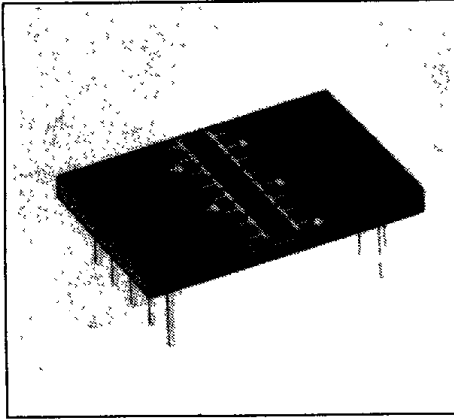


SIEMENS

KOM 0622045

**8-CHIP SILICON PHOTODIODE ARRAY
VERY LOW DARK CURRENT**

F-41-55

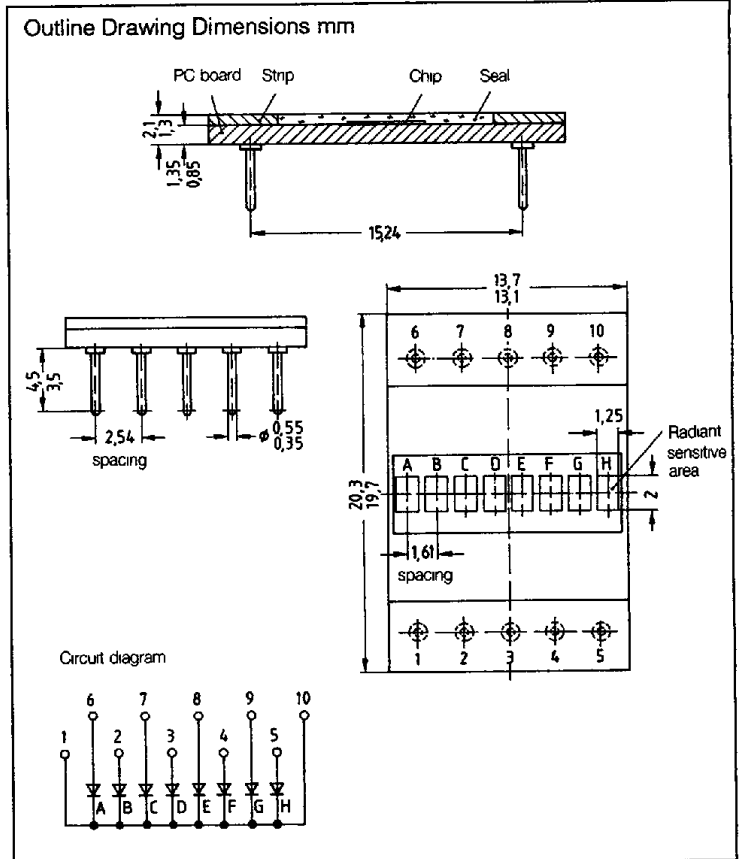


DESCRIPTION

The KOM 0622045 is an 8-chip photodiode linear array fabricated in planar technology with low reverse current. The N-Si material used results in a positive front and negative back contact. These photodetectors are suitable for diode operation (with reverse voltage) as well as for element operation.

The package consists of a PC board with pin connectors, cover frame with clear epoxy seal, 2.54 mm (1/10") lead spacing. See drawing for cathode marking.

The KOM 0622045 can be used on general-purpose PC board for scanning arrays.



Characteristics (Single Segment)

($T_A=25^\circ\text{C}$, $E_v=1000 \text{ lx}$, standard light A, $T=2856 \text{ K}$)

Parameter	Symbol	Value	Unit
Wavelength of Maximum Spectral Sensitivity	λ_s	850	nm
Spectral Sensitivity ($S=10\%$ of S_{max})	λ	400 - 1050	nm
Radiant Sensitive Area (8 elements)	A	1.25 x 2	mm
Half Angle	ϕ	± 60	Deg
Dark Current ($V_R=5 \text{ V}$)	I_n	5 (≤ 50)	pA
Maximum Deviation of the Spectral Sensitivity of the Systems from the Average Value	Δ_s	± 5	%
Open-Circuit Voltage	V_o	425 (≥ 300)	mV
Photocurrent ($V_a=5 \text{ V}$)	I_p	17 (≥ 12)	μA
Forward Voltage ($I_f=10 \text{ mA}$)	V_f	0.7 (≤ 0.8)	V
Reverse Voltage ($I_n=5 \mu\text{A}$)	V_R	>20	V
Capacitance ($V_R=0 \text{ V}$) (chip)	C_o	235	pF