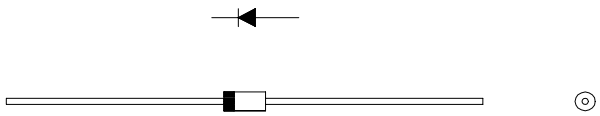
Nihon Inter Electronics Corporation

SBD Type :11DQ10

FEATURES

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

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:0.32g

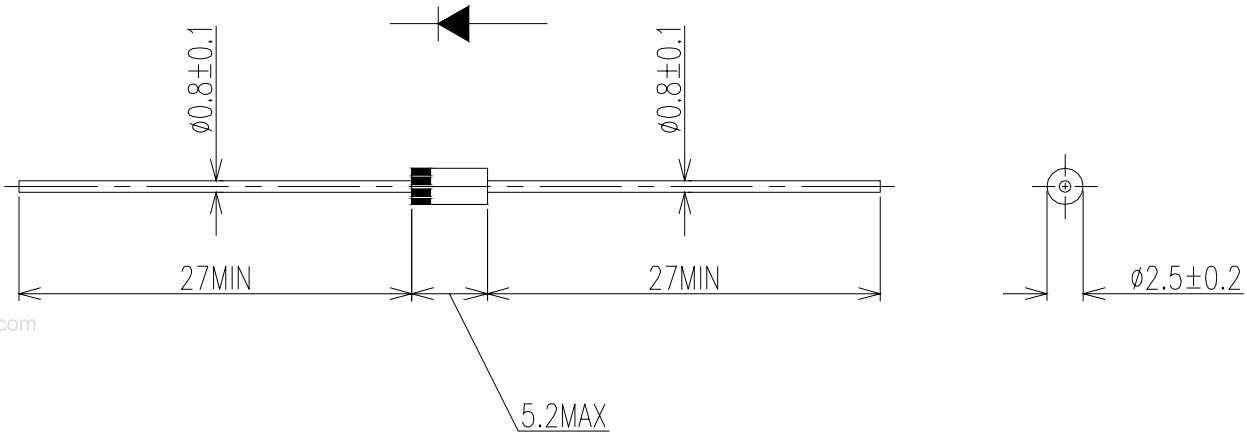
Rating		Symbol	11DQ10			Unit
Repetitive Peak Reverse Voltage		V_{RRM}	100			V
Average Rectified Output Current	Without Fin or P.C.Board	I_O	1.0	Ta=35℃*	50Hz Half Sine Wave Resistive Load	A
	P.C.Board mounted		1.0	Ta=78℃*		
RMS Forward Current		$I_{F(RMS)}$	1.57			A
Surge Forward Current		I_{FSM}	40	50Hz Half Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		Tjw	- 40 to + 150			℃
Storage Temperature Range		Tstg	- 40 to + 150			℃

Electrical • Thermal Characteristics

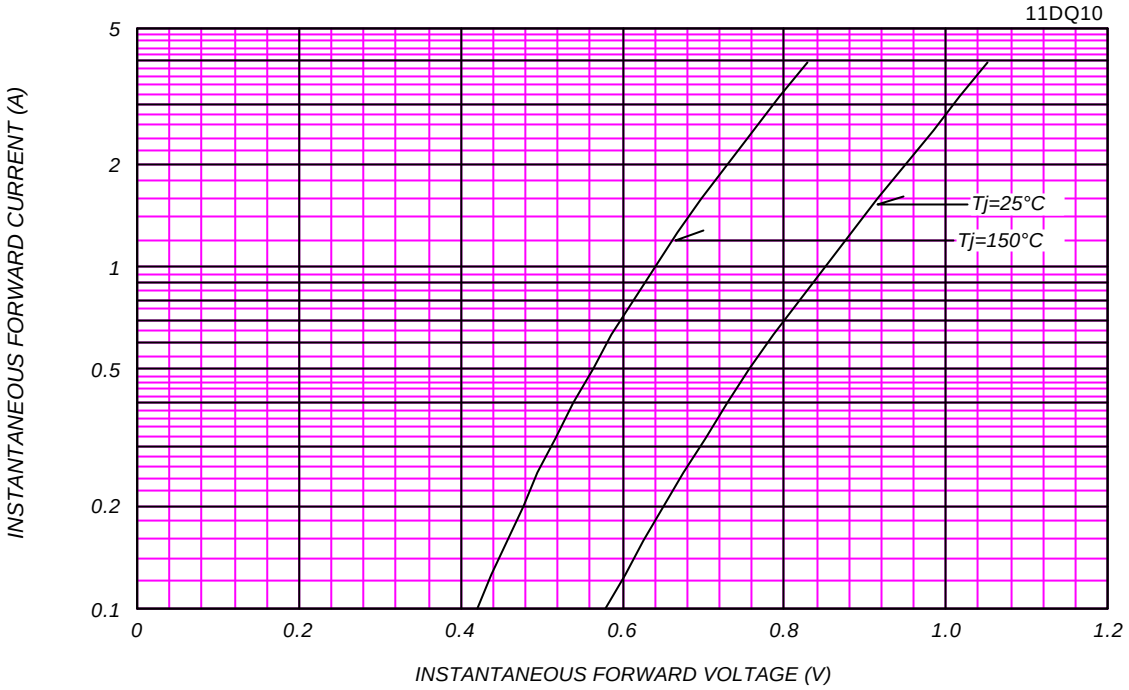
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	0.5	mA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 1.0A	-	-	0.85	V
Thermal Resistance (Junction to Ambient)	Rth(j-a)	Without Fin or P.C.Board	-	-	130	℃/W
		P.C.Board mounted			81	

