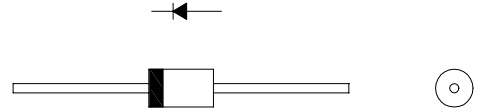


3A 400A 210ns
FRD Type: 30PRA40

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

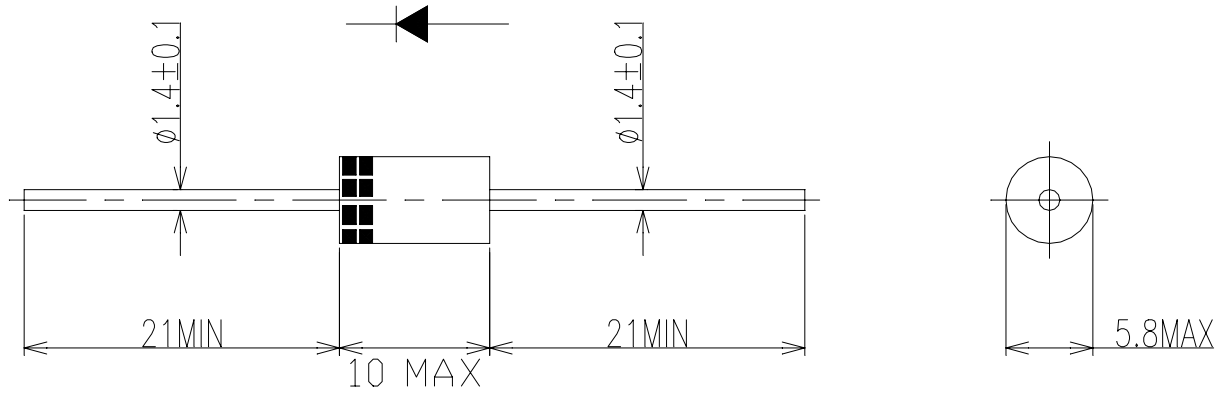
Rating	Symbol	30PRA40		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400		V
Average Rectified Output Current	I_O	3.0	50Hz Half Sine Wave Resistive Load $T_l=121^{\circ}\text{C}$ (T_l :Lead Temperature) $T_a=39^{\circ}\text{C}$ *1	A
		1.6		
RMS Forward Current	$I_{F(RMS)}$	4.71		A
Surge Forward Current	I_{FSM}	70	50Hz Half Sine Wave, 1cycle, Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150		$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150		$^{\circ}\text{C}$

Electrical/Thermal • Characteristics

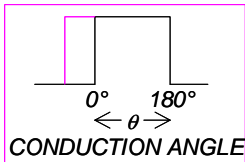
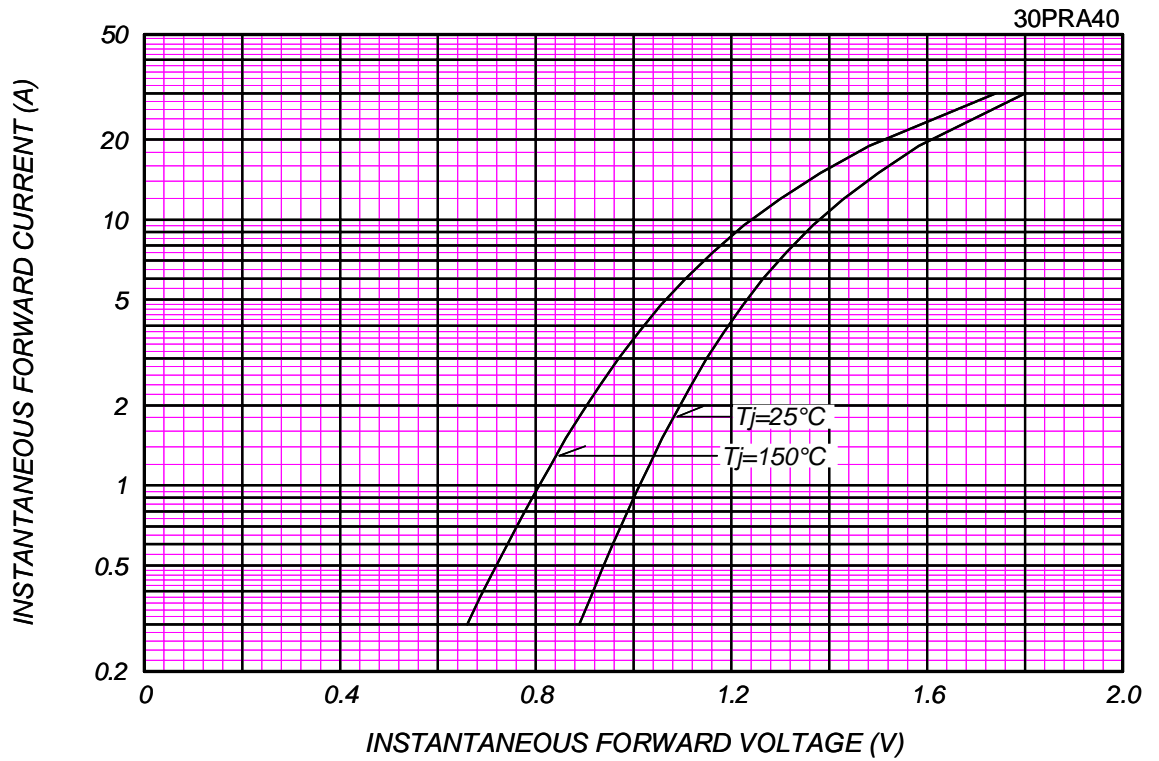
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j = 25^{\circ}\text{C}$, $V_{RM} = V_{RRM}$	-	-	10	μA
Peak Forward Voltage	V_{FM}	$T_j = 25^{\circ}\text{C}$, $I_{FM} = 3\text{ A}$	-	-	1.15	V
Reverse Recovery Time	t_{rr}	$T_a = 25^{\circ}\text{C}$, $I_{FM} = 1\text{A}$,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

