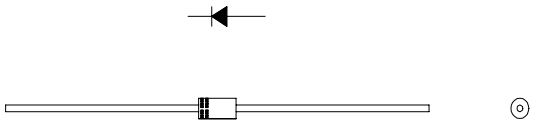
Nihon Inter Electronics Corporation

1A 400V 120ns

OUTLINE DRAWING

FRD Type : 10DRA40



FEATURES

* Miniature Size
* Super Fast Recovery
* Low Forward Voltage drop
* Low Power Loss, High Efficiency
* High Surge Capability
* 100 Volts thru 600 Volts Types Available
* 52mm Inside Tape Spacing Package Available

Maximum Ratings

Approx Net Weight:0.33g

Rating	Symbol	10DRA40			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400			V
Average Rectified Output Current	I_O	1.0	Ta=58℃ *1	50Hz Half Sine Wave Resistive Load	A
		0.9	Ta=35℃ *2		
RMS Forward Current	$I_{F(RMS)}$	1.57			A
Surge Forward Current	I_{FSM}	35	50Hz Half Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range	T_{jw}	- 40 to + 150			℃
Storage Temperature Range	T_{stg}	- 40 to + 150			℃

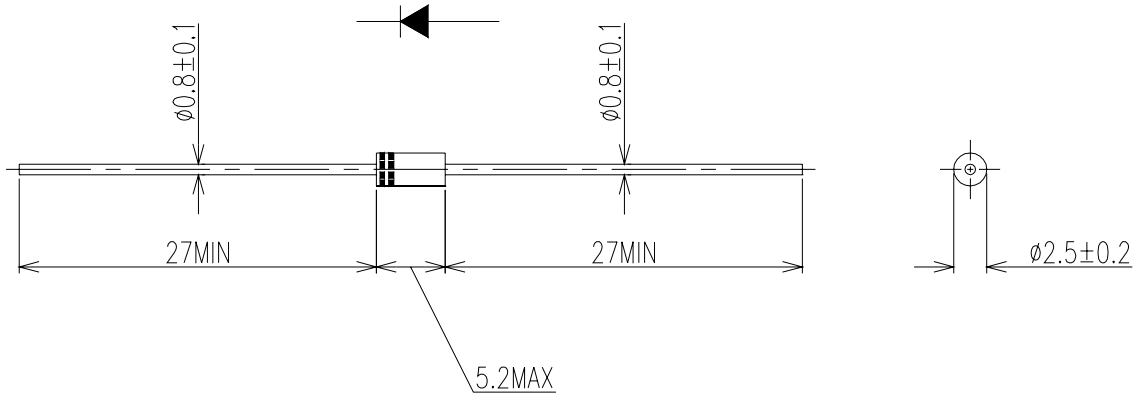
Electrical • Thermal Characteristics

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}= 1.0A		-	-	1.13	V
Reverse Recovery Time	trr	Ta= 25℃, I_{FM}=1A,-di/dt=50A/μs				120	ns
Thermal Resistance	Rth(j-a)	Junction to Ambient	*1:P.C.Board mounted	-	-	81	℃/W
			*2:Without Fin or P.C.Board mounted			115	

