

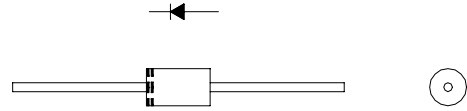
DIODE Type : 30PUA60

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

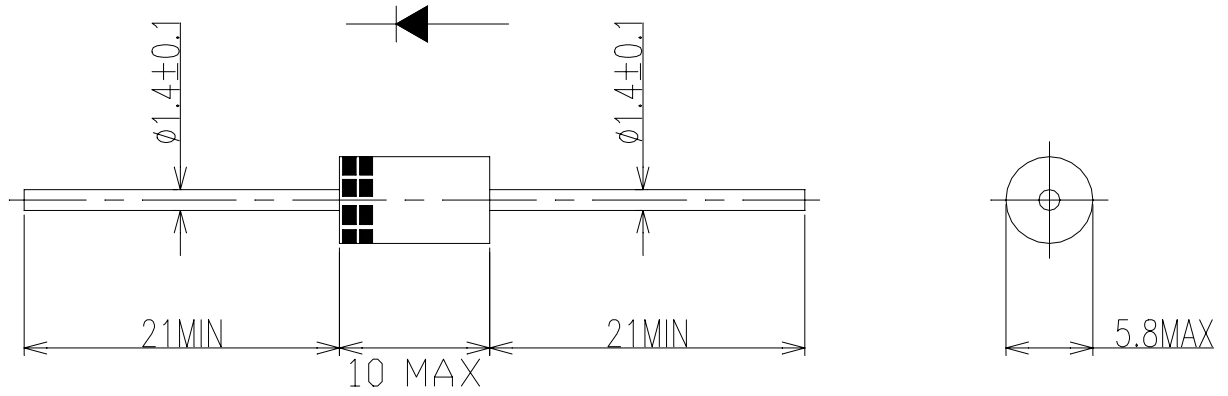
Rating	Symbol	30PUA60		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600		V
Average Rectified Output Current	I_O	50Hz Half Sine Wave Resistive Load	$T_a=30^{\circ}\text{C} *1$ 1.8	A
			$T_l=92^{\circ}\text{C}$ (T_l : Lead Temperature) 3.0	
RMS Forward Current	$I_{F(RMS)}$		4.71	A
Surge Forward Current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

Electrical • Thermal Characteristics

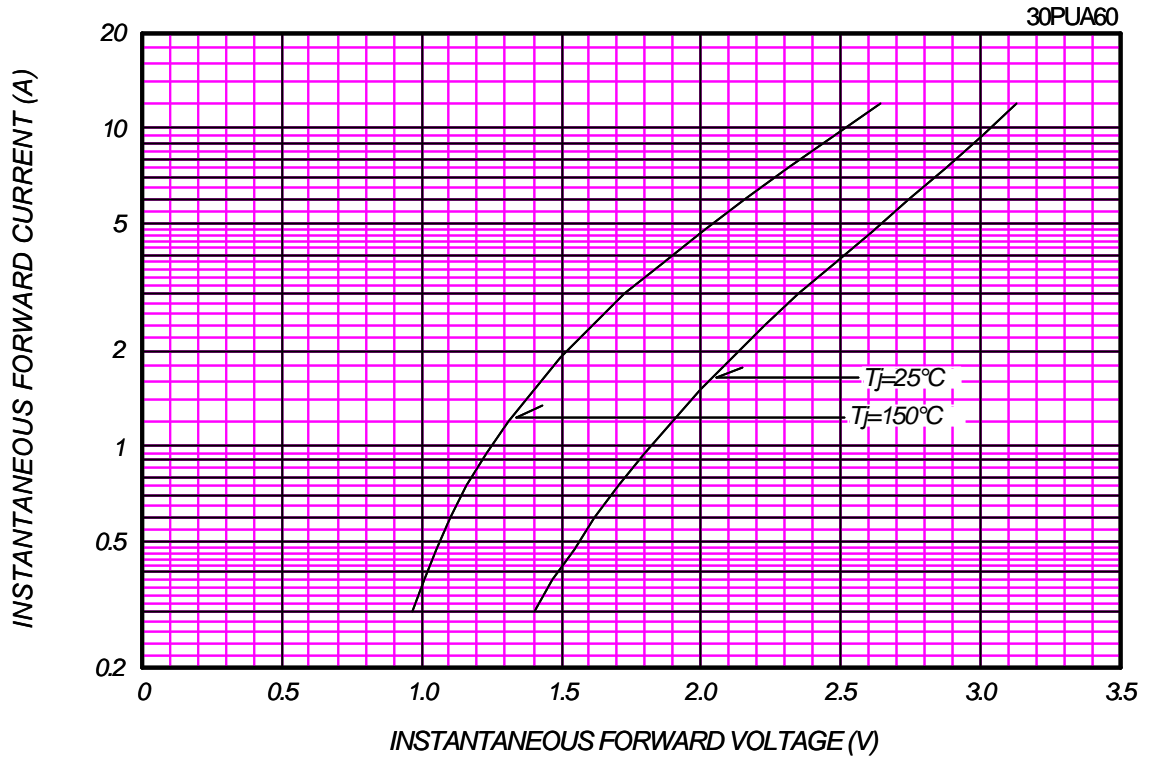
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}, V_{RM}= V_{RRM}$	-	-	20	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}, I_{FM}= 3.0\text{A}$	-	-	2.35	V
Reverse Recovery time	trr	$T_j= 25^{\circ}\text{C}, I_{FM}= 3.0\text{A} -di/dt=50\text{V}$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

