

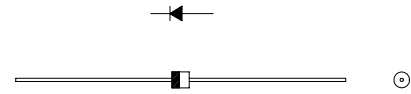
**1A 200V 60ns**

OUTLINE DRAWING

# FRD Type :10ERB20

**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	10ERB20			Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	200			V
Average Rectified Output Current	$I_O$	1.0	$T_a=50^{\circ}C$ *1	Half Sine Wave Resistive Load	A
		0.9	$T_a=27^{\circ}C$ *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			$^{\circ}C$
Storage Temperature Range	$T_{stg}$	- 40 to + 150			$^{\circ}C$

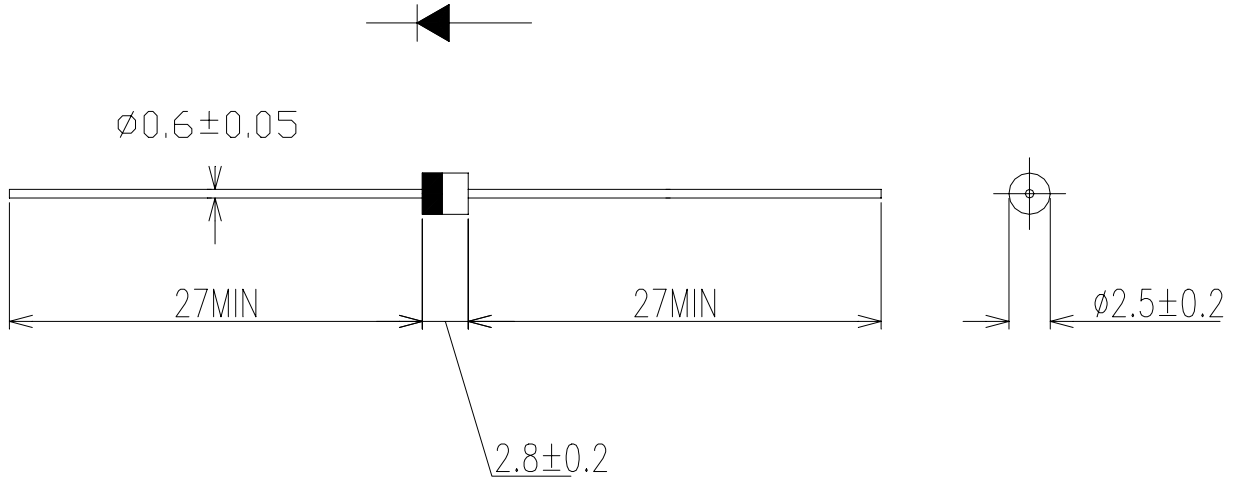
**Electrical • Thermal Characteristics**

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

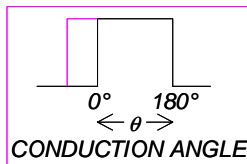
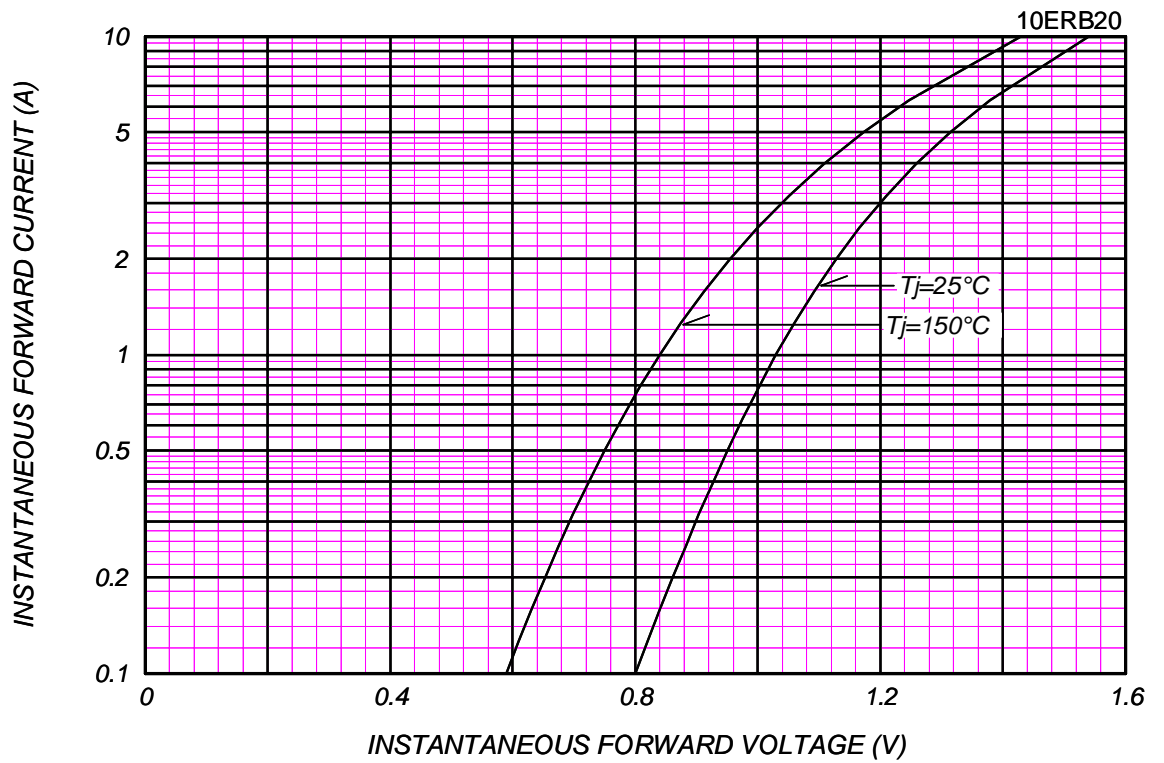
\*1: P.C. Board mounted (L=3mm, Print Lands = 7x7 mm,Both Sides)

