

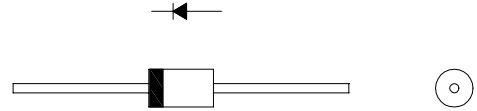
**3A 600V 210ns**

# FRD Type: 30PRA60

OUTLINE DRAWING

## FEATURES

- \* Super Fast Recovery
- \* Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* 100 Volts thru 600 Volts Types Available



## Maximum Ratings

Apporox Net Weight:1.19g

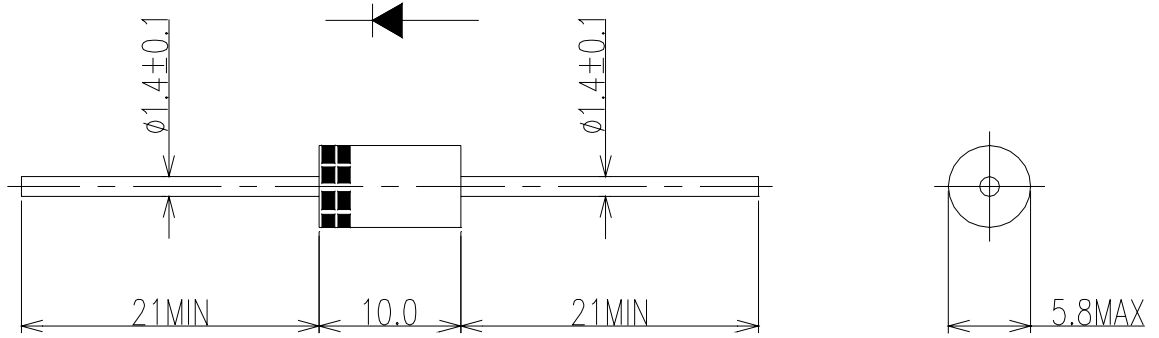
Rating	Symbol	30PRA60		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	600		V
Average Rectified Output Current	$I_O$	3.0	50Hz Half Sine Wave Resistive Load <small>Tl=121°C (Tl:Lead Temperature) Ta=39°C *1</small>	A
		1.6		
RMS Forward Current	$I_{F(RMS)}$	4.71		A
Surge Forward Current	$I_{FSM}$	70	50Hz Half Sine Wave, 1cycle, Non-repetitive	A
Operating Junction Temperature Range	$T_{jw}$	- 40 to + 150		°C
Storage Temperature Range	$T_{stg}$	- 40 to + 150		°C