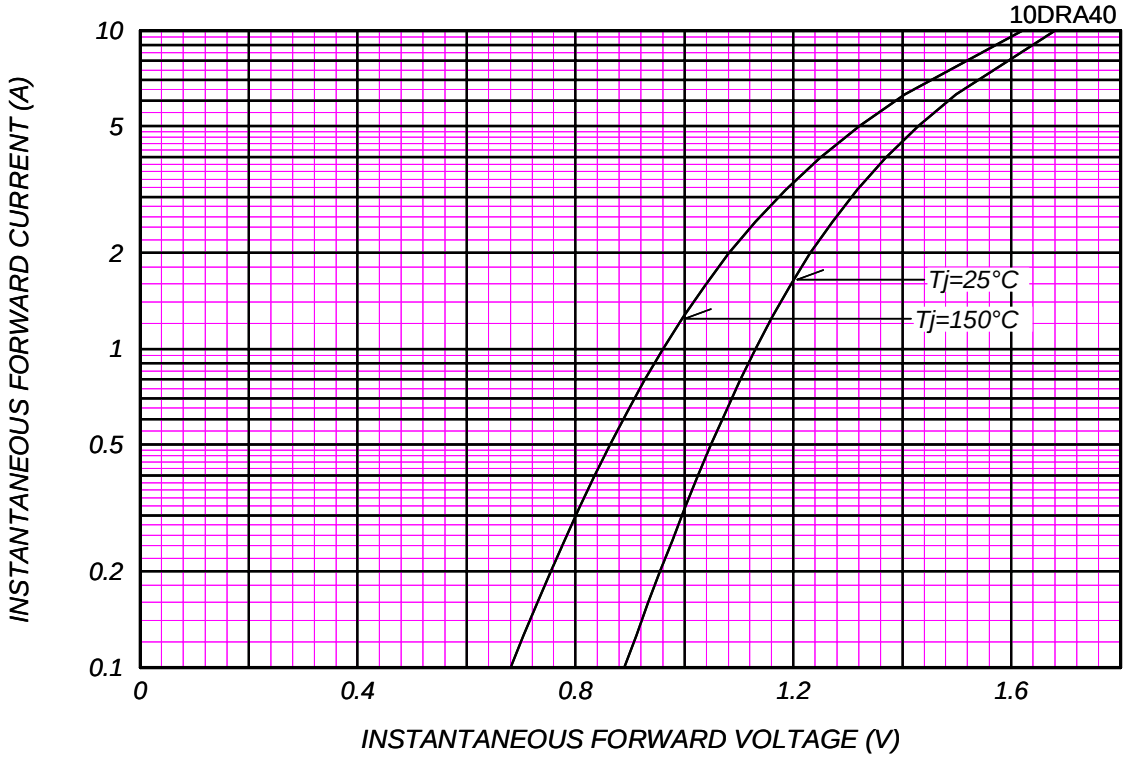
*1 : P.C. Board mounted (L=8mm, Print Land=10x10mm, Both Sides)

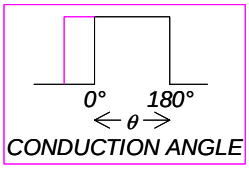
*2 : Without Fin or P.C. Board mounted

10DRA_ OUTLINE DRAWING (Dmensions in mm)

