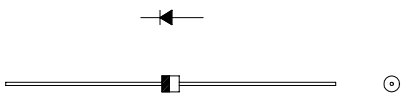
Nihon Inter Electronics Corporation

1A 100V 60ns

FRD Type :10ERB10

OUTLINE DRAWING



FEATURES

* Miniature Size
* Fast Recovery and Low Price
* High Surge Capability
* 100volts trough 600volts Types Available
* 26mm and 52mm Inside Tape Spacing

Maximum Ratings

Approx Net Weight:0.17g

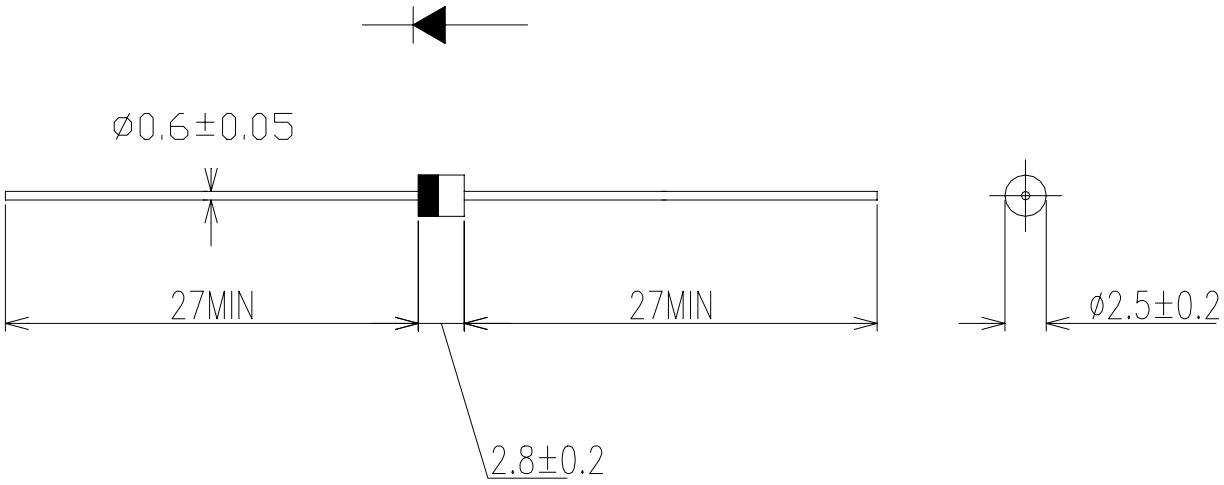
Rating	Symbol	10ERB10			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100			V
Average Rectified Output Current	I_O	1.0	Ta=50℃ *1	Half Sine Wave Resistive Load	A
		0.9	Ta=27℃ *2		
RMS Forward Current	$I_{F(RMS)}$	1.57			A
Surge Forward Current	I_{FSM}	45	Half Sine Wave,1cycle,Non-repetitive		A
Operating JunctionTemperature Range	Tjw	- 40 to + 150			℃
Storage Temperature Range	Tstg	- 40 to + 150			℃