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

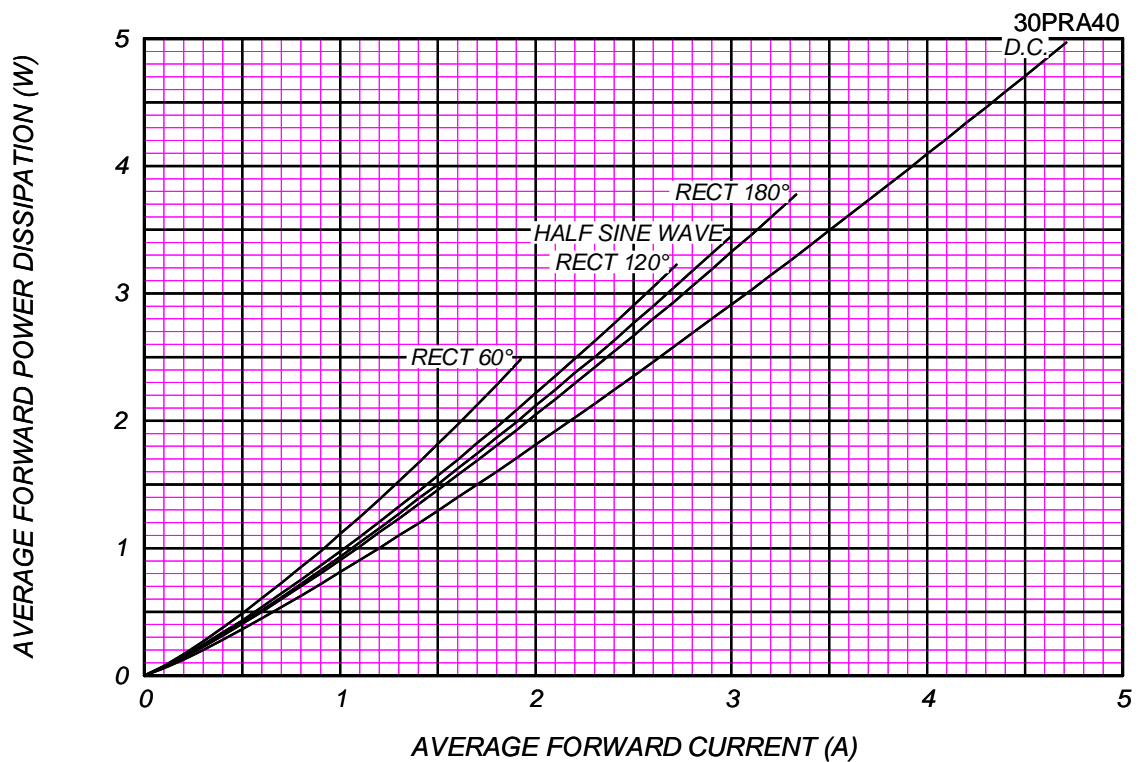
30PRA_ OUTLINE DRAWING (Dimensions in mm)