## Electrical/Thermal • Characteristics

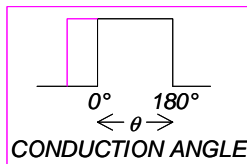
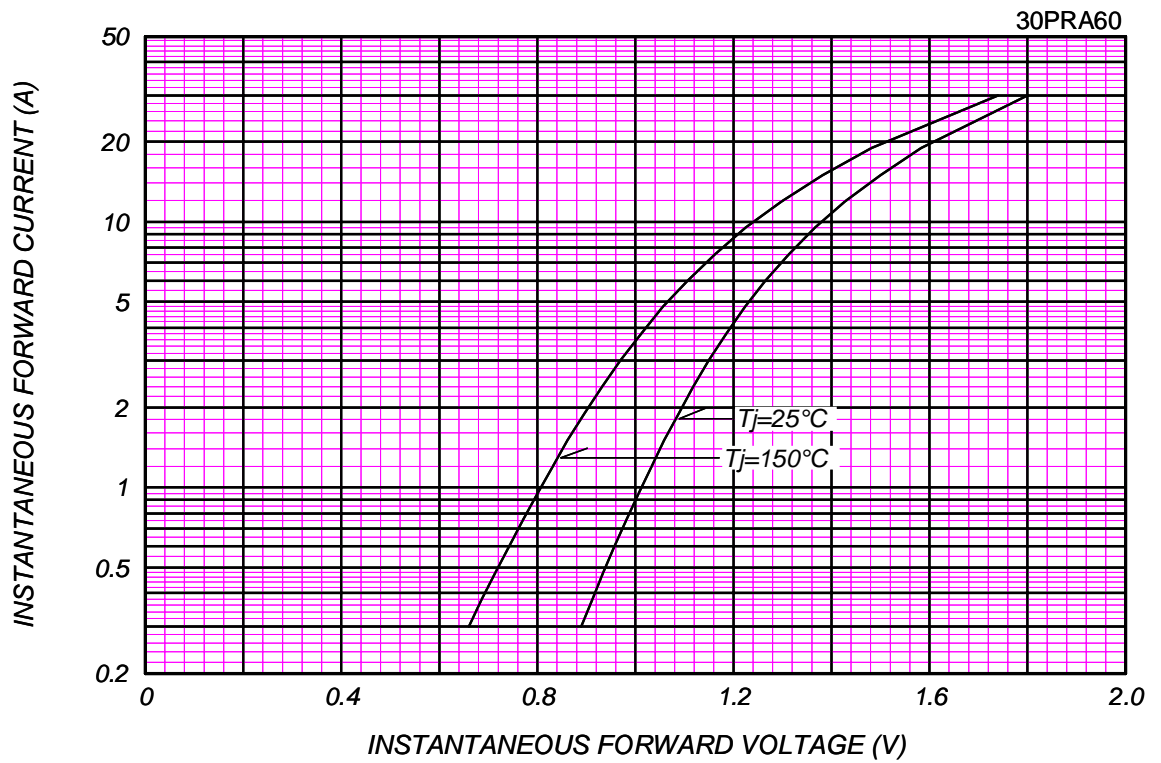
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j = 25^\circ\text{C}, V_{RM} = V_{RRM}$	-	-	10	$\mu\text{A}$
Peak Forward Voltage	$V_{FM}$	$T_j = 25^\circ\text{C}, I_{FM} = 3 \text{ A}$	-	-	1.15	V
Reverse Recovery Time	$t_{rr}$	$T_a = 25^\circ\text{C}, I_{FM} = 1\text{A}, -di/dt = 50\text{A}/\mu\text{s}$			210	ns
Thermal Resistance	$R_{th(j-l)}$	Junction to Lead	-	-	8	°C/W
	$R_{th(j-a)}$	Junction to Ambient *1			80	

\*1: Without Fin or P.C. Board mounted

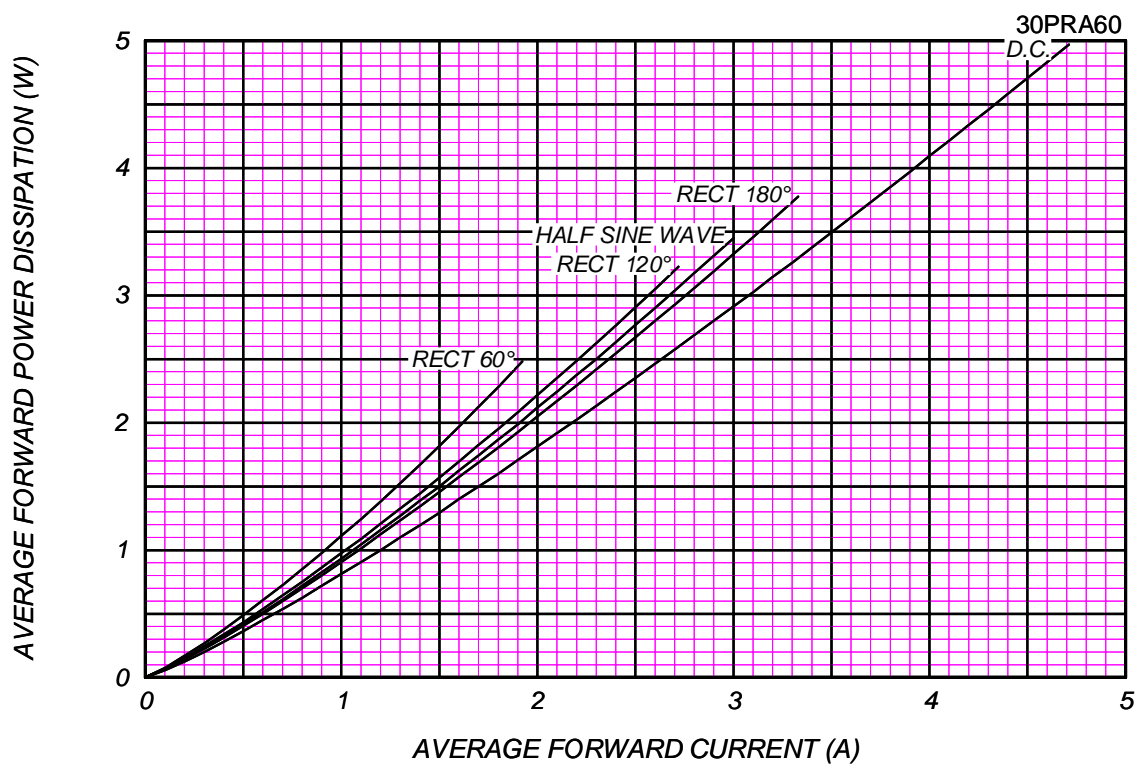
30PRA\_ OUTLINE DRAWING (Dimensions in mm)

