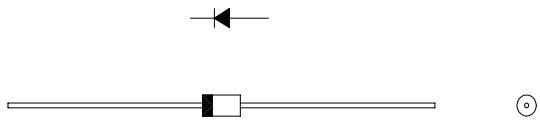
Nihon Inter Electronics Corporation

SBD Type :11EQ09

FEATURES

* Miniature Size
* Low Forward Voltage drop
* Low Power Loss, High Efficiency
* High Surge Capability
* 40 Volts thru 100 Volts Types Available
* 26mm&52mm Inside Tape Spacing Package Available

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:0.21g

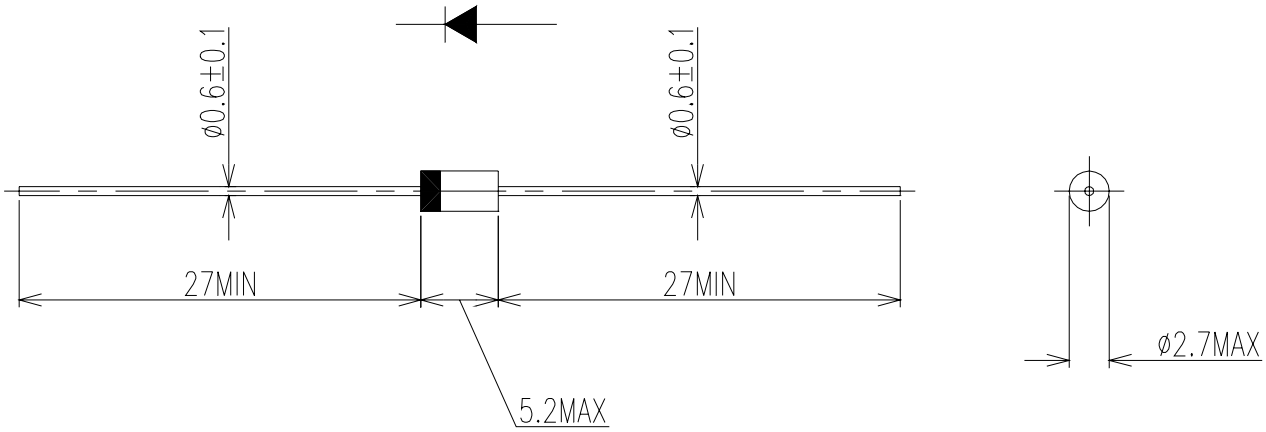
Rating		Symbol	11EQ09			Unit
Repetitive Peak Reverse Voltage		V_{RRM}	90			V
Average Rectified Output Current	Without Fin or P.C.Board	I_O	1.0	Ta=30℃*	50Hz Half Sine Wave Resistive Load	A
	P.C.Board mounted		1.0	Ta=60℃*		
RMS Forward Current		$I_{F(RMS)}$	1.57			A
Surge Forward Current		I_{FSM}	40	50Hz Half Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range		Tjw	- 40 to + 150			℃
Storage Temperature Range		Tstg	- 40 to + 150			℃

