Nihon Inter Electronics Corporation

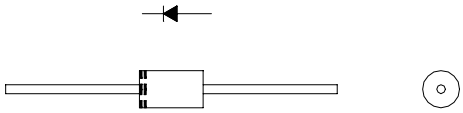
DIODE Type : 30PUA60

OUTLINE DRAWING

3A 600V 32ns

FEATURES

* Ultra-Fast Recovery
* Low Forward Voltage drop
* Low Reverse Leakage Current
* High Surge Capability



Maximum Ratings

Approx Net Weight:1.21g

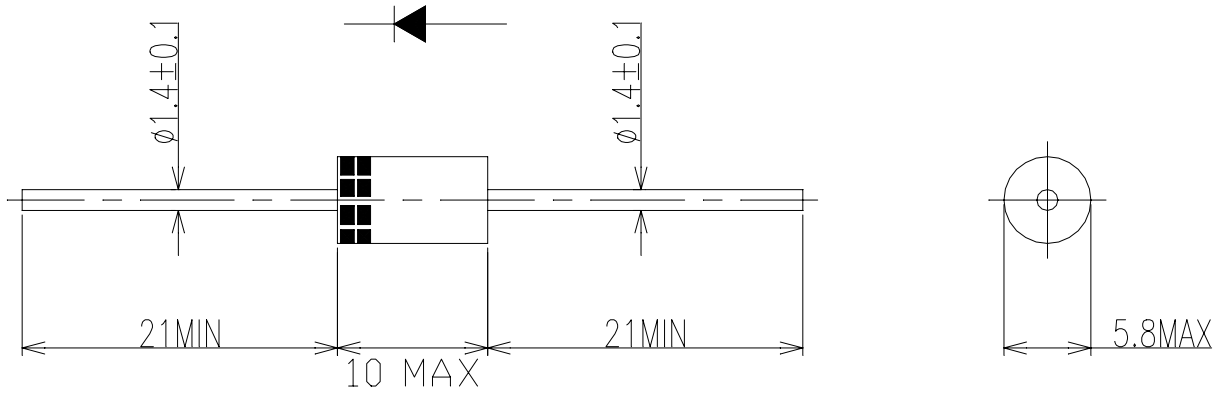
Rating	Symbol	30PUA60			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600			V
Average Rectified Output Current	I_O	50Hz Half Sine Wave Resistive Load	Ta=30℃ *1	1.8	A
			Tl=92℃ (Tl: Lead Temperature)	3.0	
RMS Forward Current	$I_{F(RMS)}$			4.71	A
Surge Forward Current	I_{FSM}	50Hz Half Sine Wave,1cycle, Non-repetitive		55	A
Operating JunctionTemperature Range	T_{jw}	- 40 to + 150			℃
Storage Temperature Range	T_{stg}	- 40 to + 150			℃

Electrical • Thermal Characteristics

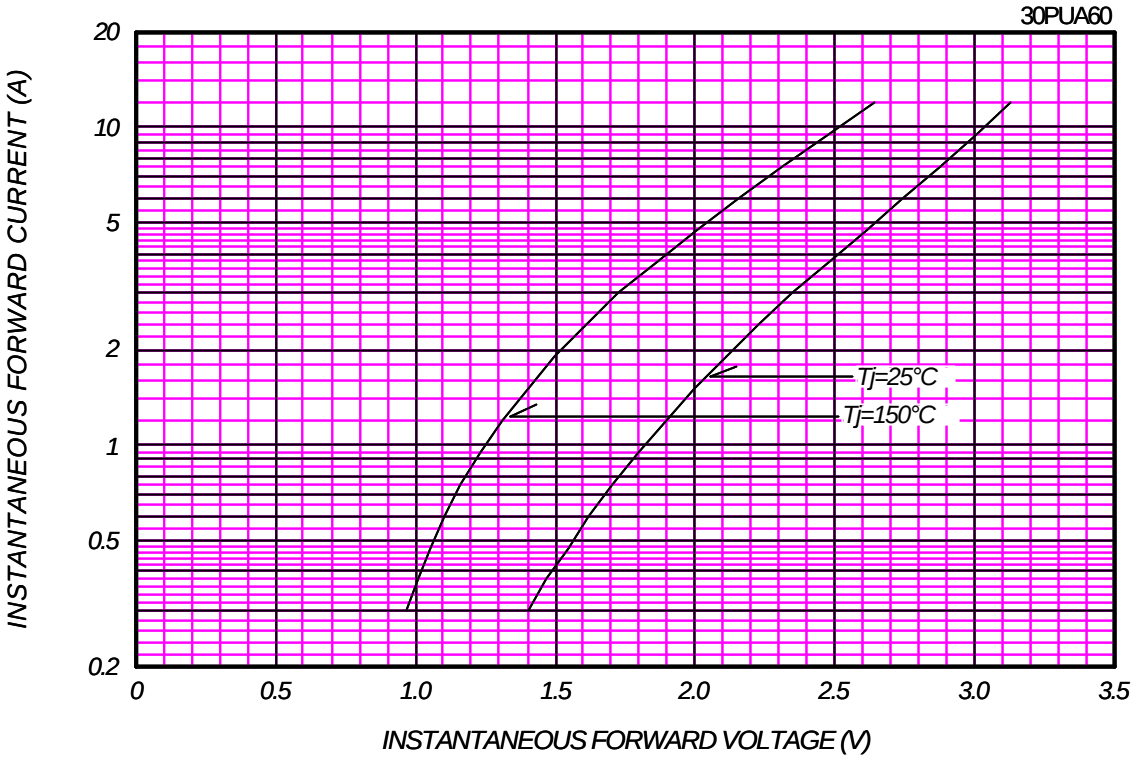
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	20	μA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 3.0A	-	-	2.35	V
Reverse Recovery time	trr	Tj= 25℃, I_{FM}= 3.0A –di/dt=50V			32	ns
Thermal Resistance	Rth(j-a)	Junction to Ambient *1	-	-	34	℃/W
	Rth(j-l)	Junction to Lead	-	-	8	