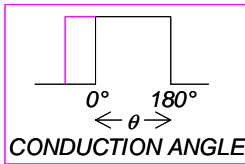


### FORWARD CURRENT VS. VOLTAGE

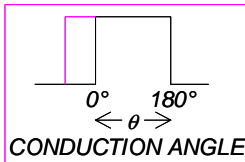
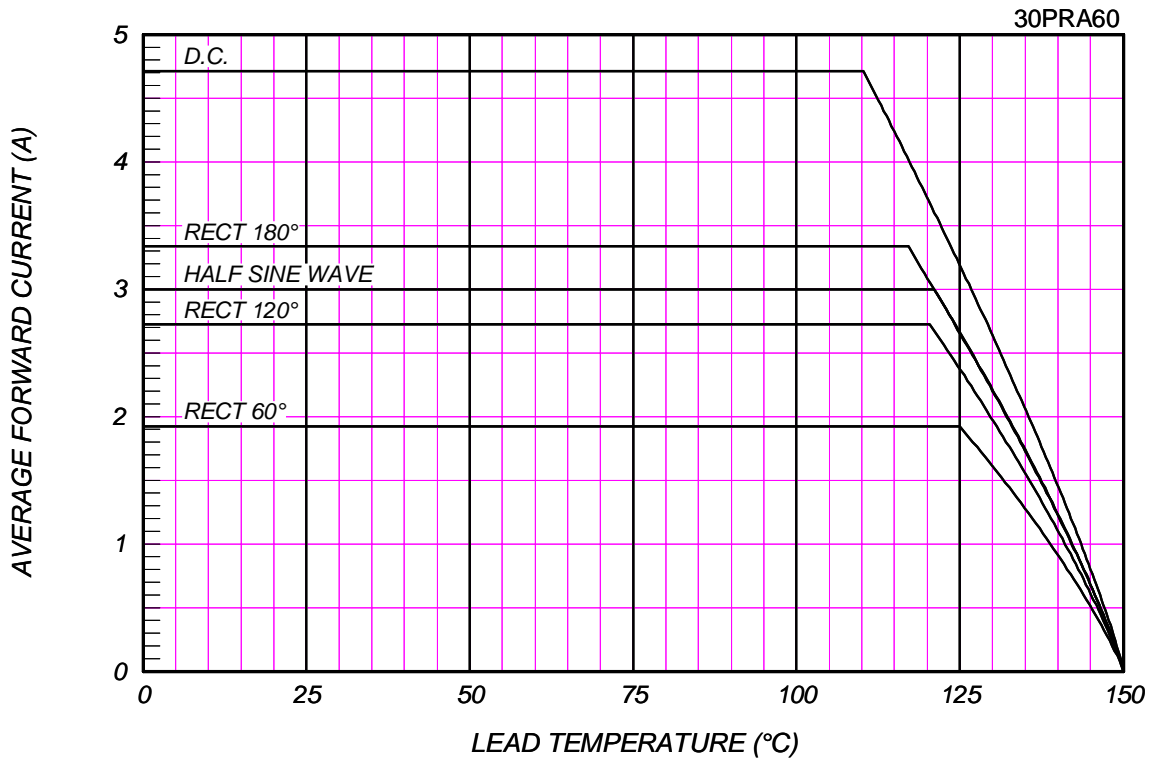