Electrical • Thermal Characteristics

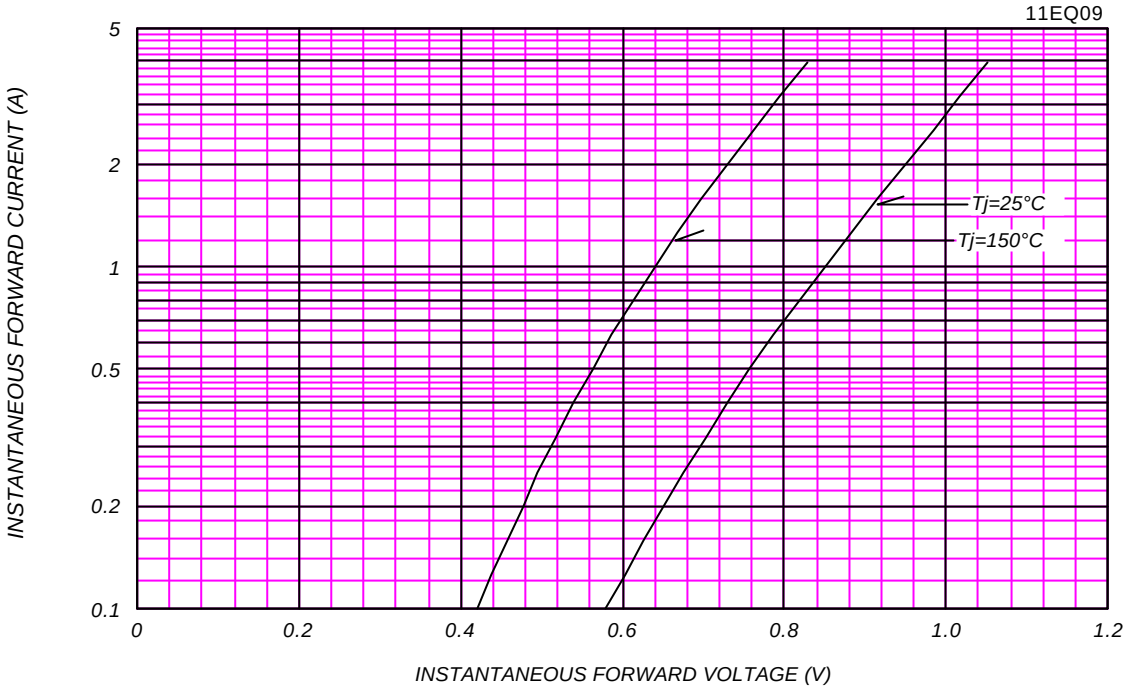
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	0.5	mA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 1.0A	-	-	0.85	V
Thermal Resistance (Junction to Ambient)	Rth(j-a)	Without Fin or P.C.Board	-	-	140	℃/W
		P.C.Board mounted			105	

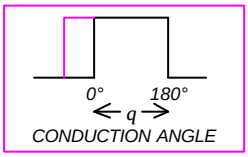
*:Print Lands=5x5mm,Both Sides

11EQ09 OUTLINE DRAWING (Dimensions in mm)