Electrical • Thermal Characteristics

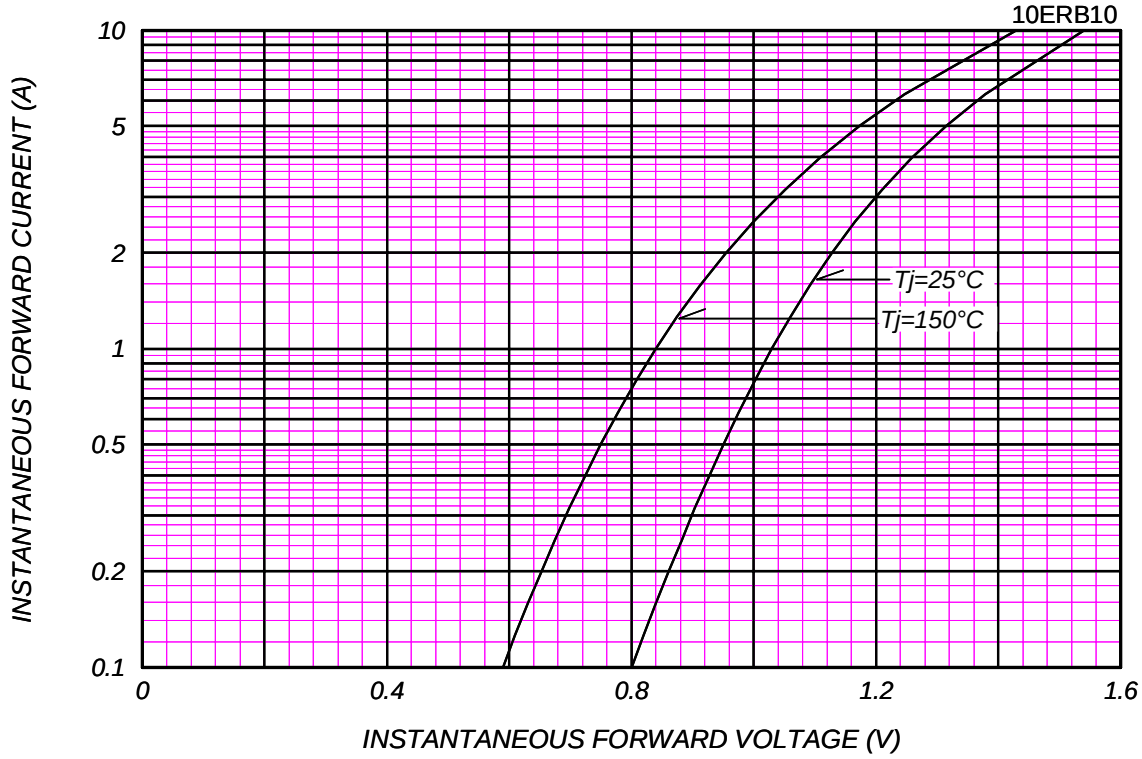
Characteristics	Symbol	Conditions		Min	Typ	Max	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}		-	-	10	μA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 1 A		-	-	1.03	V
Reverse Recovery Time	trr	I_{FM}= 1 A, -di/dt= 50 A/μs, Ta= 25℃		-	-	60	ns
Thermal Resistance	Rth(j-a)	Junction to Ambient	*1 P.C. Board mounted	-	-	100	℃/W
			*2 Without Fin or P.C. Board mounted			140	

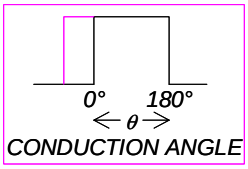
*1: P.C. Board mounted (L=3mm, Print Lands = 7x7 mm,Both Sides)
*2: Without Fin or P.C.Board mounted

10ERB_ OUTLINE DRAWING (Dimensions in mm)

