

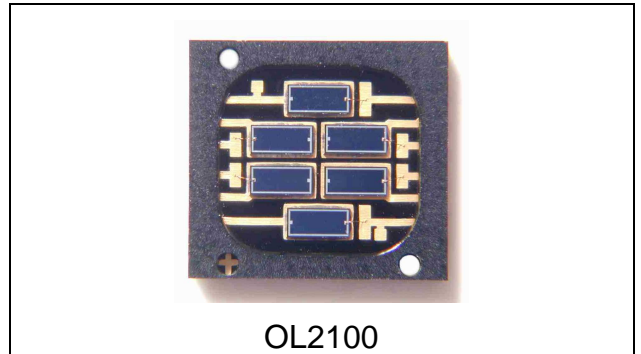
6 Chip PIN Photodiode Array for high temperature Encoder Applications

Features of this photodiode array:

- High operating temperature up to 125°C
- Low dark current
- Low capacitance
- High switching speed
- Good uniformity
- Photoconductive or photovoltaic use

Applications :

- Optical encoders, linear or rotary

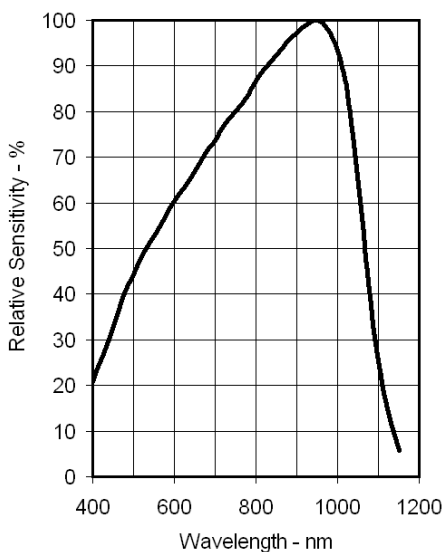


OL2100

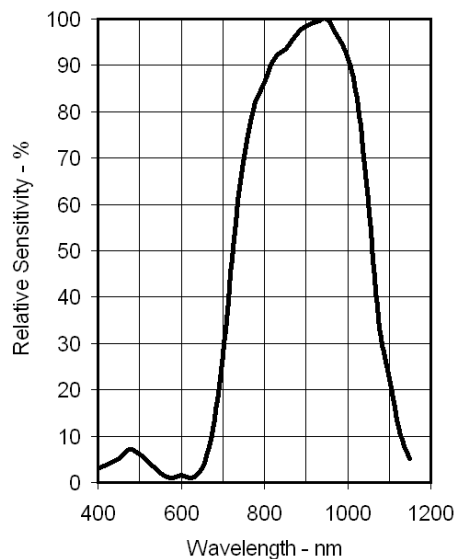
Compatible to KOM2100 or OPR2100

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating and storage temperature OL2100	T_{op}, T_{stg}	-55		+125	°C
Reverse breakdown voltage	V_R	50			V
Solder temperature (30sec.)	T_{sol}			235	°C
Spectral sensitivity (no filter)	S_λ	0.53	0.6		A/W
Spectral range ($S > 20\%$ of S_{max}) OL2100	λ	400		1100	nm
Wavelength of max. sensitivity	$\lambda_{S,max}$		950		nm
Active area of each PD chip	A		2.5		mm ²
Dimension of active area	L x W		2.5 x 1		mm ²
Forward voltage ($I_F = 10$ mA, $E = 0$)	V_F		680		mV
Reverse dark current ($V_R = 5$ V, $T = 20^\circ\text{C}$)	I_R		150	5000	pA
Reverse dark current ($V_R = 5$ V, $T = 125^\circ\text{C}$)	I_R		1.1		µA
Rise and fall time ($R_L = 50 \Omega$, $V_R = 20$ V, $\lambda = 857$ nm, $I_p = 800$ µA)	t_r, t_f		5	10	ns
Capacity ($V_R = 20$ V, $f = 1$ MHz, $E = 0$)	C_0		11	15	pF
Noise equivalent power ($T = 25^\circ\text{C}$, $V_R = 5$ V, $\lambda = 950$ nm)	NEP		1.5×10^{-14}		W/√Hz

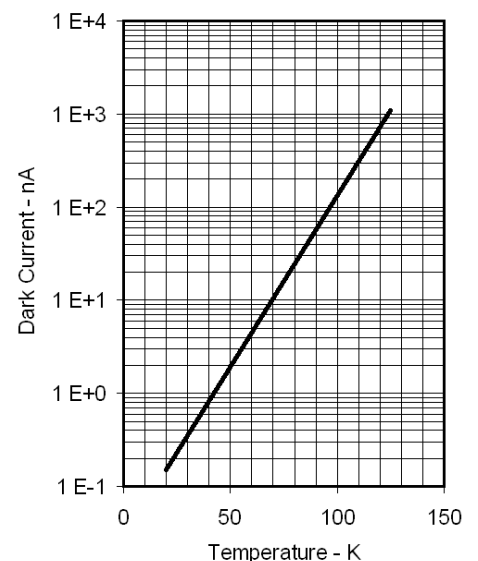
SPECTRAL SENSITIVITY OL2100



SPECTRAL SENSITIVITY OL2100-DF



DARK CURRENT OL2100, OL2100-DF



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