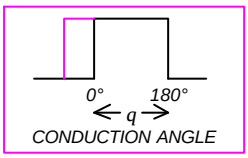
*:Print Lands=5x5mm,Both Sides

11DQ10 OUTLINE DRAWING (Dimensions in mm)

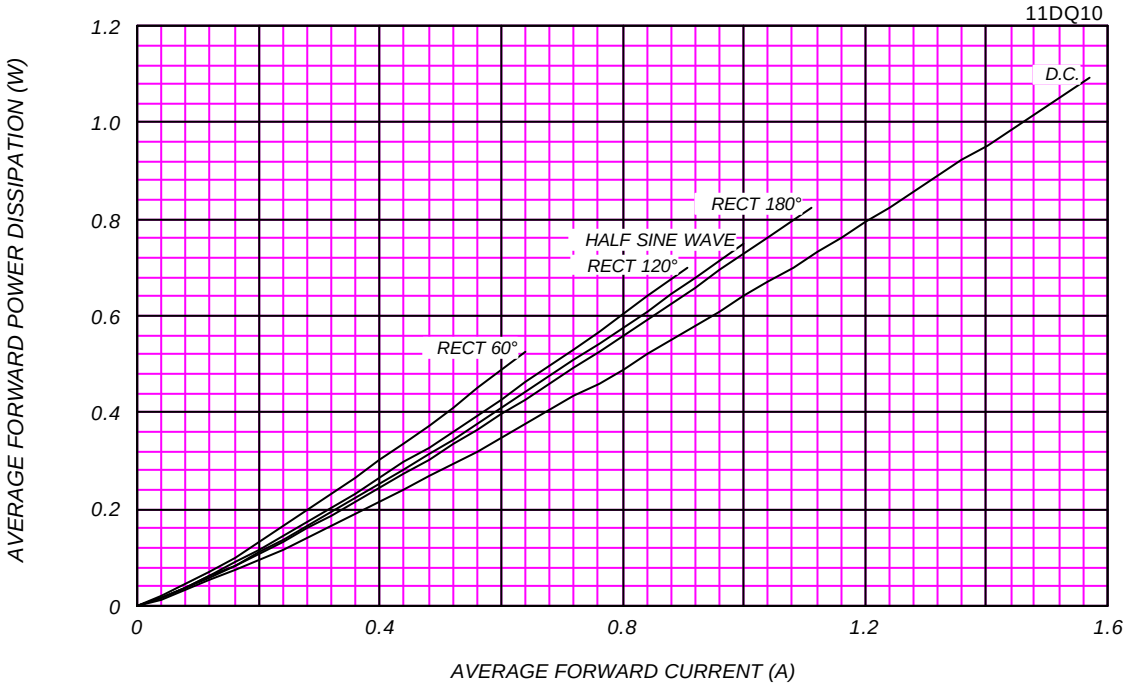


FORWARD CURRENT VS. VOLTAGE



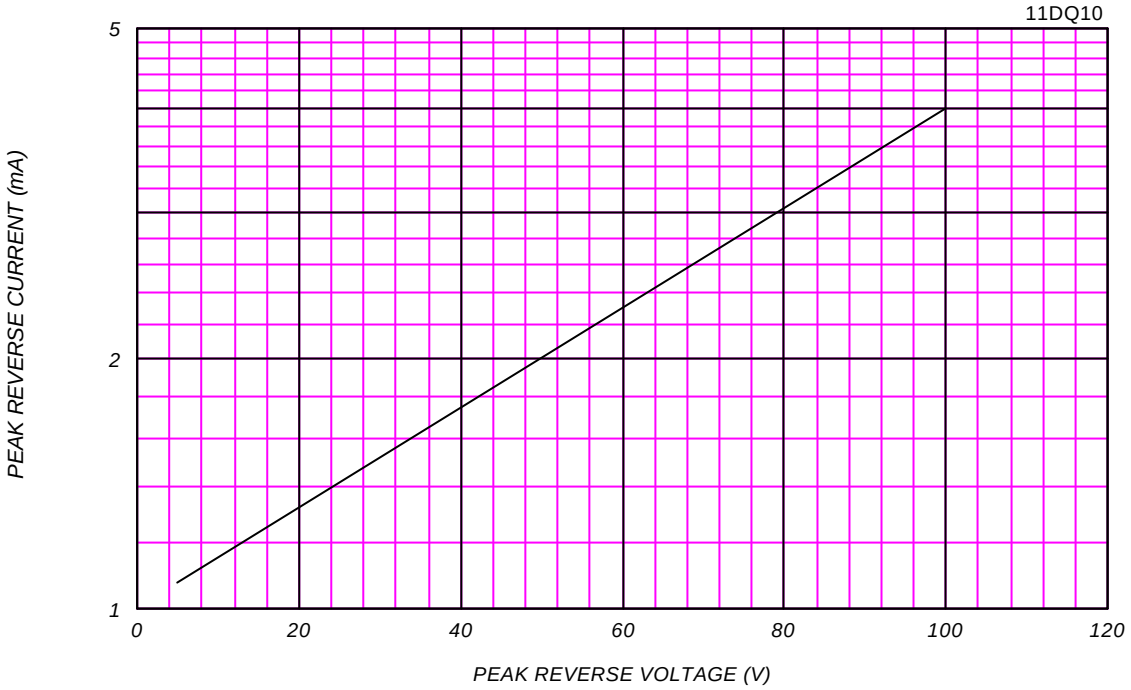


AVERAGE FORWARD POWER DISSIPATION