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

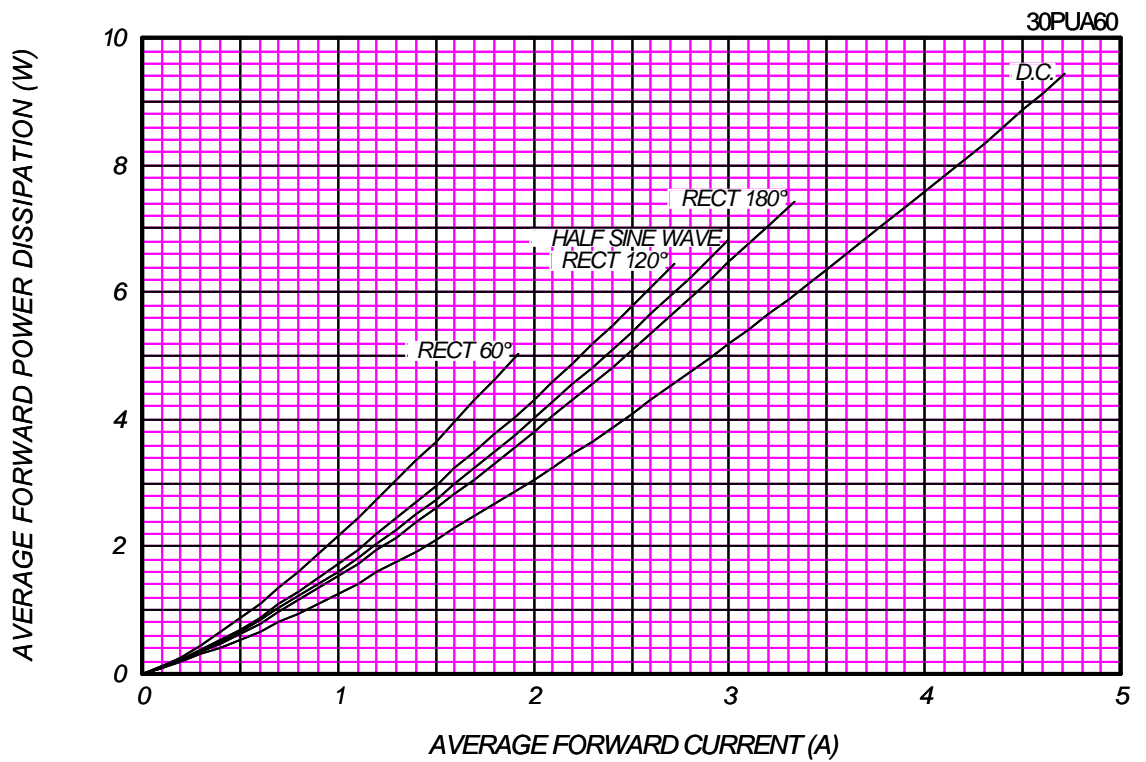
30PU*_ OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