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

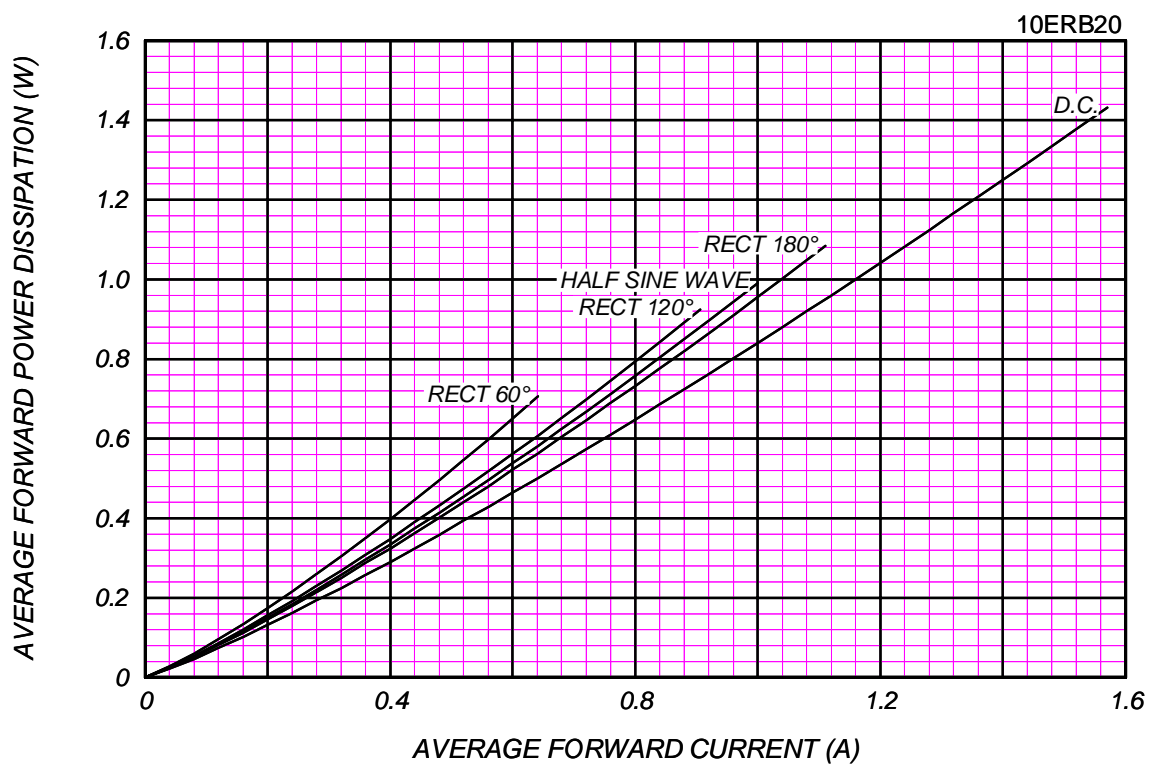
10ERB\_ OUTLINE DRAWING (Dimensions in mm)