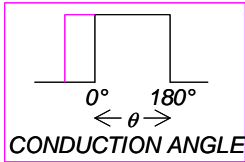


FORWARD CURRENT VS. VOLTAGE

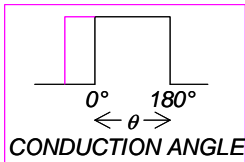
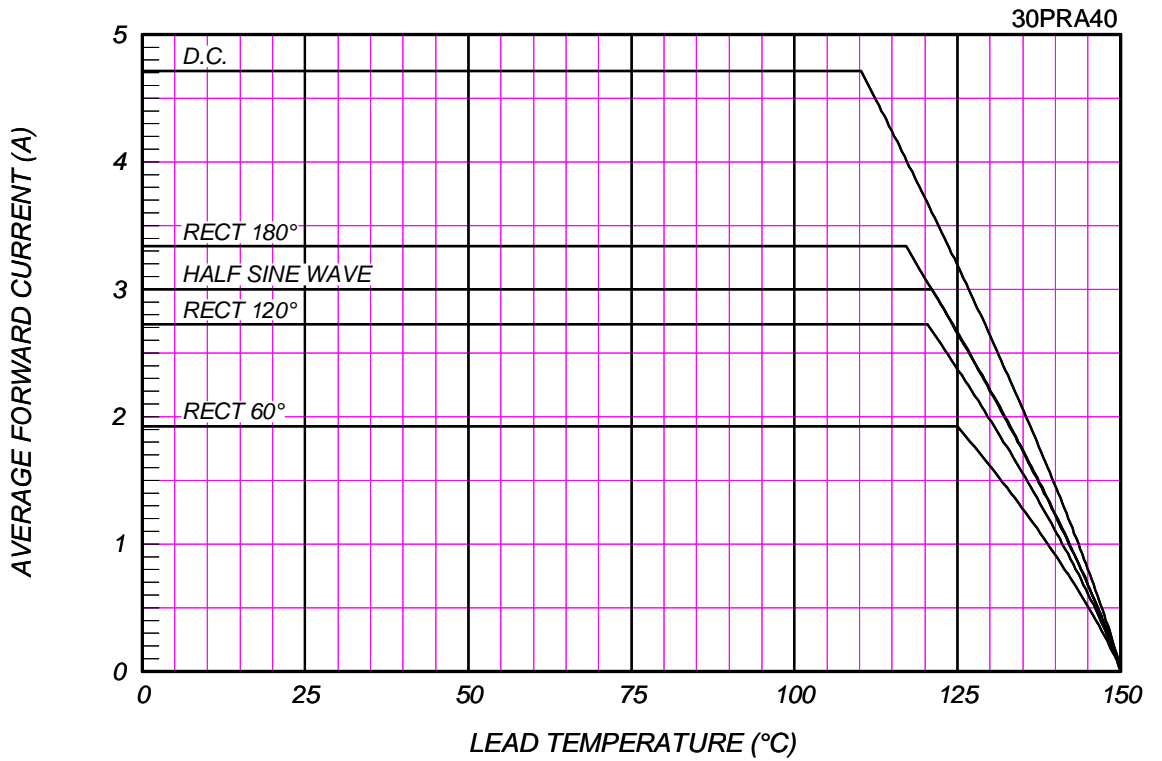


AVERAGE FORWARD POWER DISSIPATION



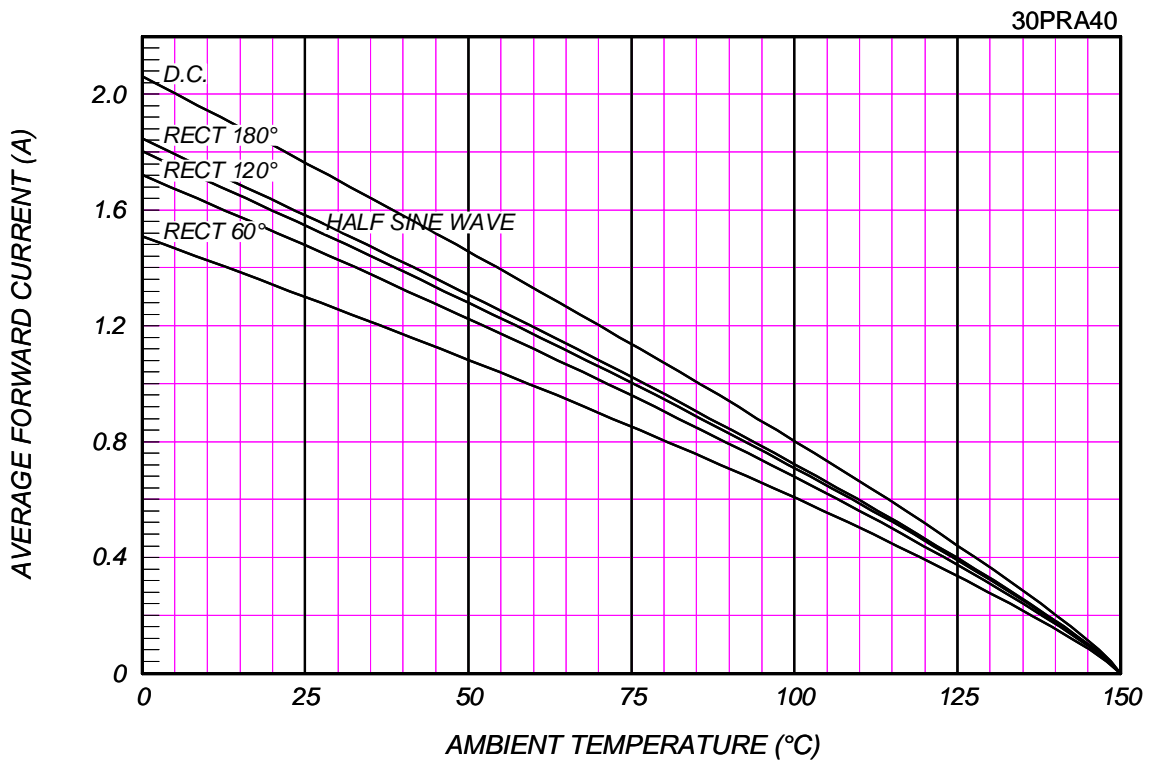


AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



SURGE CURRENT RATINGS

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

30PRA40