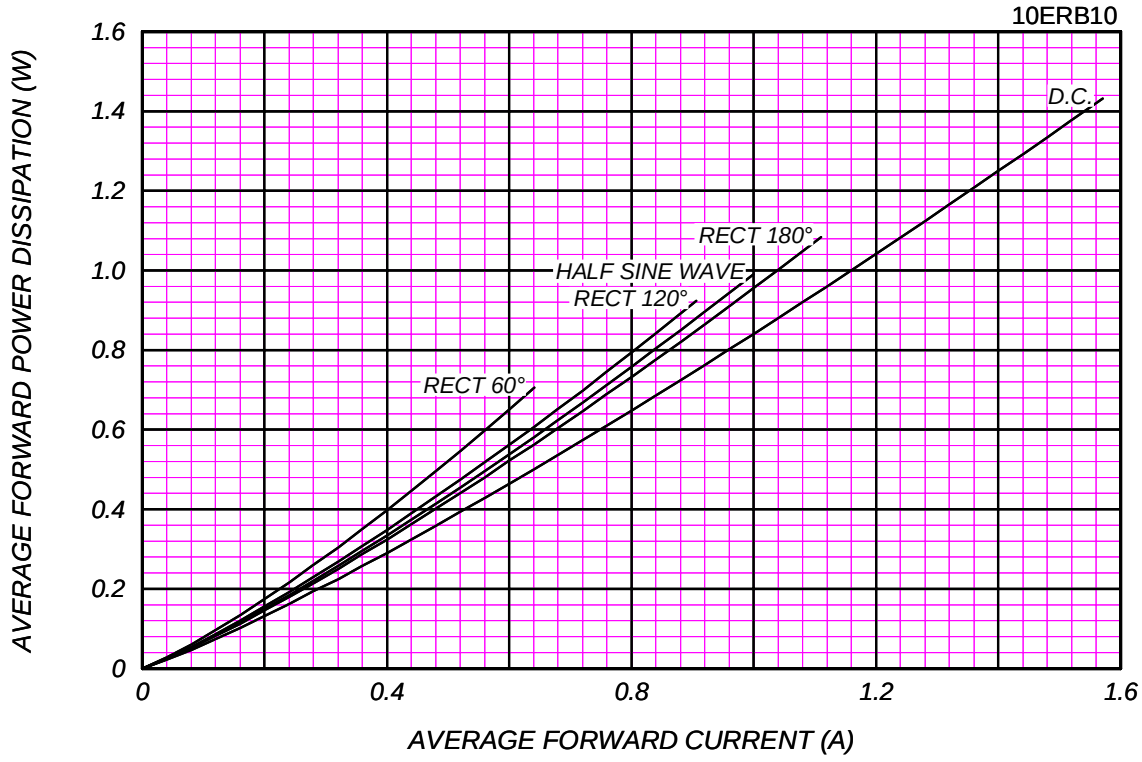


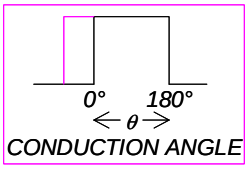
FORWARD CURRENT VS. VOLTAGE





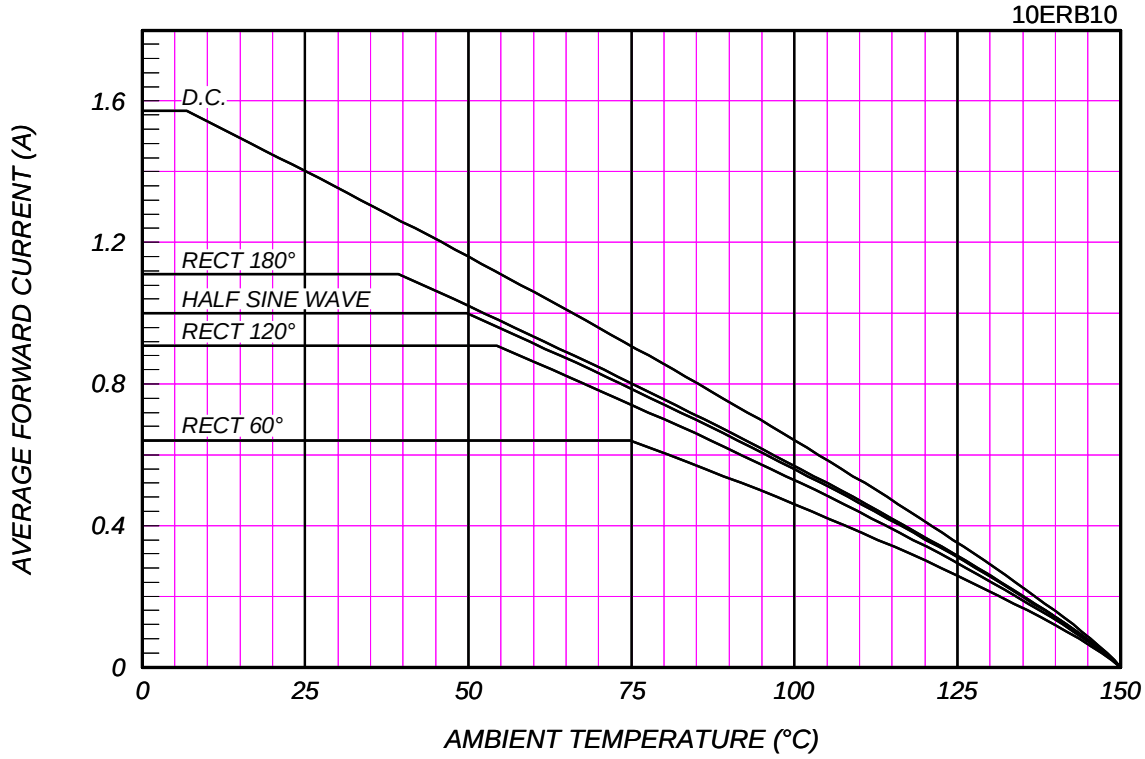
AVERAGE FORWARD POWER DISSIPATION

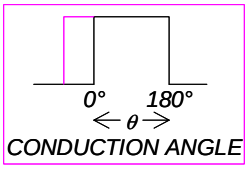




