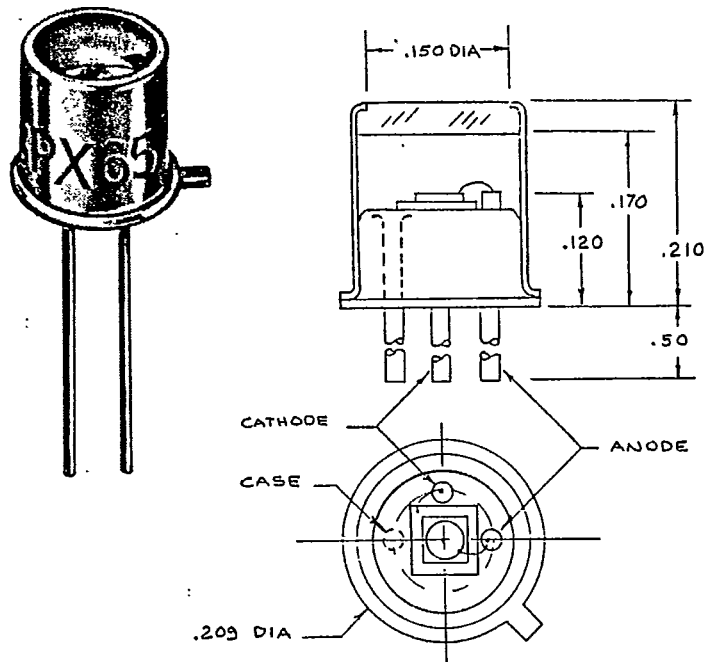




# TECHNICAL DATA SHEET

## BEPX65-R2F

CENTRONIC Model BEPX65-R2F has been specifically created for the fiber optic system designer who requires a ultra fast photodetector (<1 nanosecond rise time at 5 Volts) This detector exhibits capacitance of typically 4pF and responsivity of .47 A/W (at 820nm). The BEPX65-R2F has an active area of .063mm<sup>2</sup> and is packaged in a TO-18 case with window. Other packaging options available, plus custom designing to meet specific applications.

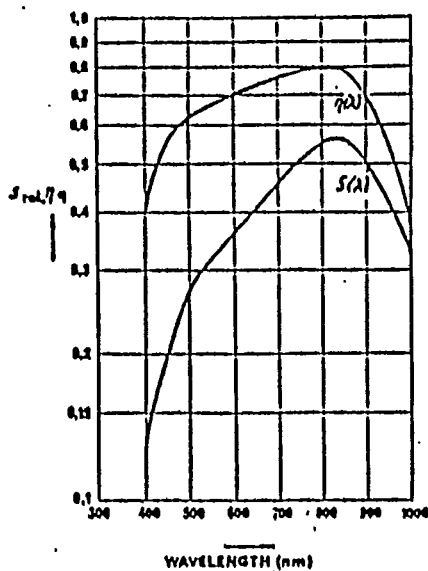


### DEVICE TYPE: BEPX65-R2F

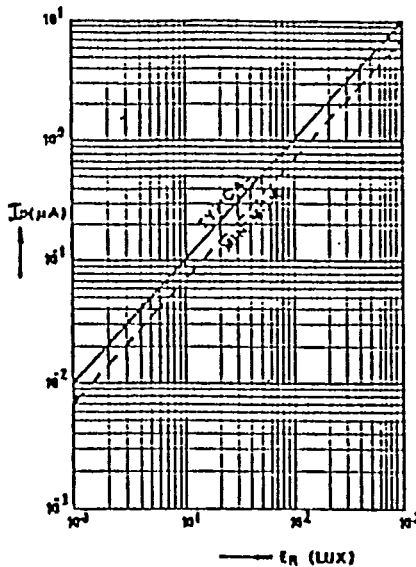
### ELECTRO/OPTICAL CHARACTERISTICS ( $T_a = 25^{\circ}\text{C}$ Except where noted)

Parameters	Min	Typ	Max	Units
Dark Current ( $V_R = 5\text{V}$ )		3	10	nA
Dark Current ( $V_R = 5\text{V}$ ) ( $T_a = 75^{\circ}\text{C}$ )		100	500	nA
Breakdown Voltage ( $I_R = 1 \mu\text{A}$ )	20			Volts
Rise Time (5V, 825nm, 50Ω) (10% to 70%)		0.9	2.0	ns
Capacitance (5V)		4	5	pF
Noise Equivalent Power			$1.65 \times 10^{-13}$	$\text{W/Hz}^{\frac{1}{2}}$
Peak Wavelength		800		nm
Responsivity (5V, 820nm)	0.42	0.47		A/W
Active Area		0.63		mm <sup>2</sup>
Field of View (full angle)		43		DEG
Output current		+0.05		%/°C
Temp. coefficient (Wavelength 829nm)				