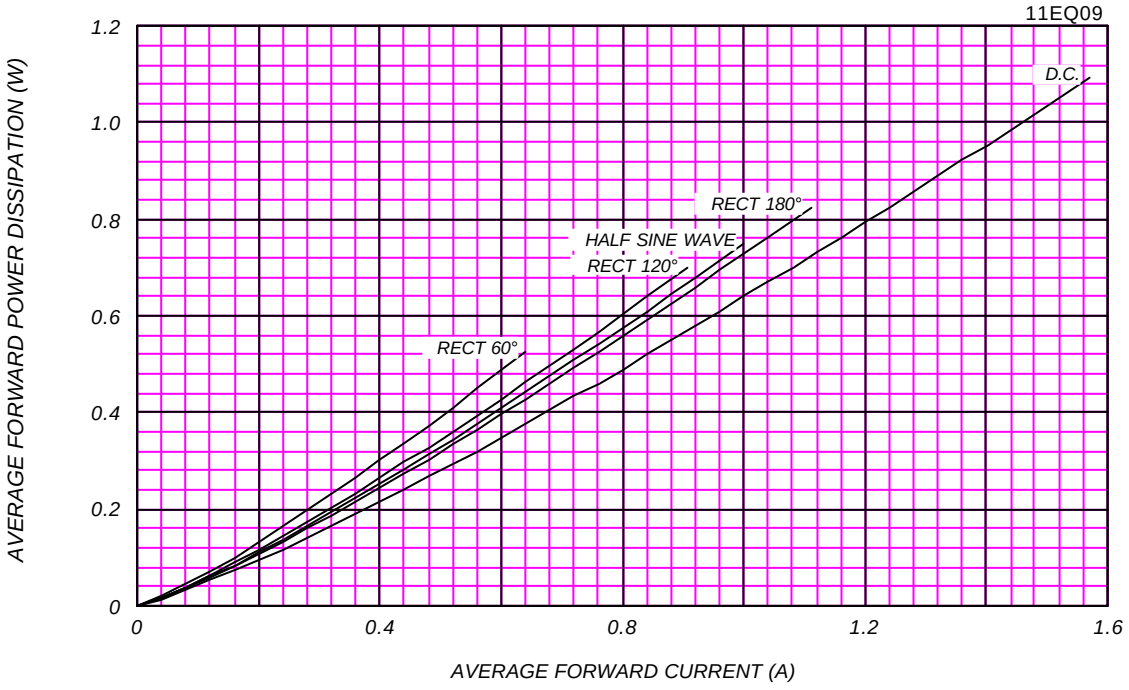


FORWARD CURRENT VS. VOLTAGE



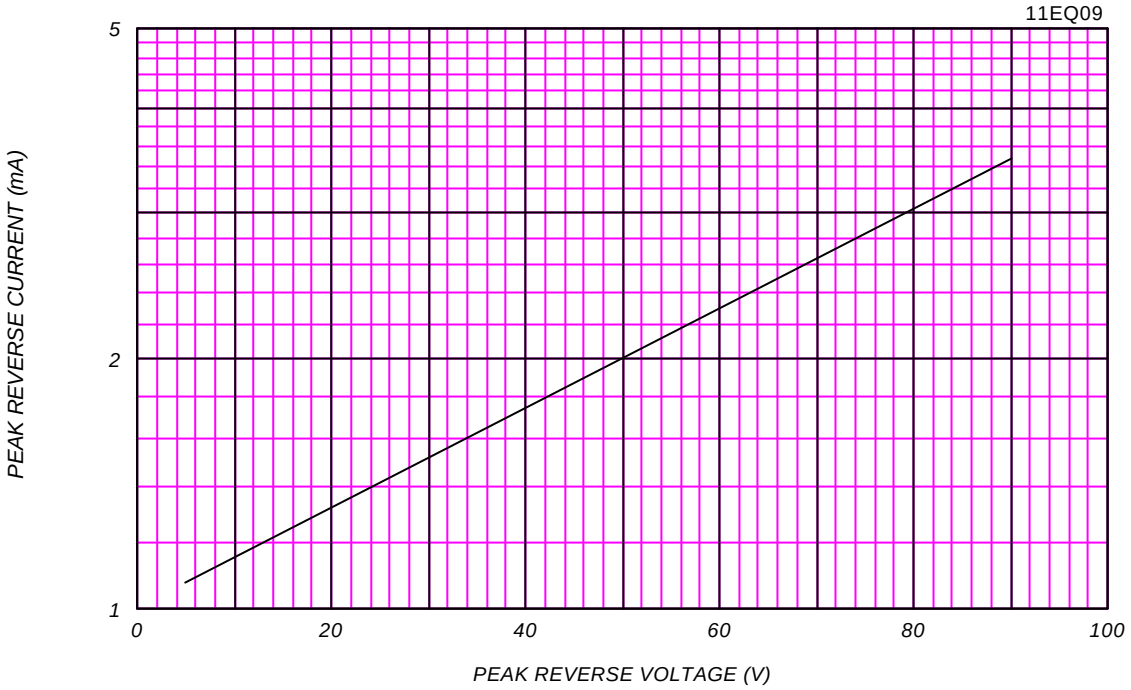


AVERAGE FORWARD POWER DISSIPATION

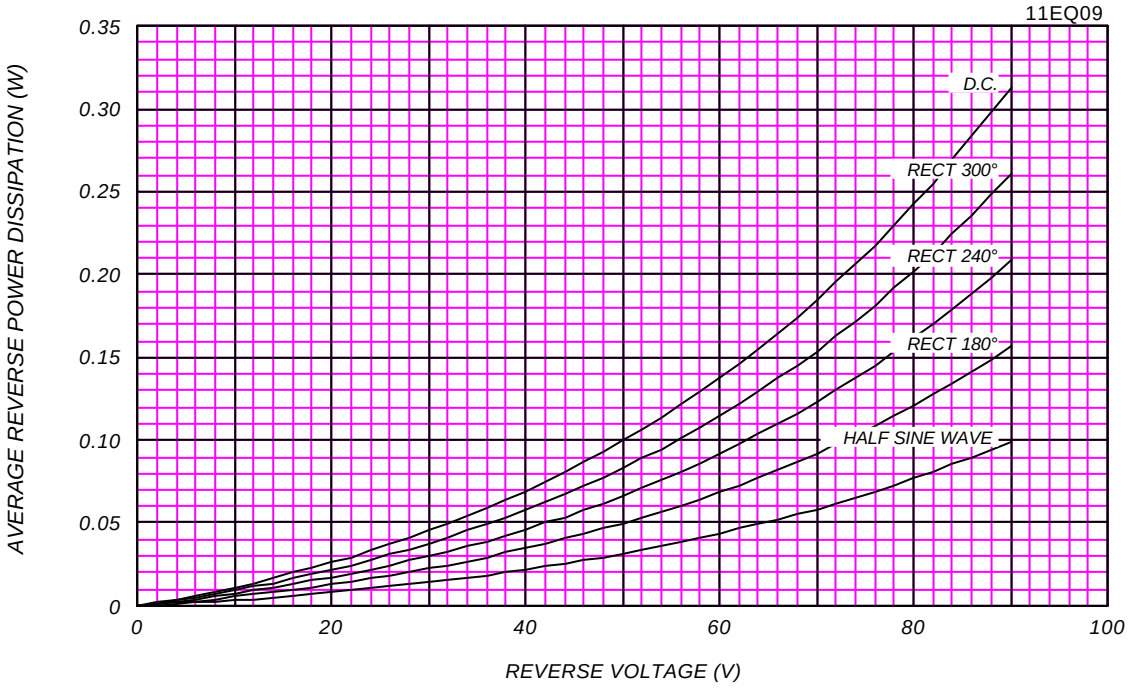


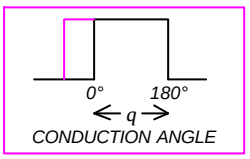
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C



