

EryF*



Features

- Special UV-index sensor, precision up to +/- 0.5 UVI
- Optimally suited for accurate sun-UV dosimetry
- Also suited for sun tanning bank dosimetry
- Silicon Carbide based chip for radiation hardness
- Intrinsic visible blindness due to wide-bandgap semiconductor material
- TO-18 metal package with integrated filter glass
- 0.054 mm² active chip area
- The chip is manufactured by Cree Research Inc., U.S.A.

Maximum Ratings

Parameter	Symbol	Value	Unit
Operating temperature range	T _{opt}	-25 ... +70	°C
Reverse voltage	V _{Rmax}	20	V



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General Characteristics

(T_a = 25 °C)

Parameter	Symbol	Value	Unit
Active area	A	0.054	mm ²
Dark current at 1 V reverse bias	I _d	1	fA
Capacitance	C	21	pF
Short circuit current at bright sun	I ₀	ca. 7	nA

Spectral Characteristics

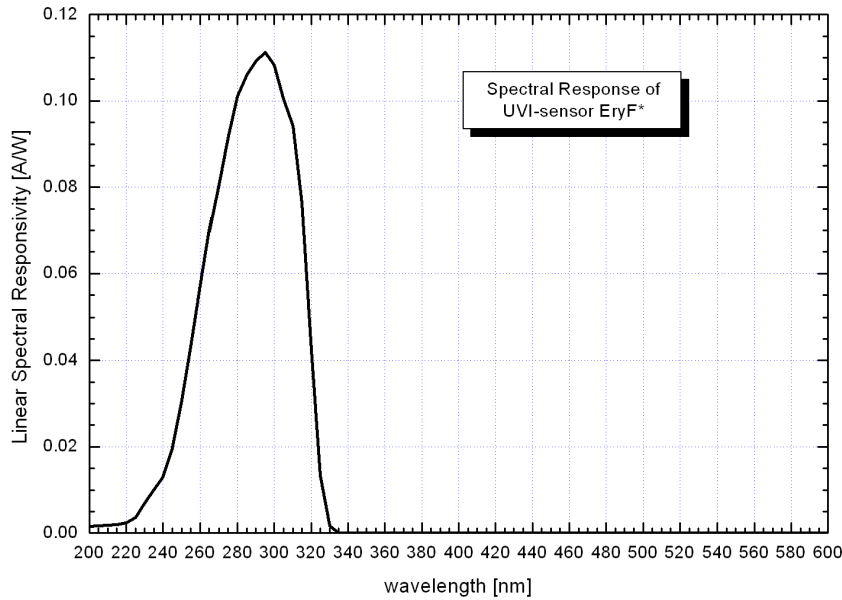
(T_a = 25 °C)

Parameter	Symbol	Value	Unit
Max. spectral sensitivity	S _{max}	0.11	A W ⁻¹
Wavelength of max. spectral sensitivity	λ _{Smax}	295	nm
Range of spectral sensitivity (S=0.1*S _{max})	-	235 - 325	nm

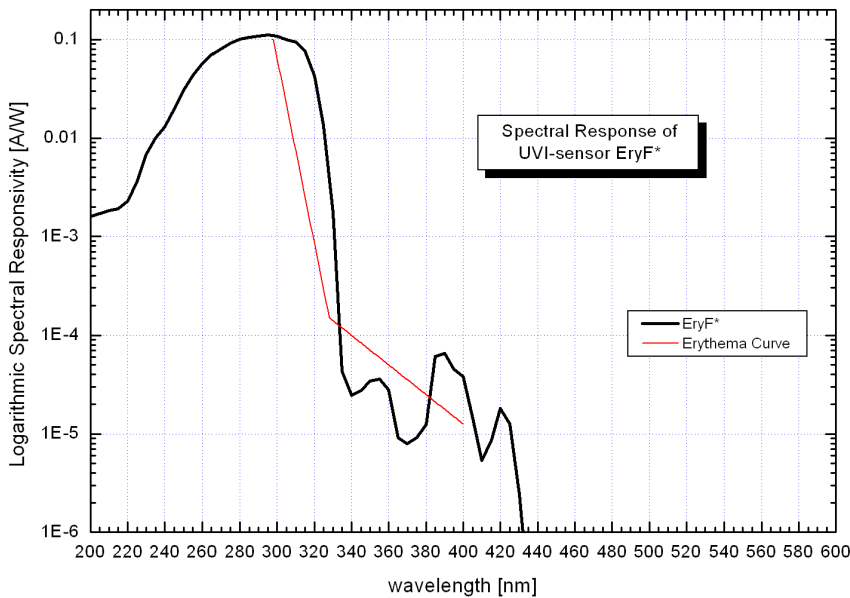


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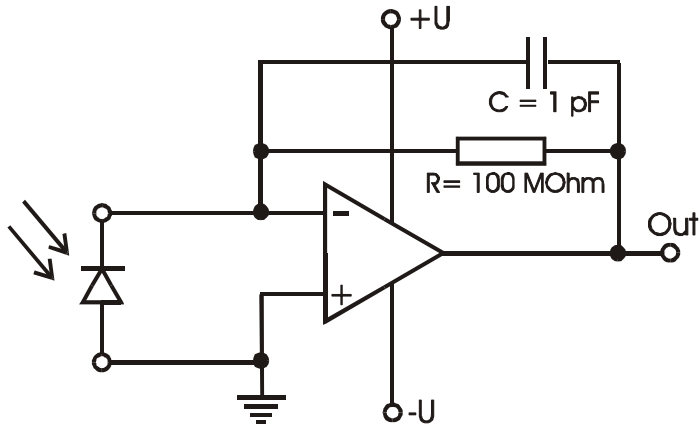
Linear Spectral Response



Logarithmic Spectral Response



Application Example



Pin Layout

Grounded pin: Anode
Isolated pin: Cathode

