Nihon Inter Electronics Corporation

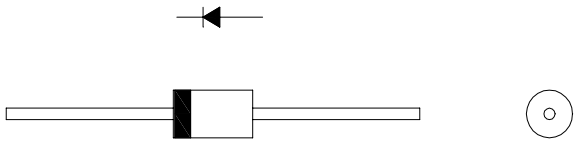
DIODE Type : 30PDA40

3A 400V Tj =150 ℃

OUTLINE DRAWING

FEATURES

* Low Forward Voltage drop
* Low Reverse Leakage Current
* High Surge Capability



Maximum Ratings

Approx Net Weight:1.24g

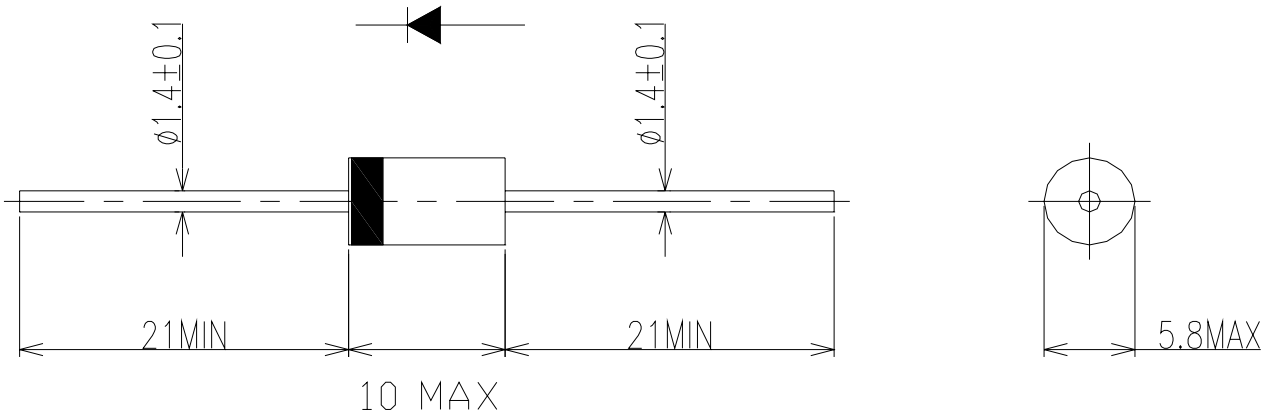
Rating	Symbol	30PDA40			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400			V
Average Rectified Output Current	I_O	50Hz Half Sine Wave Resistive Load	Ta=31℃ *1	1.6	A
			Tl=124℃ (Tl: Lead Temperature)	3.0	
RMS Forward Current	$I_{F(RMS)}$			4.71	A
Surge Forward Current	I_{FSM}	50Hz Half Sine Wave,1cycle, Non-repetitive		100	A
Operating JunctionTemperature Range	T_{jw}	- 40 to + 150			℃
Storage Temperature Range	T_{stg}	- 40 to + 150			℃

Electrical • Thermal Characteristics

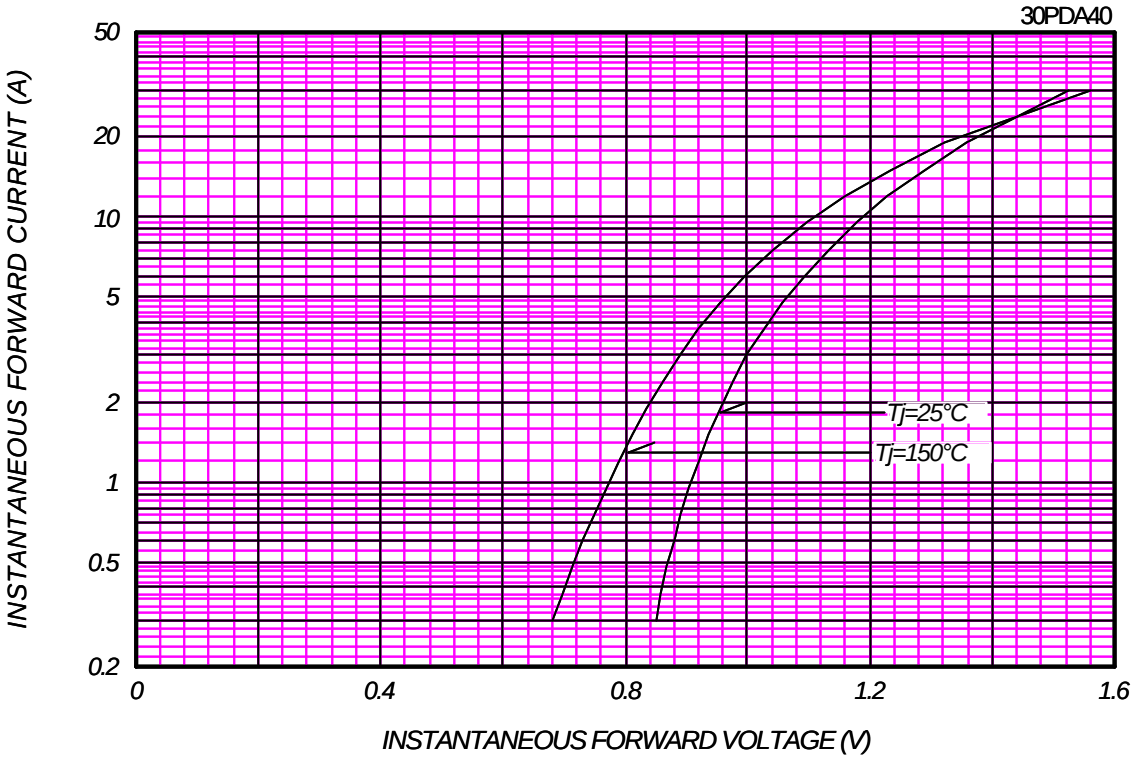
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	10	μA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 3.0A	-	-	1.0	V
Thermal Resistance	Rth(j-a)	Junction to Ambient *1	-	-	80	℃/W
	Rth(j-l)	Junction to Lead	-	-	8	