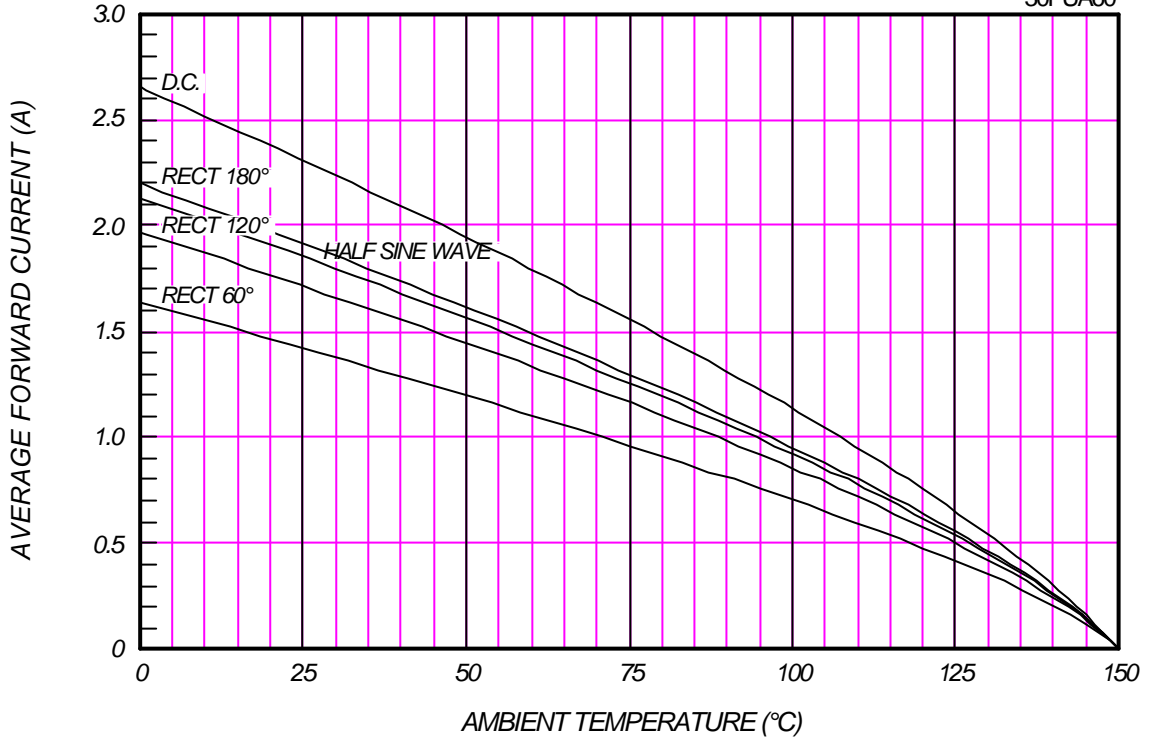
AVERAGE FORWARD POWER DISSIPATION



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

With Cu Fin (L=3mm,Print Land=5x5mm,Both Sides)

