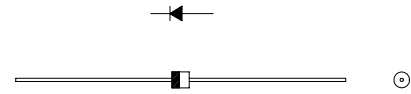


1A 100V 60ns

OUTLINE DRAWING

FRD Type :10ERB10
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	$T_a=50^{\circ}\text{C}$ *1	Half Sine Wave Resistive Load	A
		0.9	$T_a=27^{\circ}\text{C}$ *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	T_{jw}	- 40 to + 150			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 40 to + 150			$^{\circ}\text{C}$

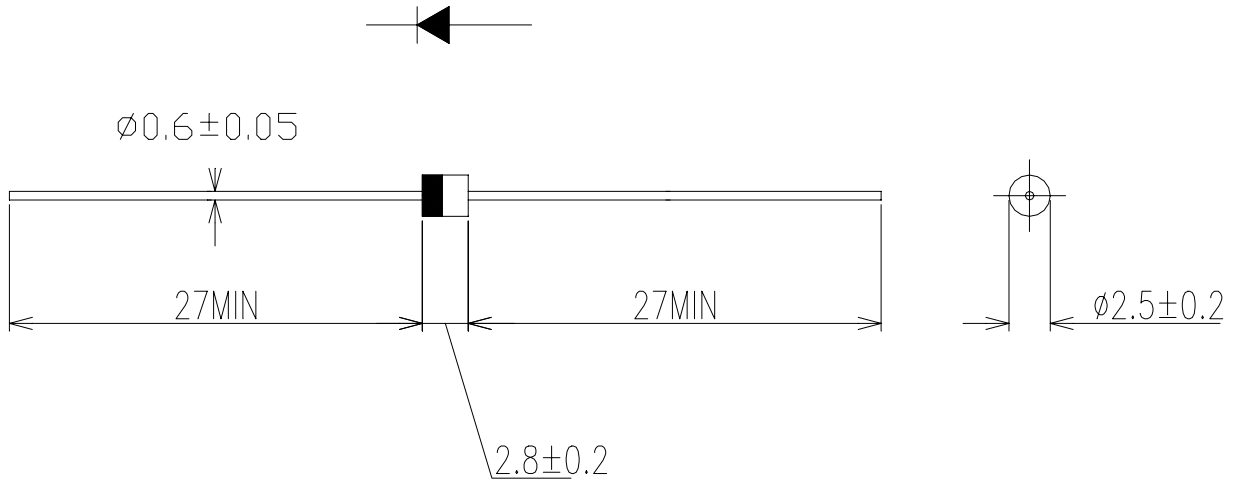
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}$, $V_{RM}= V_{RRM}$	-	-	10	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}$, $I_{FM}= 1\text{ A}$	-	-	1.03	V
Reverse Recovery Time	t_{rr}	$I_{FM}= 1\text{ A}$, $-di/dt= 50\text{ A}/\mu\text{s}$, $T_a= 25^{\circ}\text{C}$	-	-	60	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	-	-	100	$^{\circ}\text{C}/\text{W}$
		*1 P.C. Board mounted			140	
		*2 Without Fin or P.C. Board mounted				