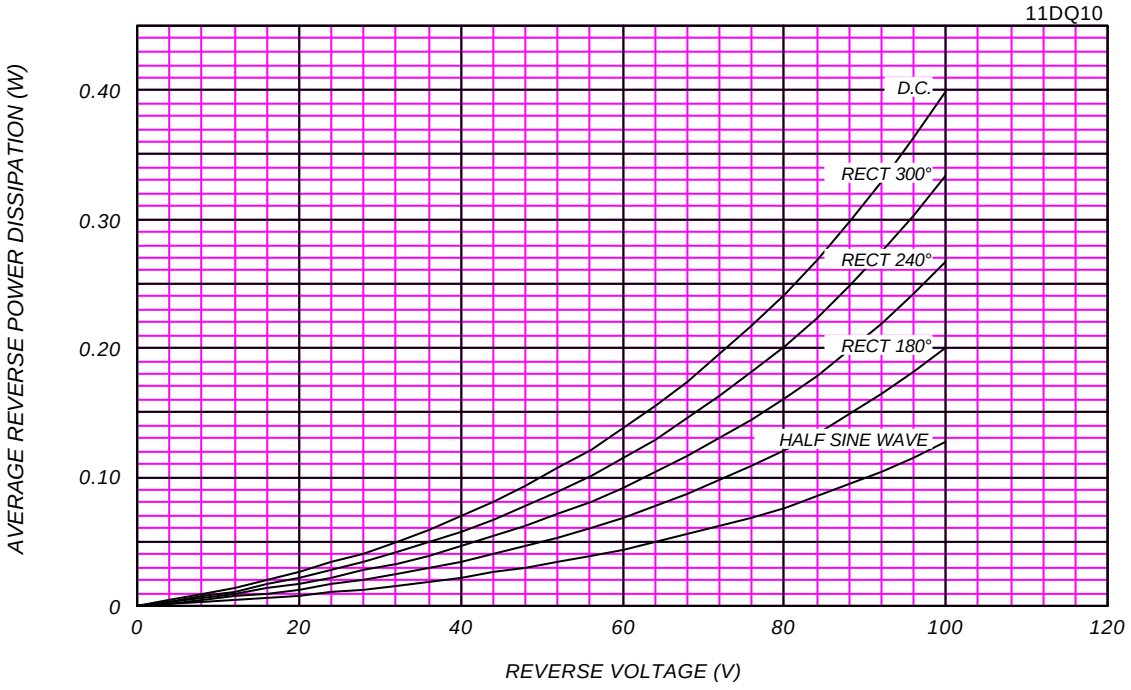


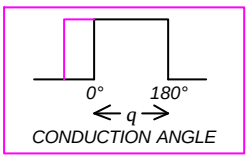
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C



AVERAGE REVERSE POWER DISSIPATION





AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board, V_{RM}=100V