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

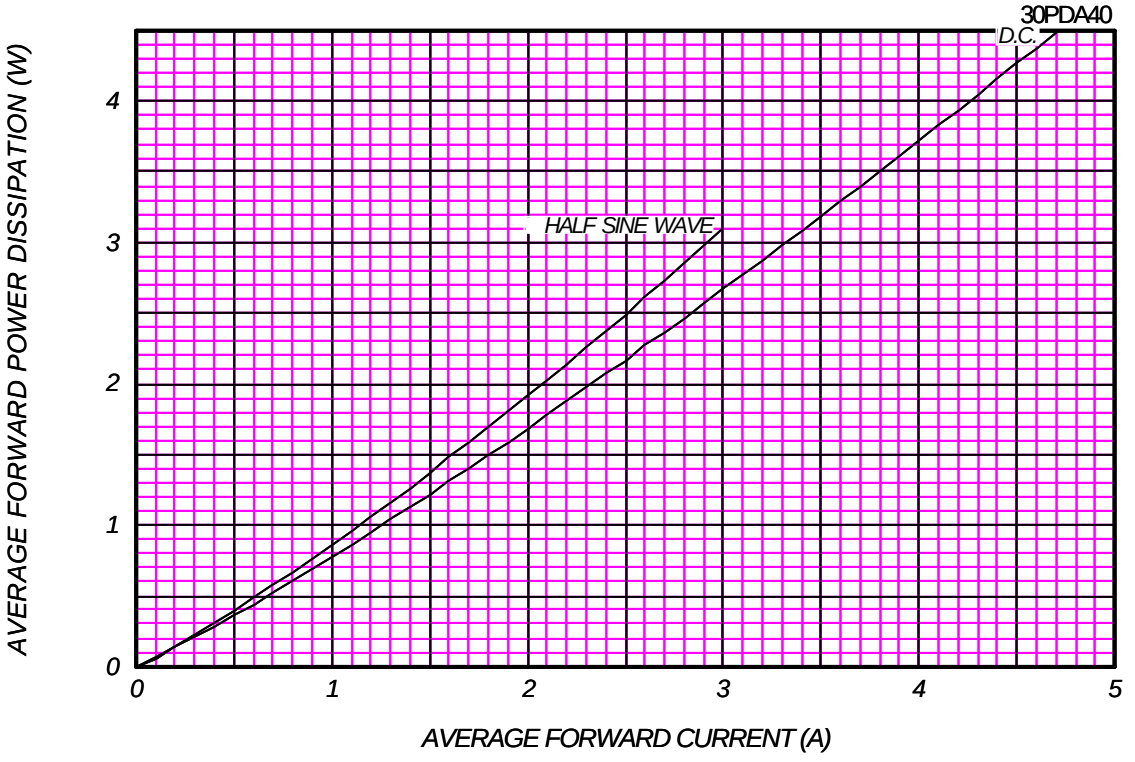
30PDA OUTLINE DRAWING (Dmensions in mm)