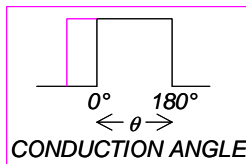
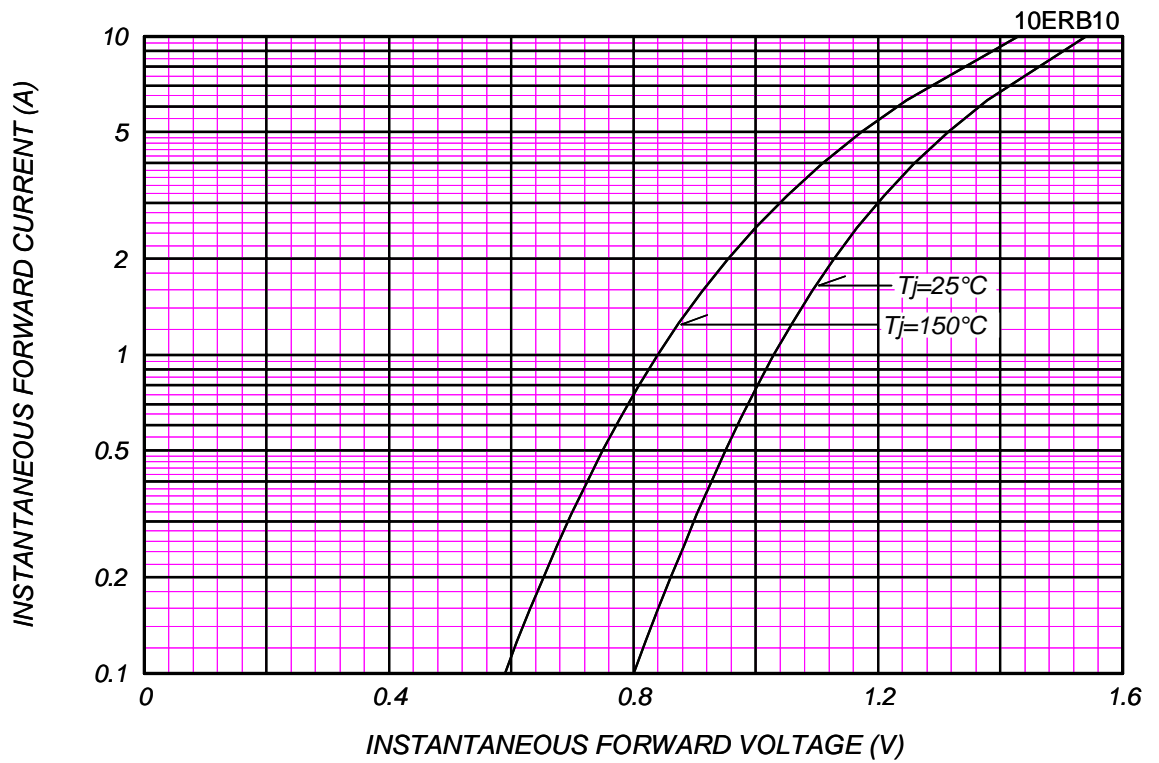
*1: P.C. Board mounted (L=3mm, Print Lands = 7x7 mm,Both Sides)

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

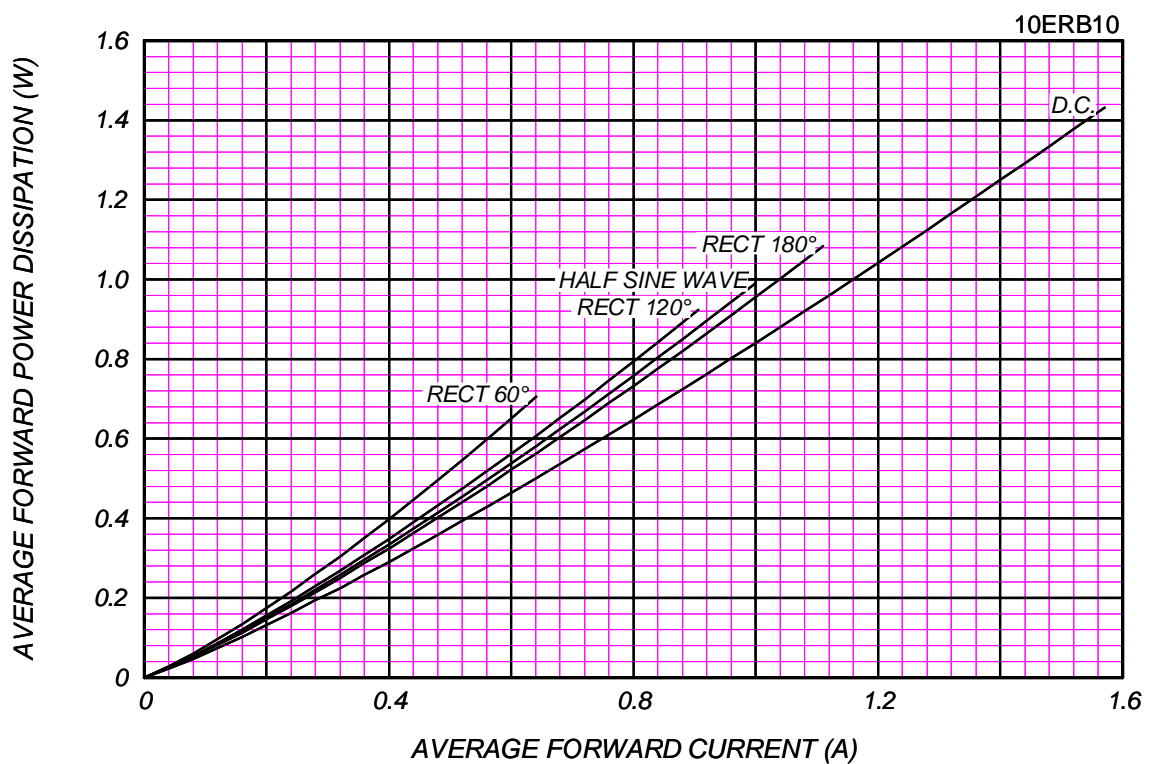
10ERB_ OUTLINE DRAWING (Dimensions in mm)