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

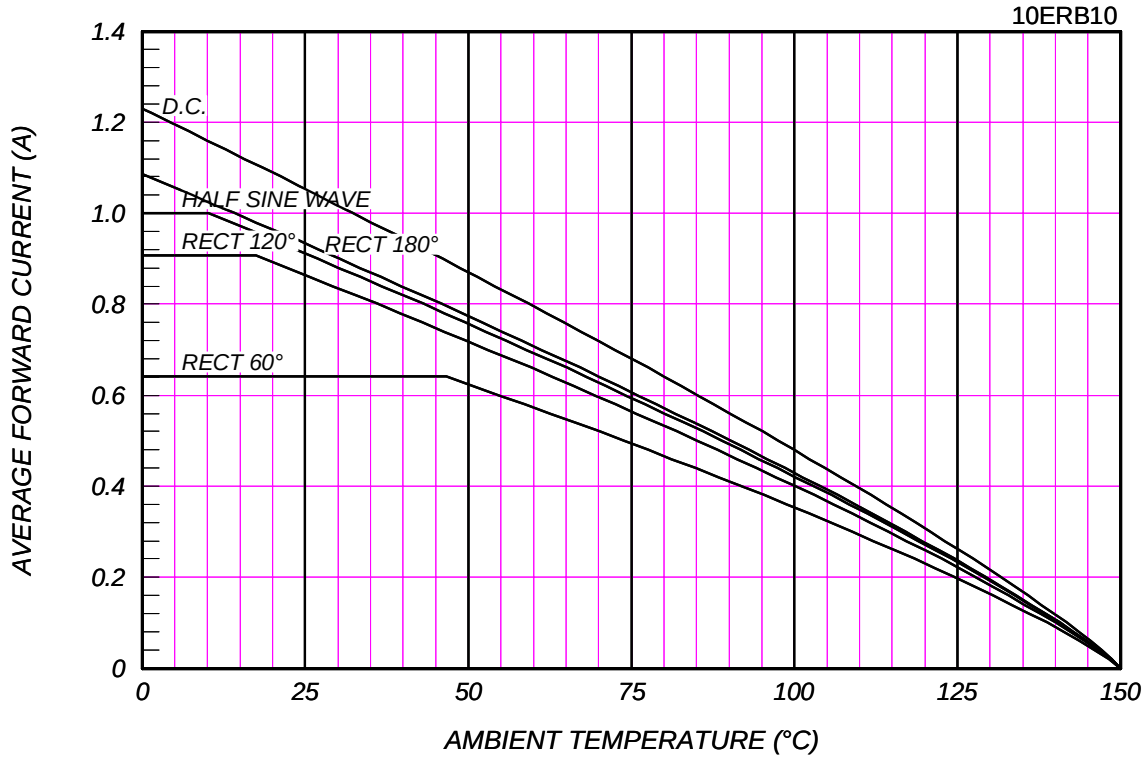
P.C. Board mounted (L=3mm,Print Land=7×7mm,Both Sides)





AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



SURGE CURRENT RATINGS

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