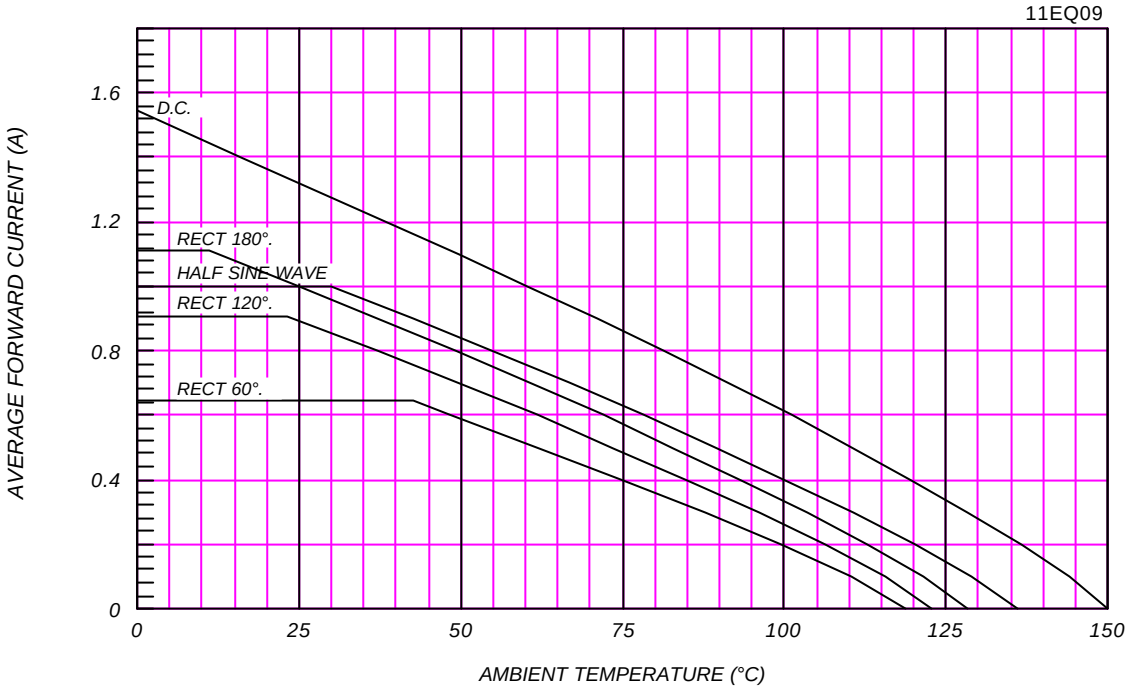
AVERAGE REVERSE POWER DISSIPATION

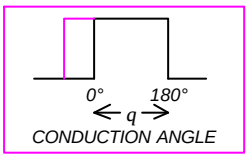




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

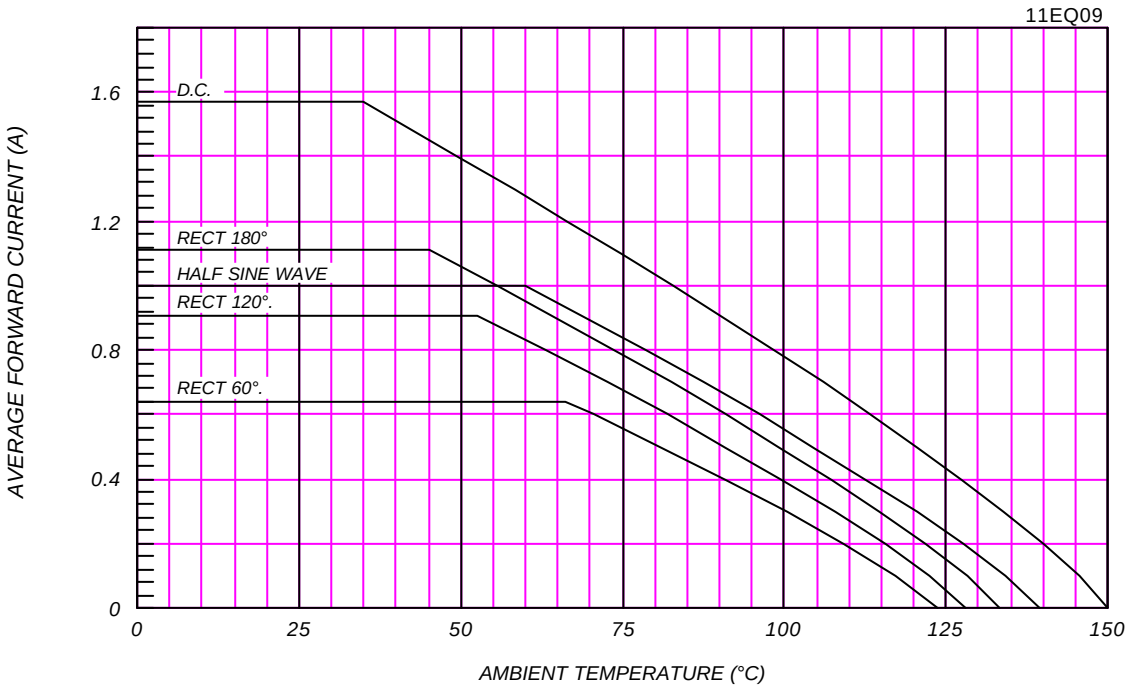