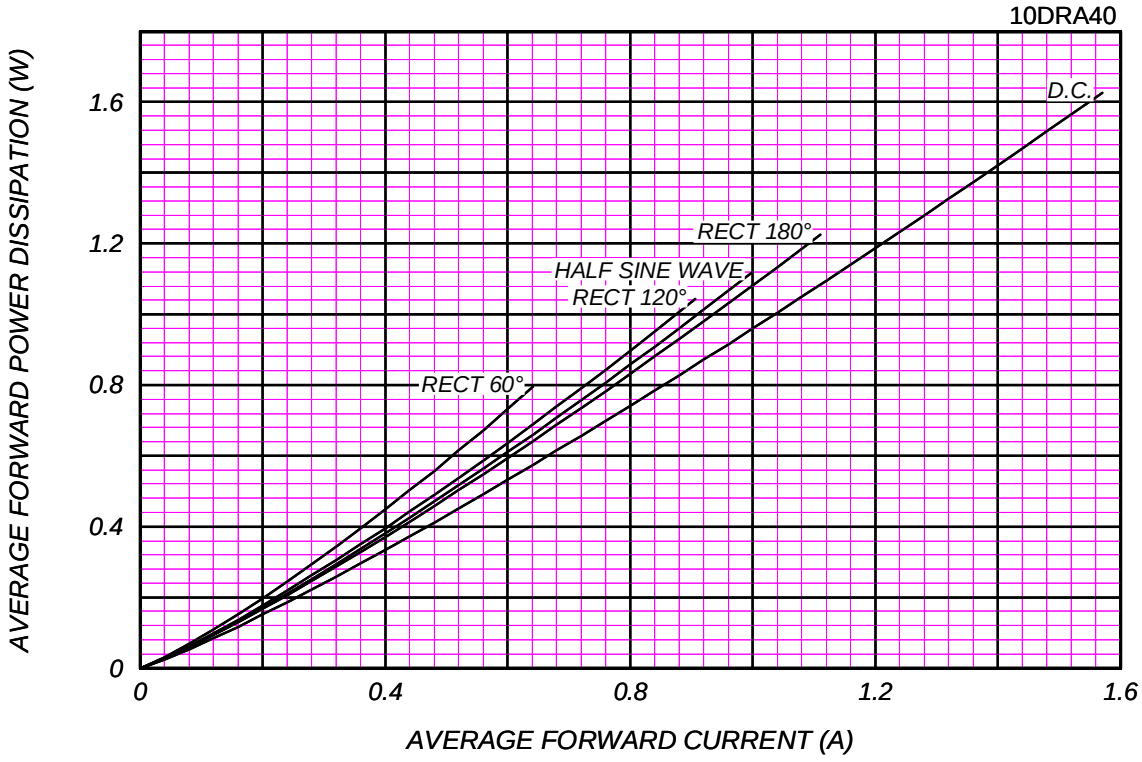


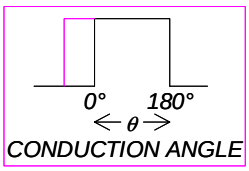
FORWARD CURRENT VS. VOLTAGE





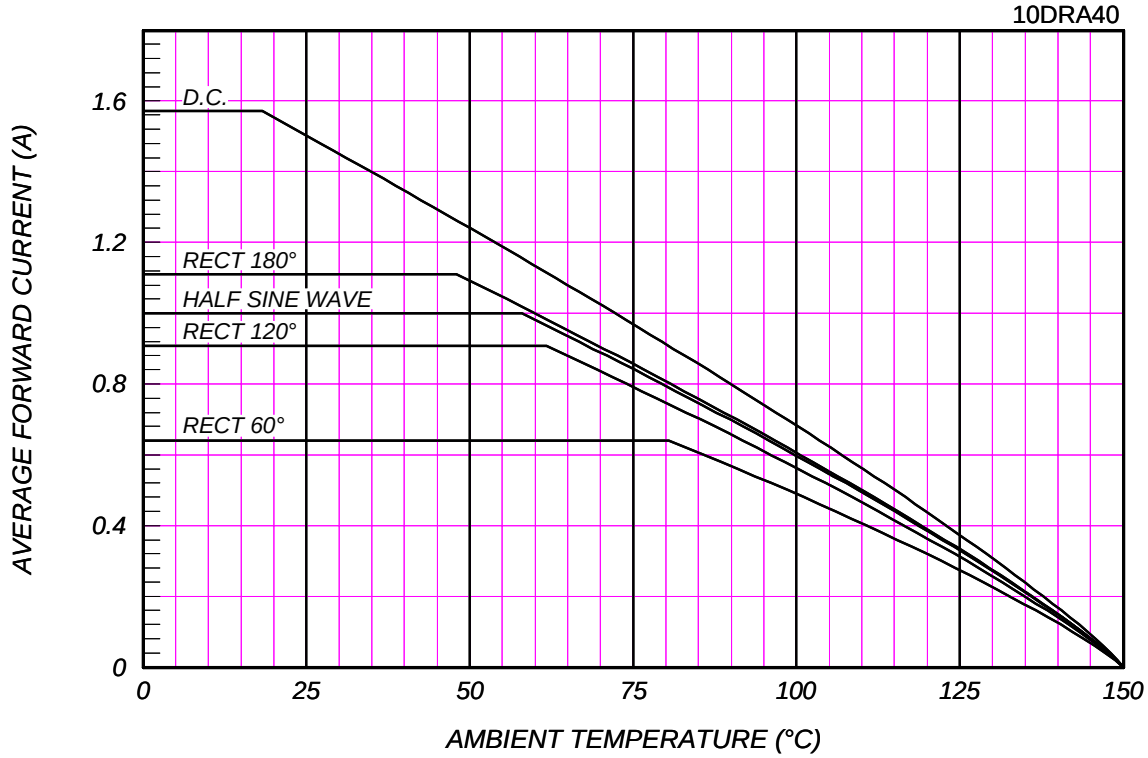
AVERAGE FORWARD POWER DISSIPATION

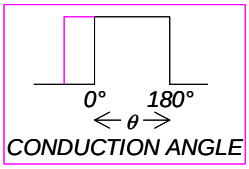