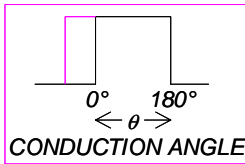


### FORWARD CURRENT VS. VOLTAGE



### AVERAGE FORWARD POWER DISSIPATION

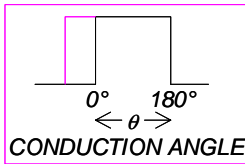
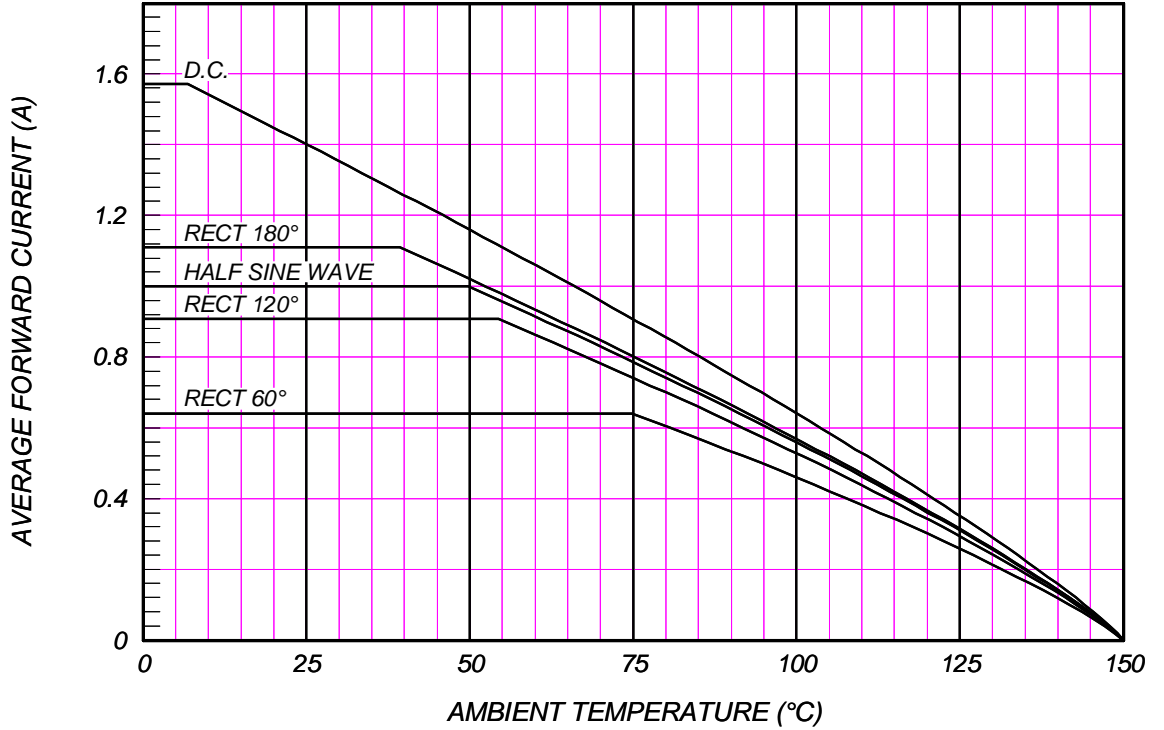




### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted (L=3mm,Print Land=7x7mm,Both Sides)

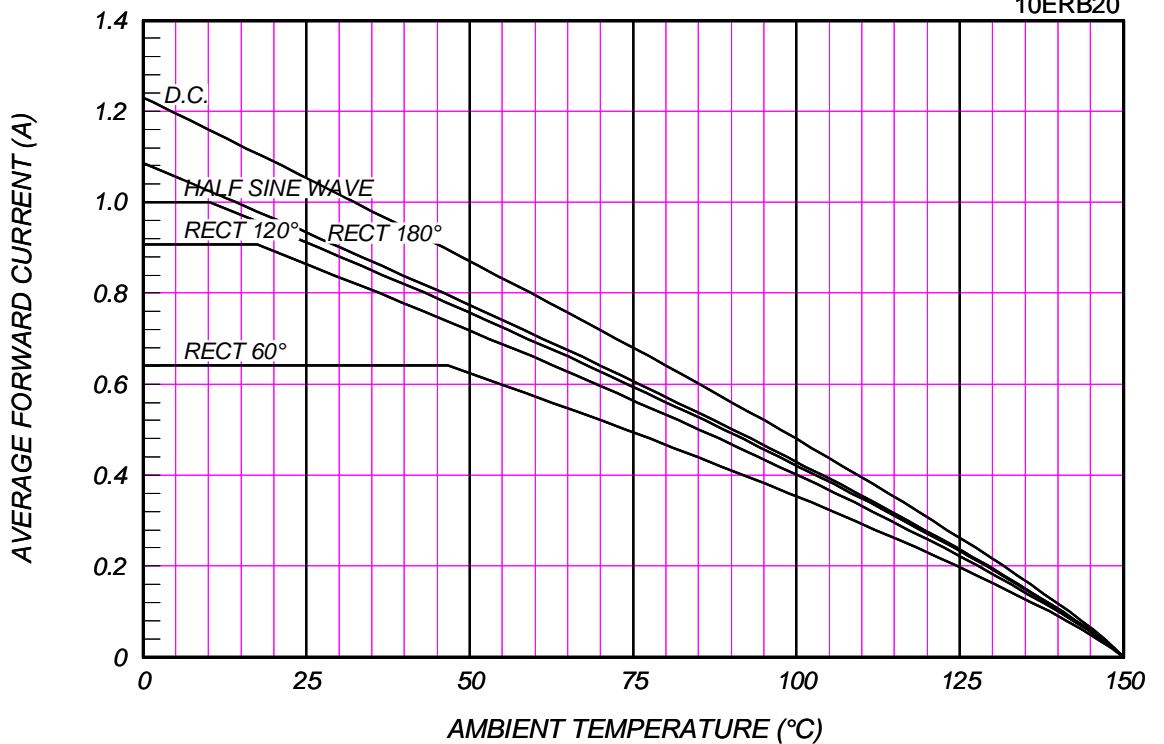
10ERB20



### AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board

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# SURGE CURRENT RATINGS

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

10ERB20