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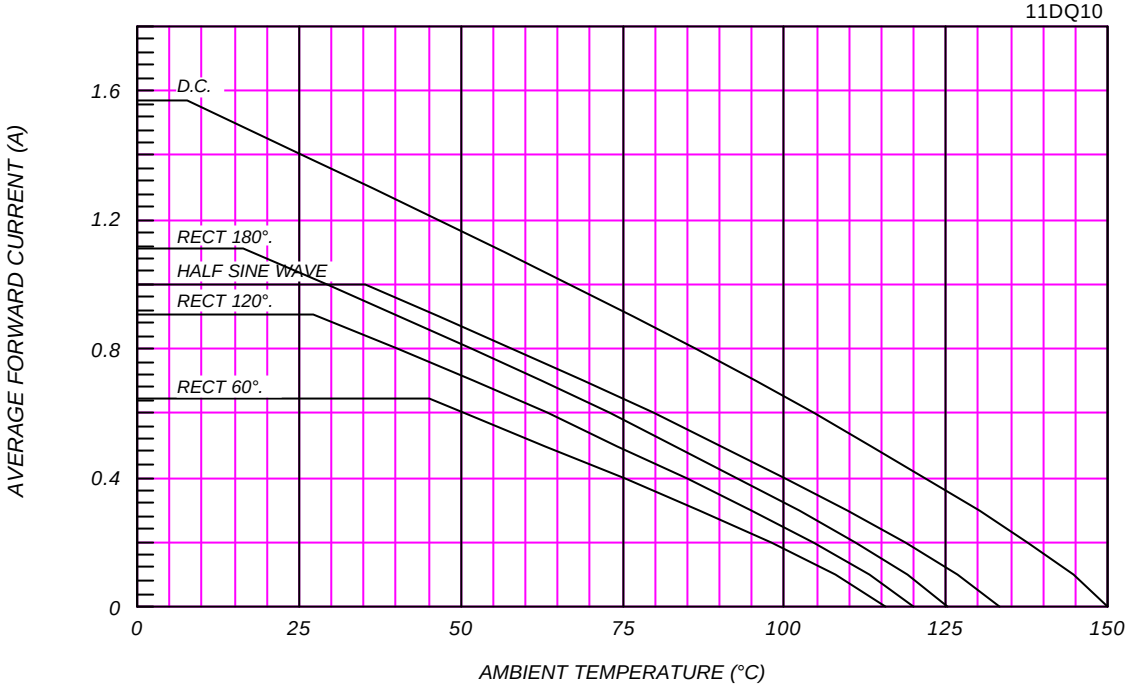

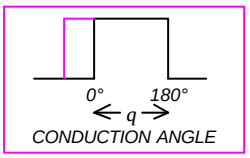

AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted(L=8mm, Print Land=10×10mm), V_{RM}=100V