FORWARD CURRENT VS. VOLTAGE

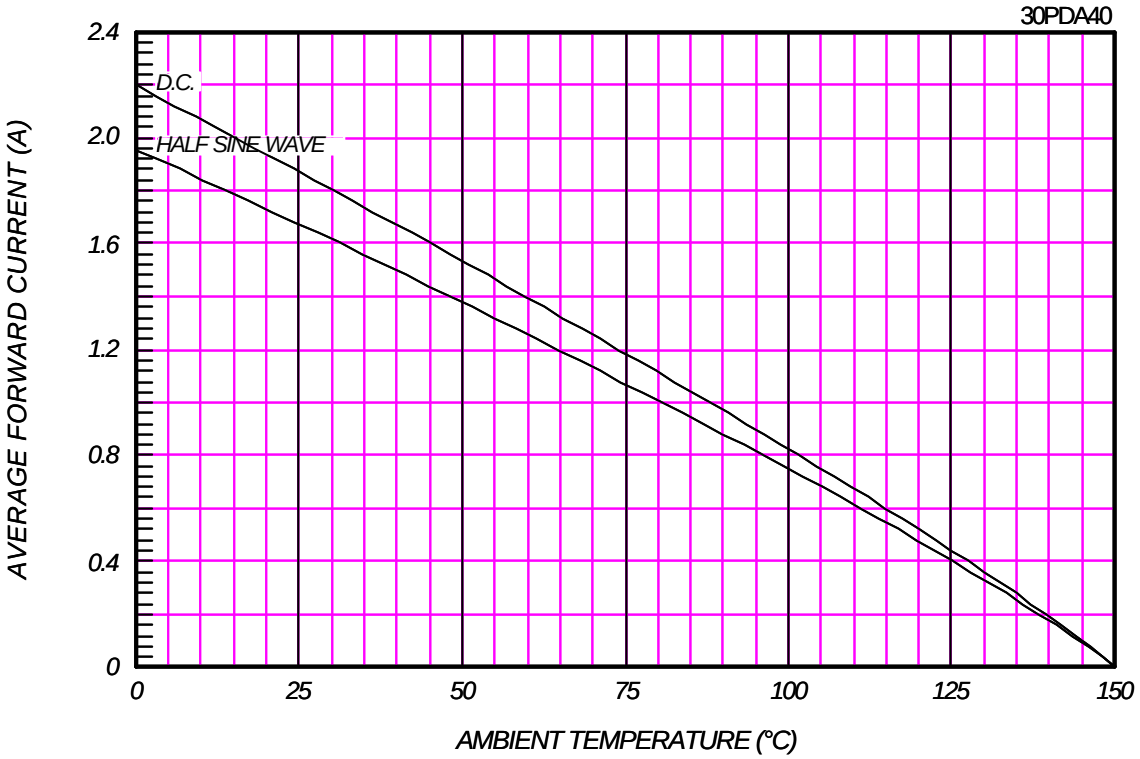


AVERAGE FORWARD POWER DISSIPATION

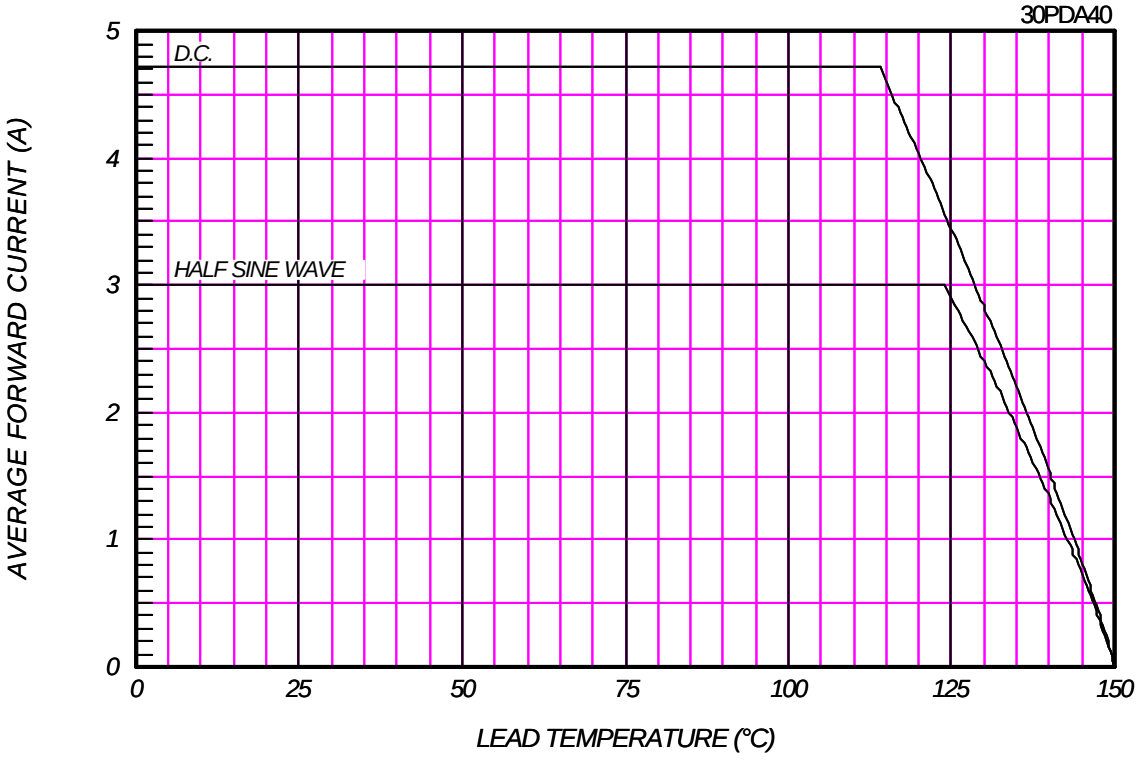


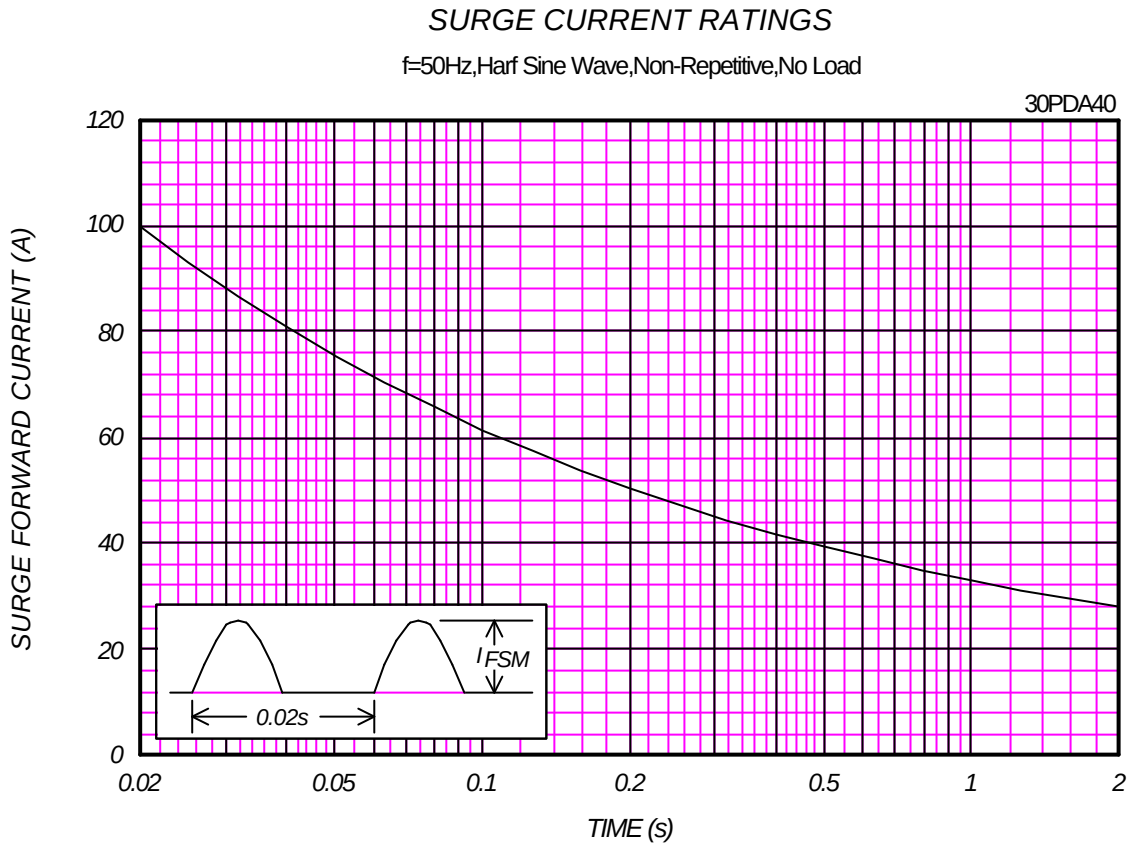
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE




SURGE CURRENT RATINGS
f=50Hz,Harf Sine Wave,Non-Repetitive,No Load
30PDA40
SURGE FORWARD CURRENT (A)
120
100
80
60
40
20
0
0.02
0.05
0.1
0.2
0.5
1
2
TIME (s)
I FSM
0.02s