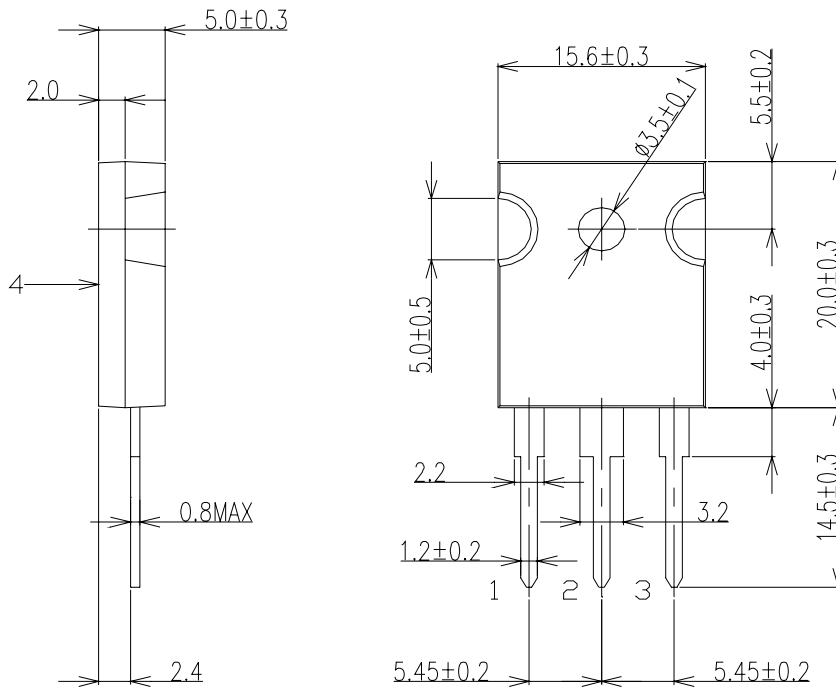
Rating	Symbol	KCU30A30		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	300		V
Average Rectified Output Current	$I_O$	30	$T_c=64^\circ C$ 50 Hz, Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3		A
Surge Forward Current	$I_{FSM}$	150	50 Hz Full Sine Wave, 1 cycle Non-repetitive	A
Operating 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

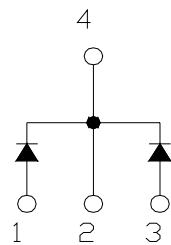
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j=25^\circ C, V_{RM}=V_{RRM}$ per Arm	-	-	25	$\mu A$
Peak Forward Voltage	$V_{FM}$	$T_j=25^\circ C, I_{FM}=15A$ per Arm	-	1.10	1.30	V
Reverse Recovery Time	trr	$I_{FM}= 10 A,$ $-di/dt= 50 A/\mu s, T_a= 25^\circ C$	-	26	38	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	2	$^\circ C/W$



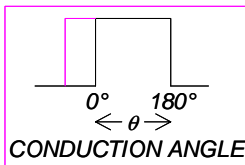
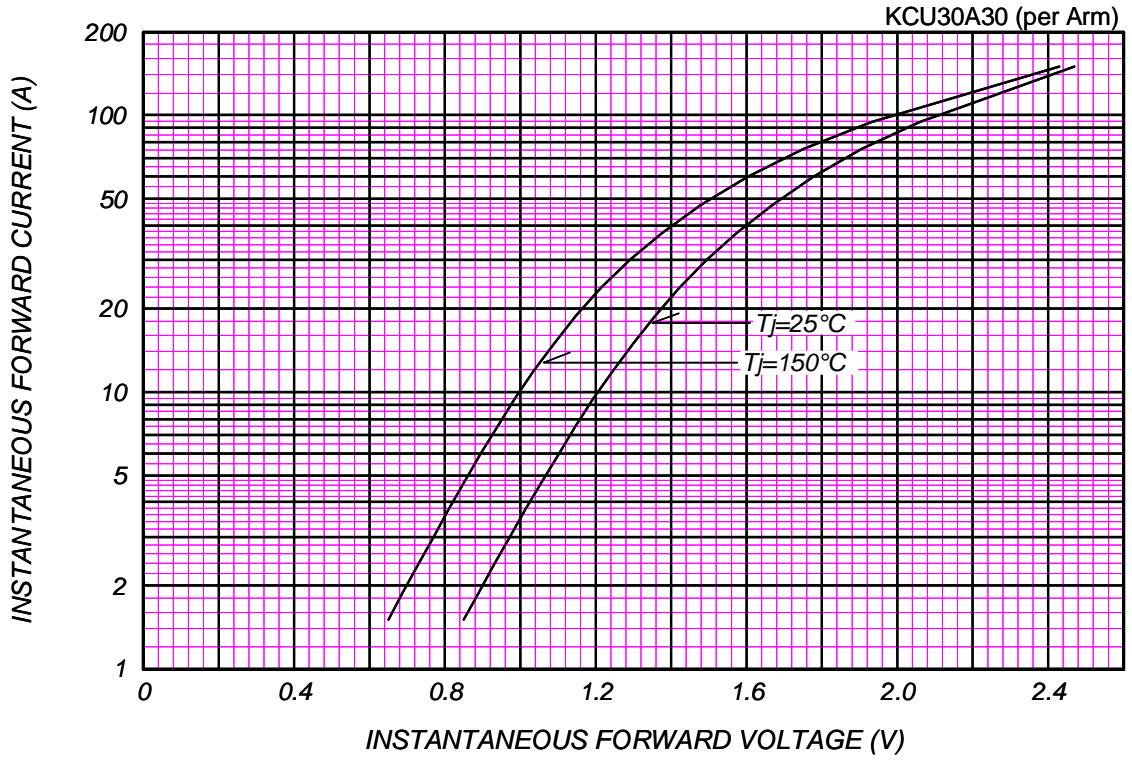
KCU30A30 OUTLINE DRAWING (Dimensions in mm)