Without Fin or P.C. Board, V_{RM}=90V





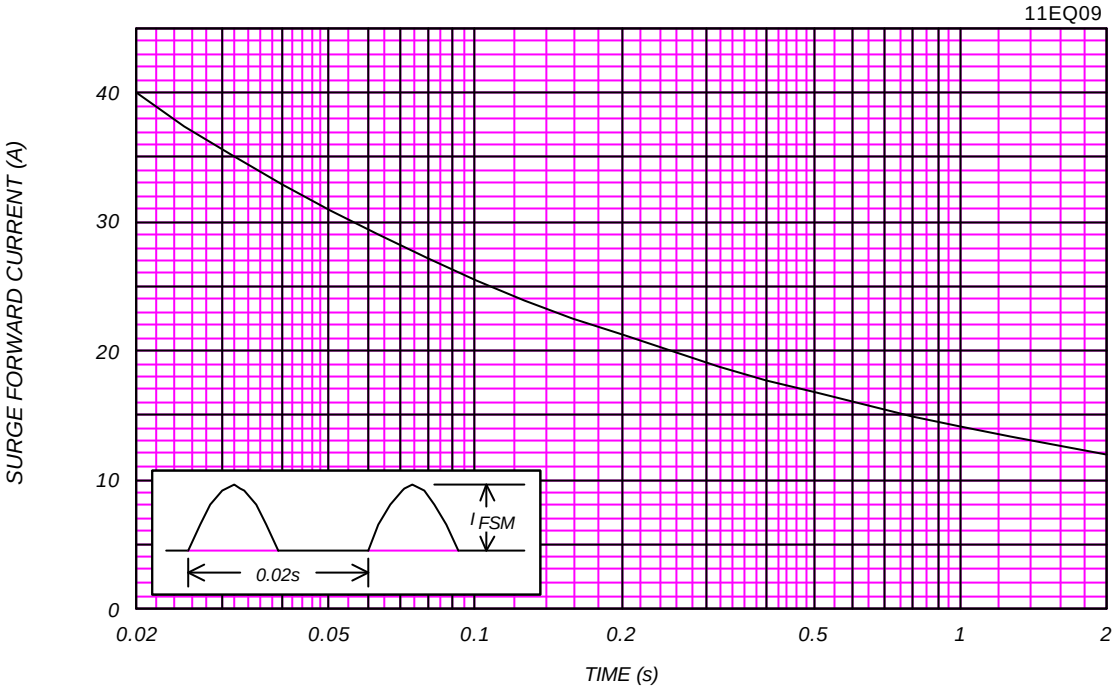
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted (L=3mm, Print Land=10×10mm), V_{RM}=90V



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