### AVERAGE FORWARD POWER DISSIPATION



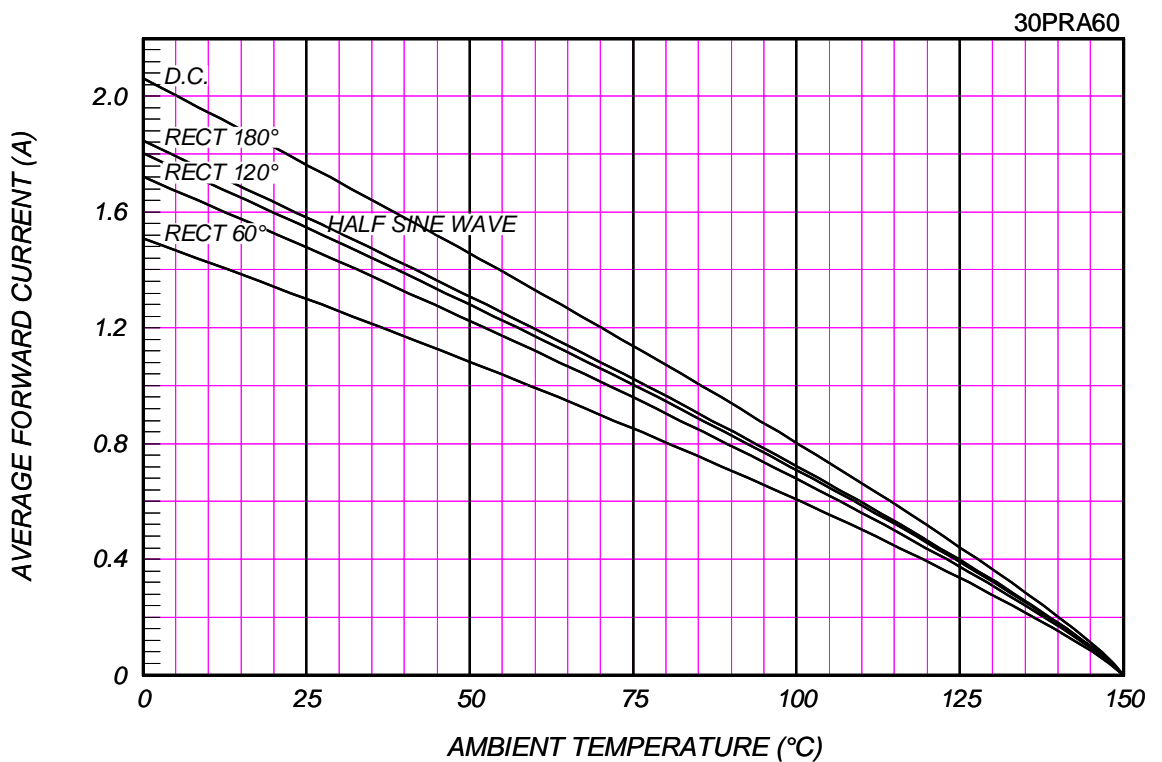


AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



# SURGE CURRENT RATINGS

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

30PRA60