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

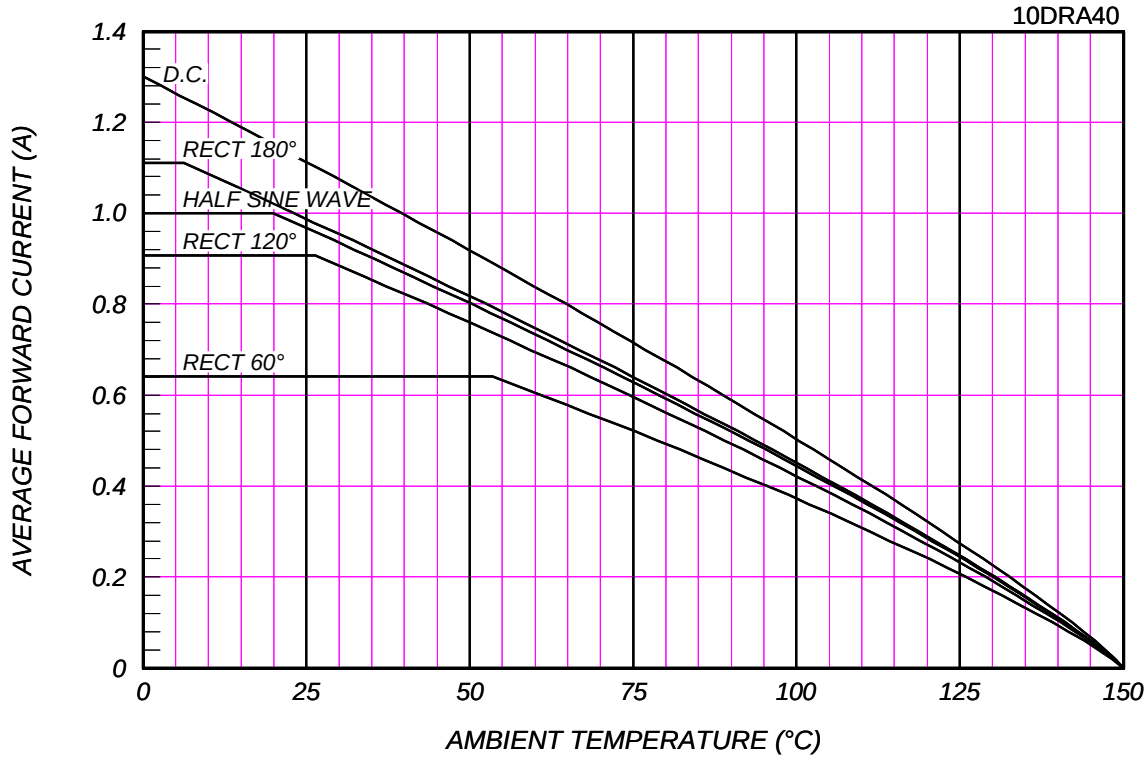
P.C. Board mounted (L=8mm,Print Land=10×10mm,Both Sides)





AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



SURGE CURRENT RATINGS

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