1: With Cu Fin (20x20x1, L=5mm, Both Sides),

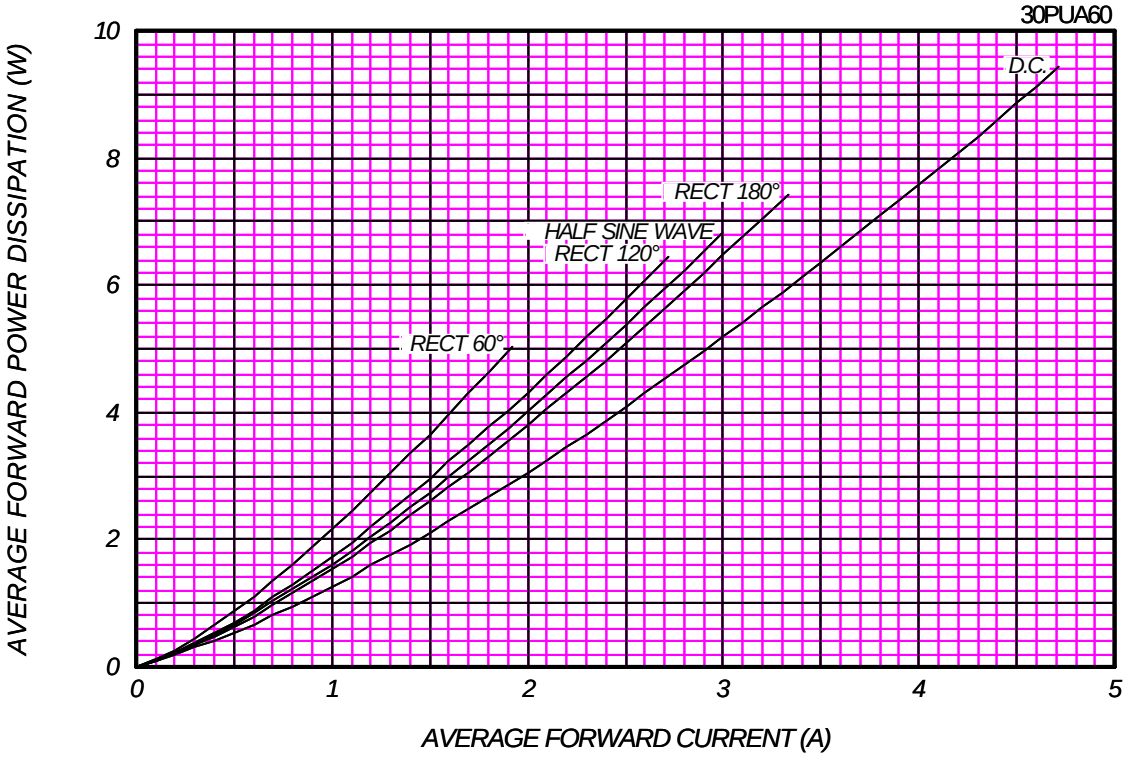
30PU*_ OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE