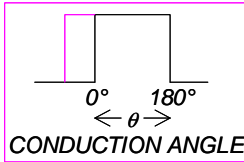


FORWARD CURRENT VS. VOLTAGE



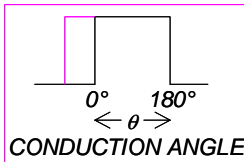
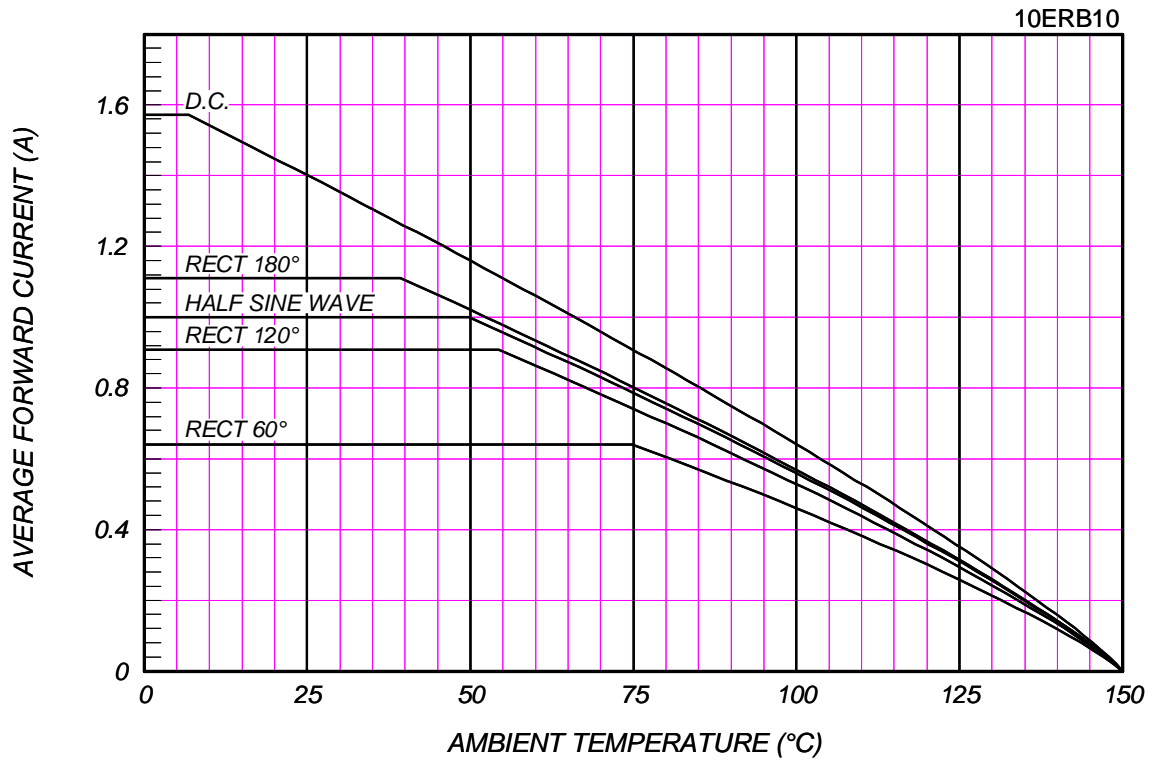
AVERAGE FORWARD POWER DISSIPATION