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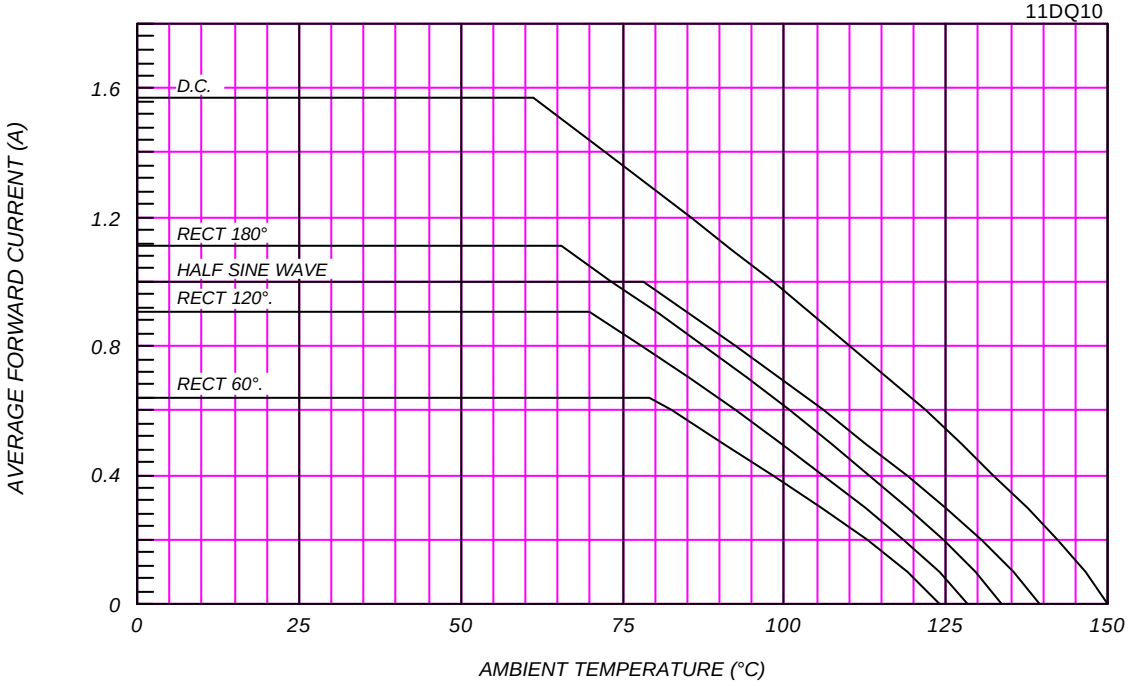
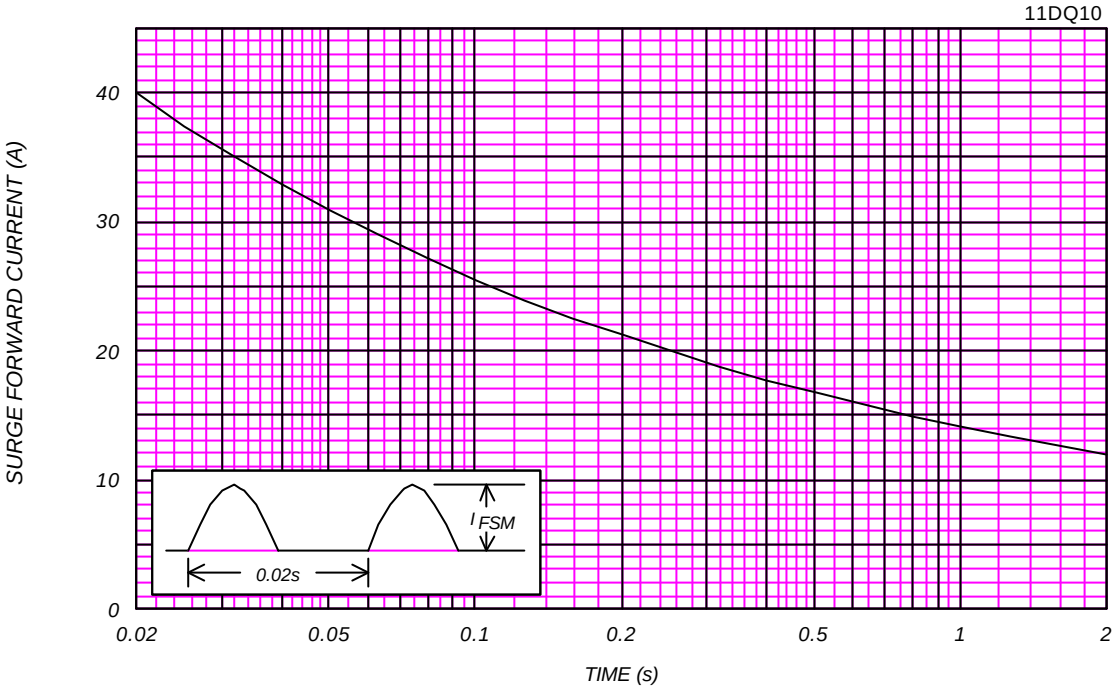


SURGE CURRENT RATINGS

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



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C,Vm=20mVRMS,f=100kHz,Typical Value