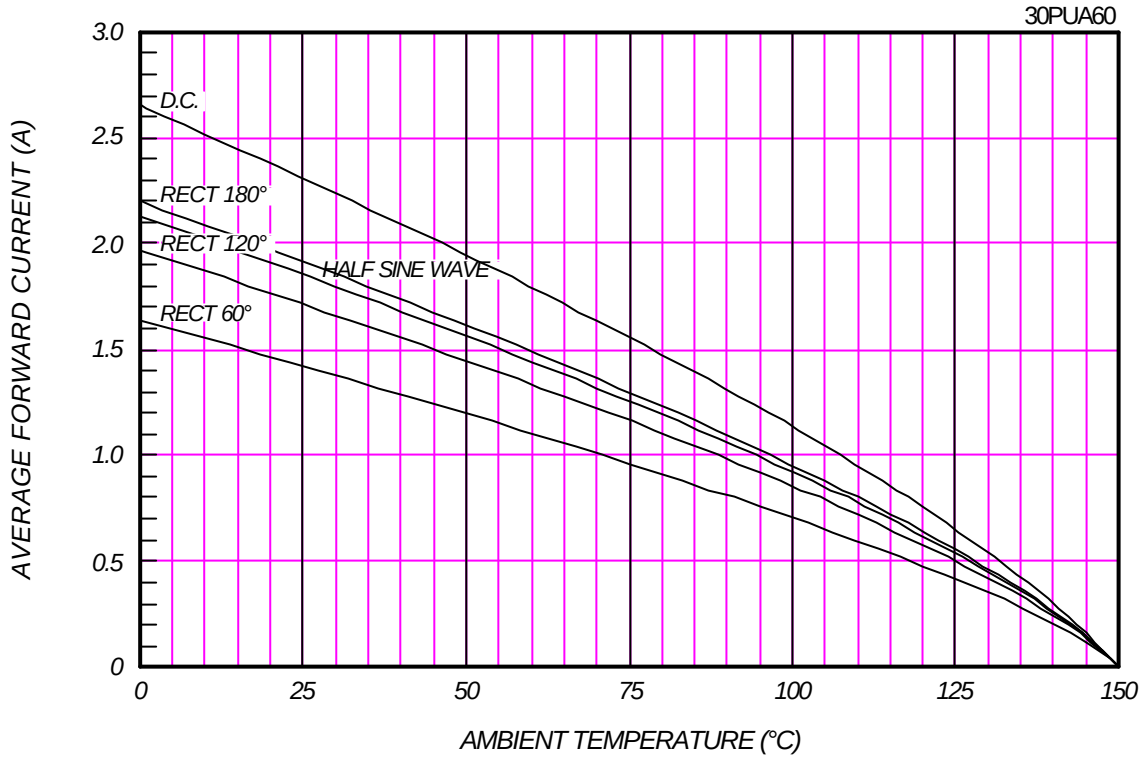


AVERAGE FORWARD POWER DISSIPATION



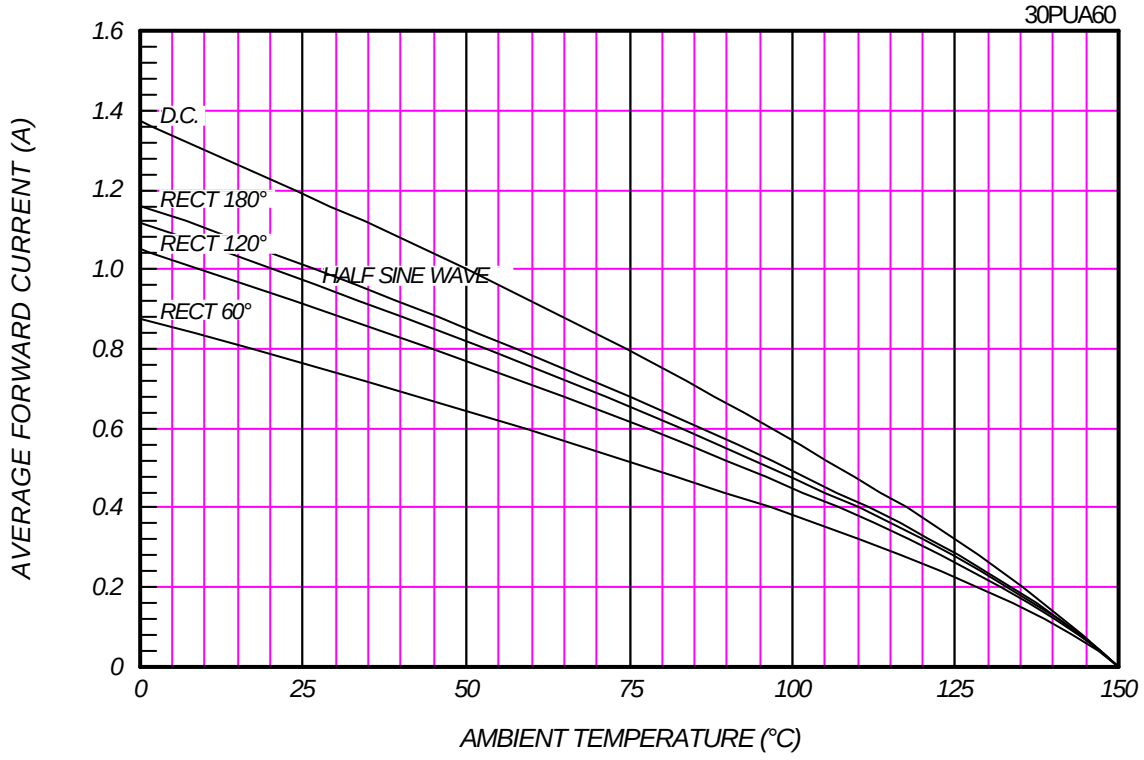
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

With Cu Fin (L=3mm,Print Land=5×5mm,Both Sides)