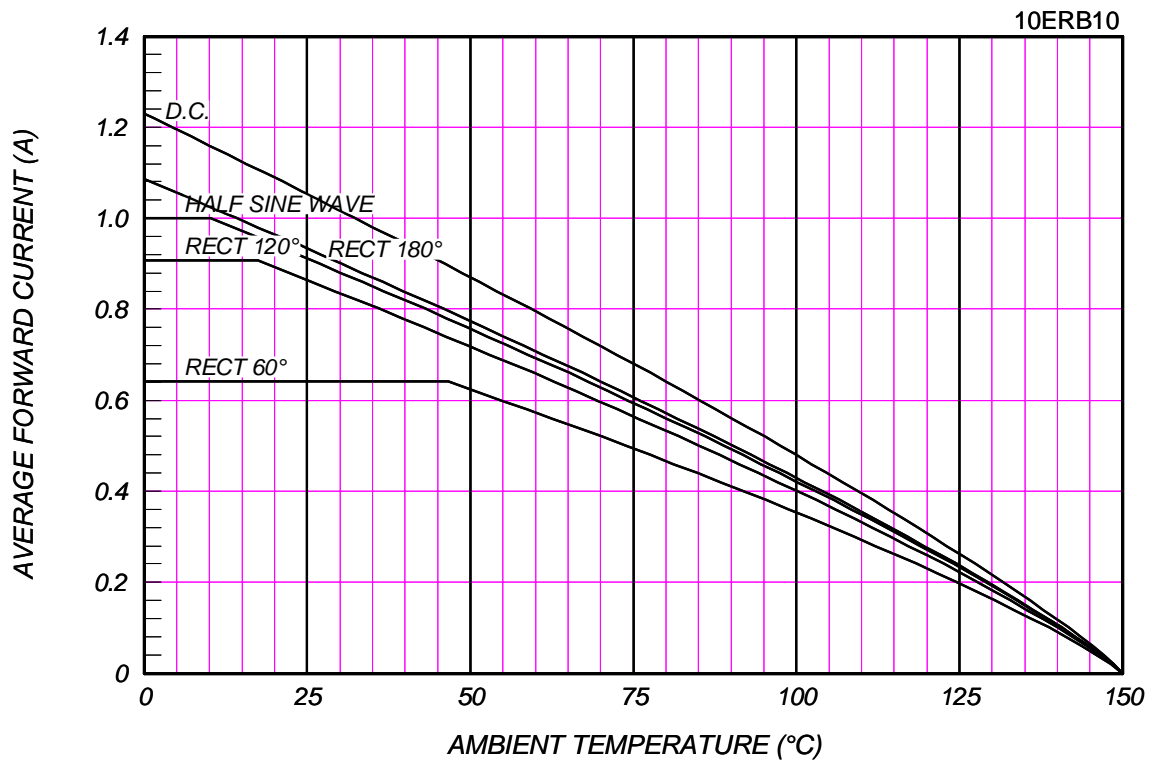
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

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, Half Sine Wave, Non-Repetitive, No Load

10ERB10