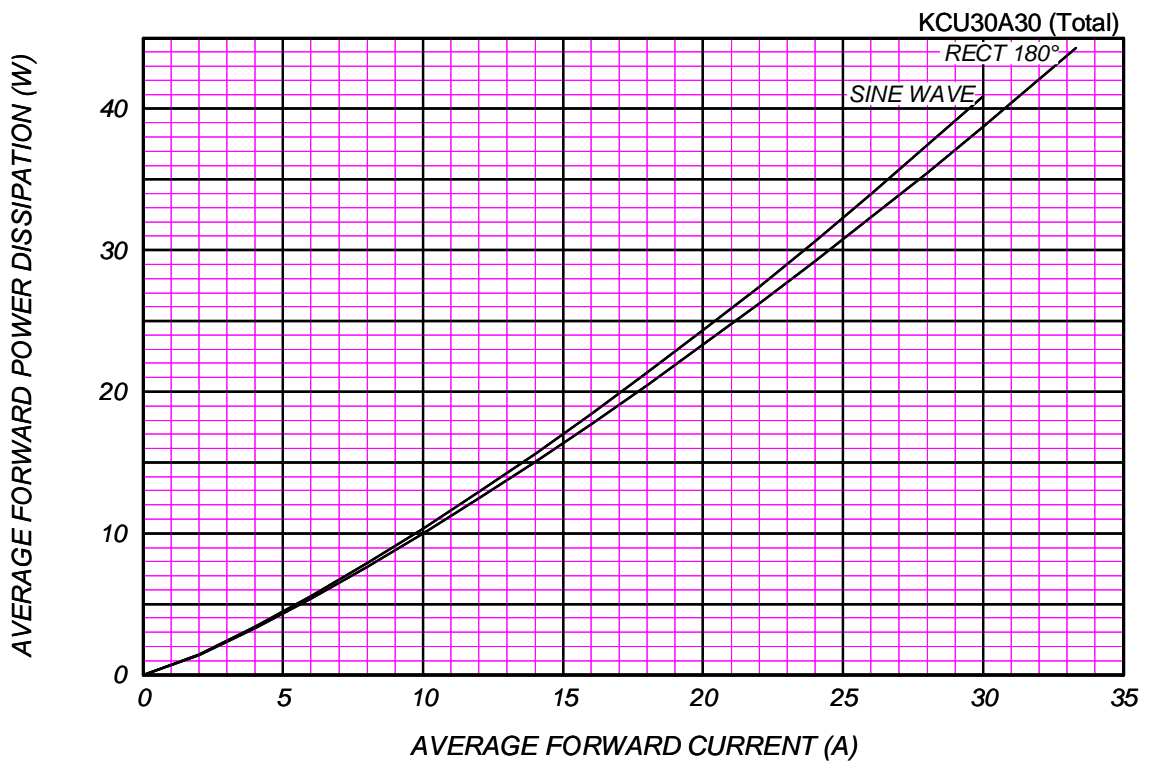
Center Tap

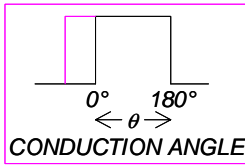


### FORWARD CURRENT VS. VOLTAGE



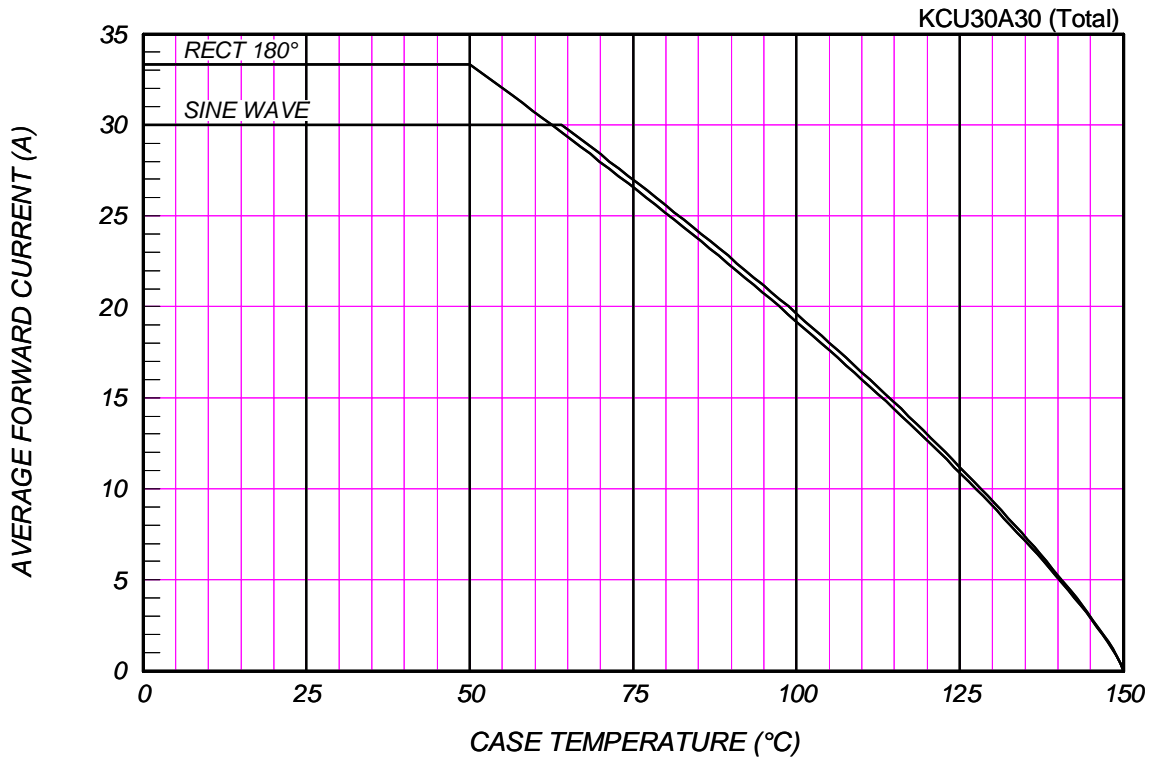
### AVERAGE FORWARD POWER DISSIPATION





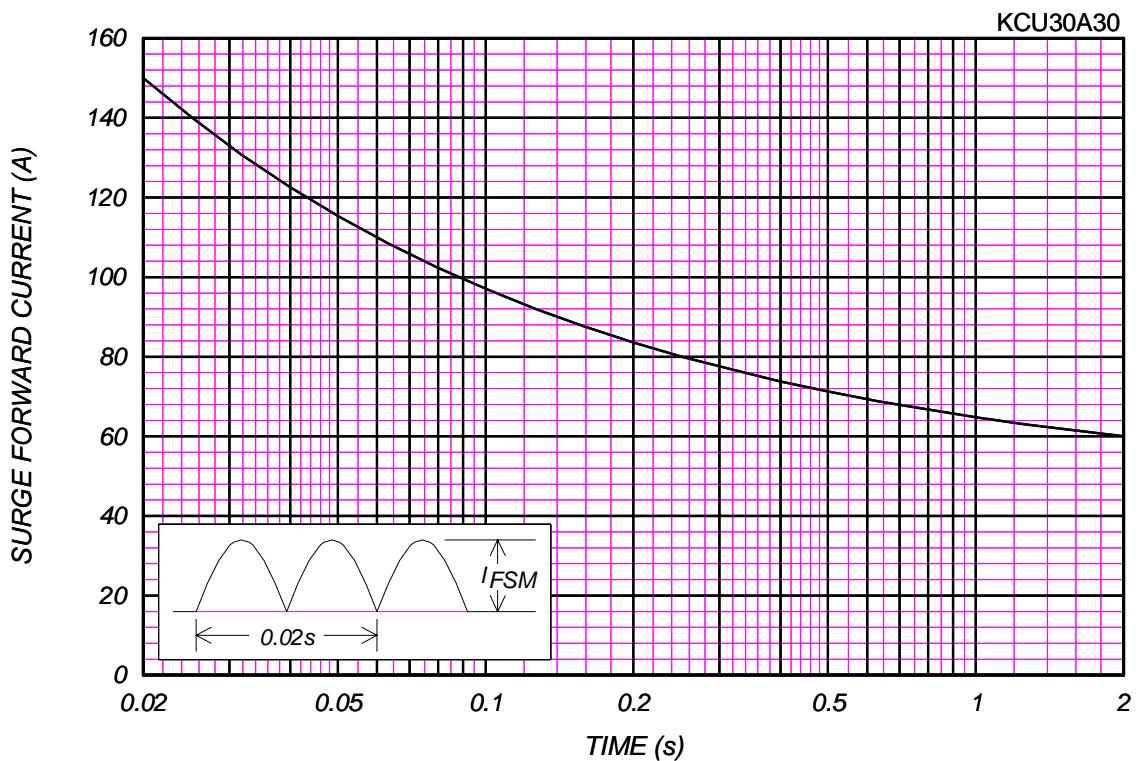
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=300V$



### SURGE CURRENT RATINGS

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



# RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

KCU30A30