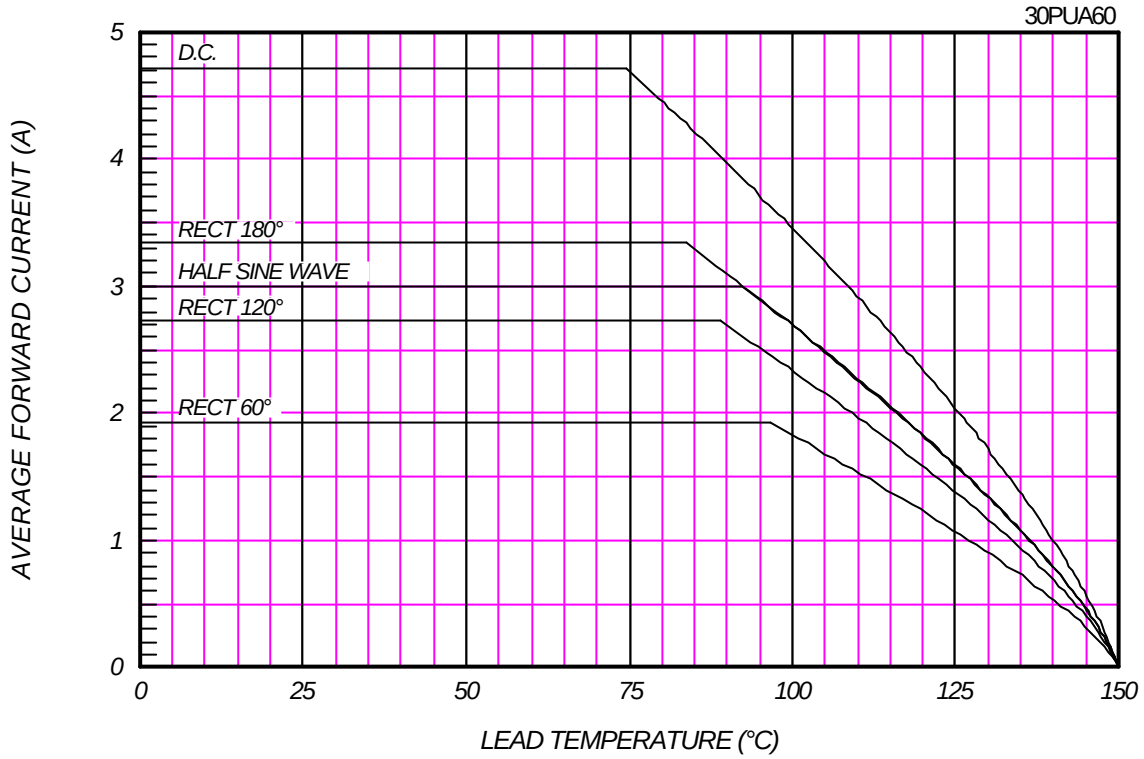


AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



SURGE CURRENT RATINGS

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