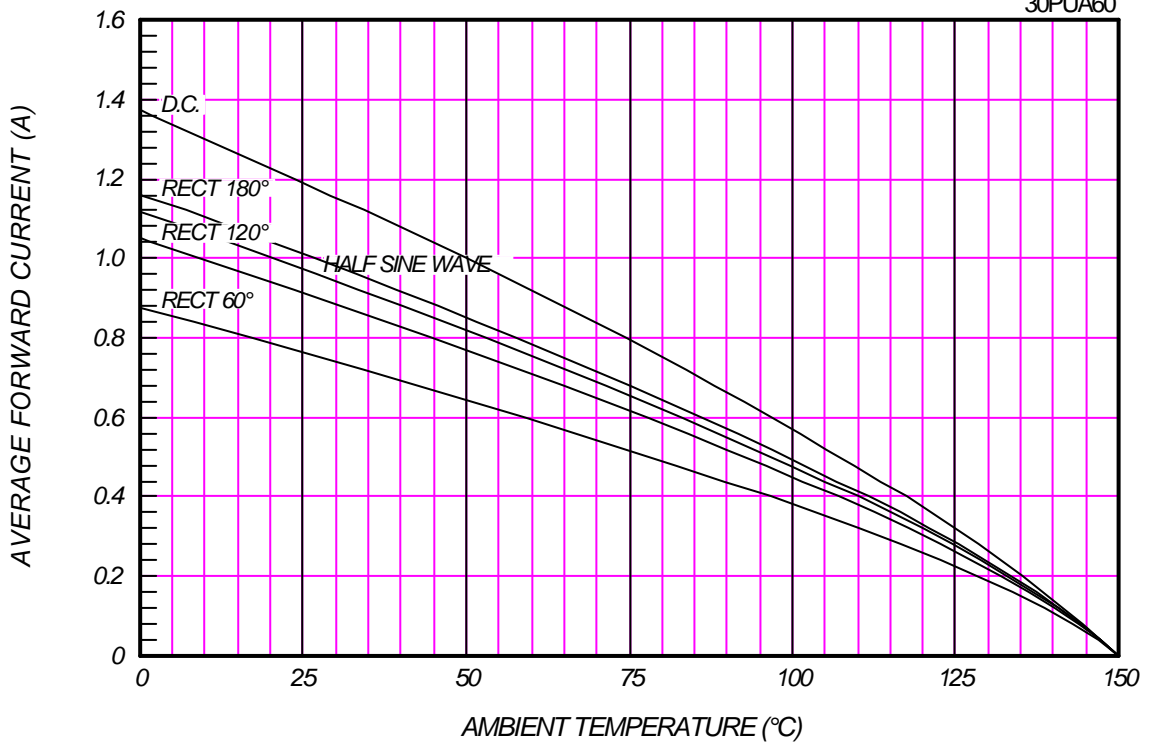
30PUA60



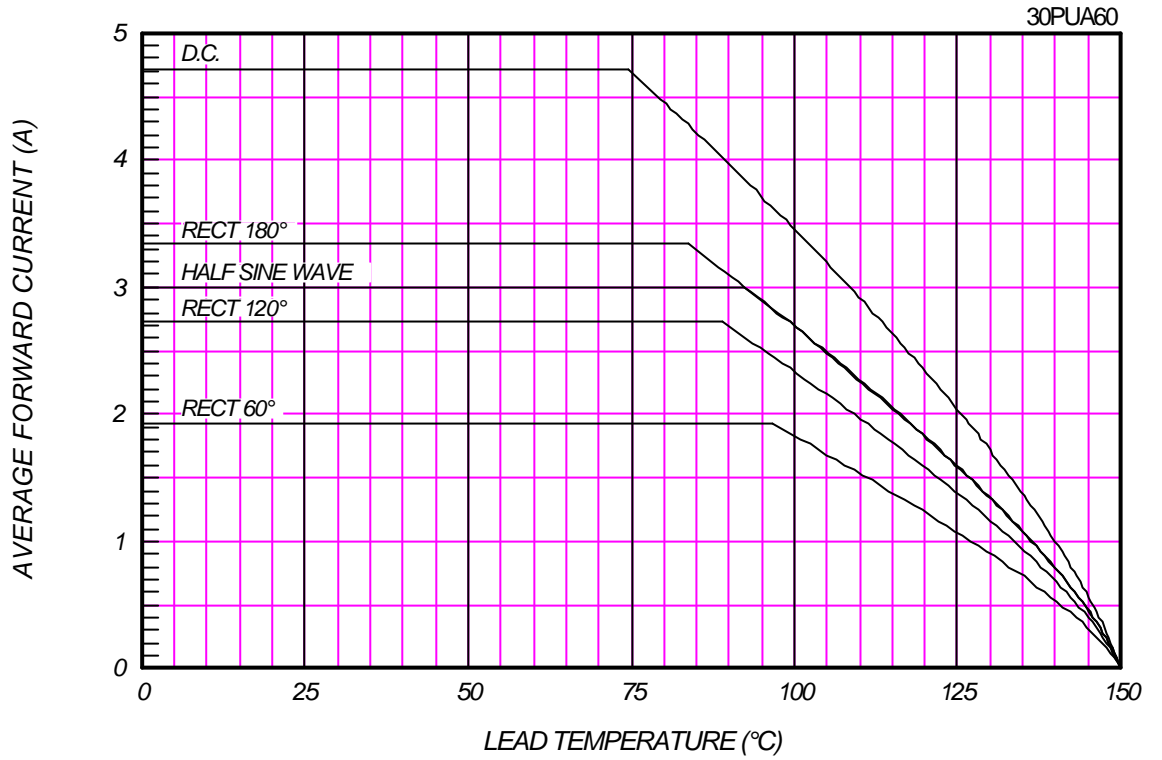
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board

30PUA60



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



SURGE CURRENT RATINGS

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