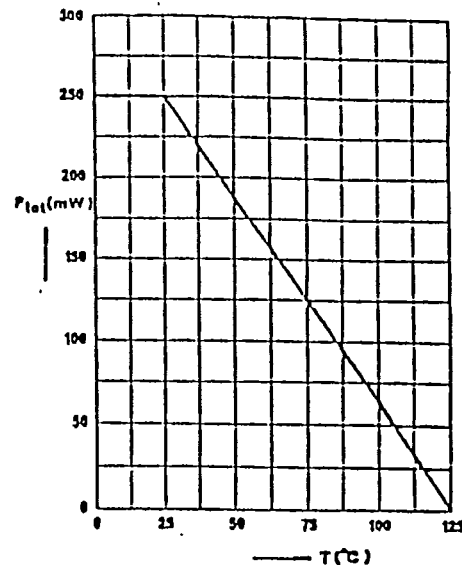
TYPICAL SPECTRAL RESPONSE CURVE  $S(\lambda)$  AND TYPICAL QUANTUM EFFICIENCY CURVE  $\eta(\lambda)$ .



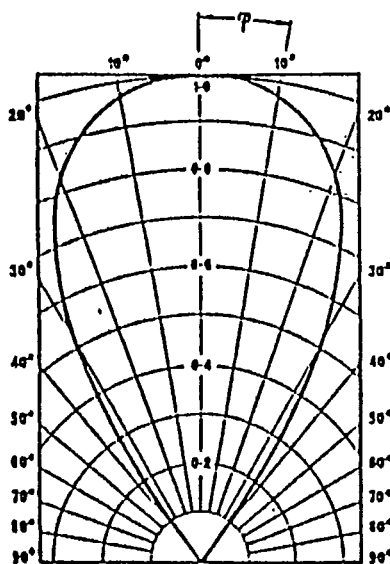
VARIATION OF OUTPUT CURRENT WITH ILLUMINATION.



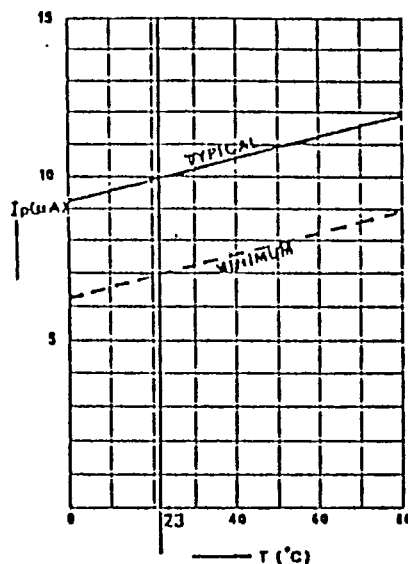
PERMISSIBLE POWER DISSIPATION CURVE.



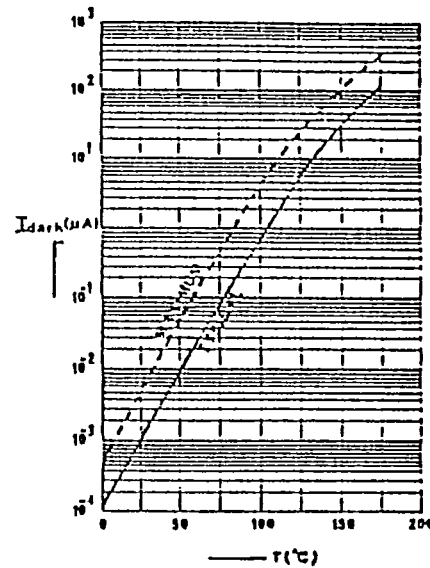
POLAR SENSITIVITY CURVE OF DIODE.



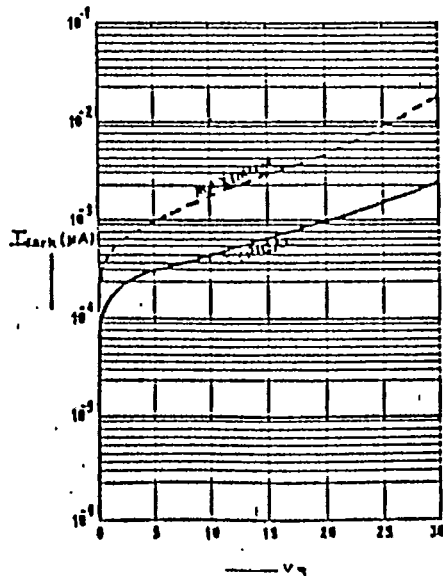
VARIATION OF OUTPUT CURRENT WITH TEMPERATURE.



VARIATION OF DARK CURRENT WITH DIODE TEMPERATURE.



VARIATION OF DIODE DARK CURRENT WITH REVERSE VOLTAGE.



VARIATION OF DIODE CAPACITANCE WITH REVERSE VOLTAGE.

