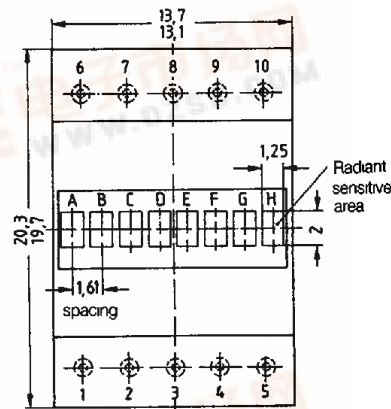
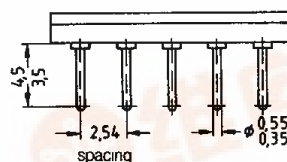
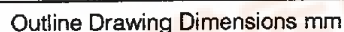
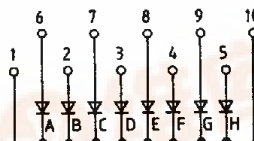


8-CHIP SILICON PHOTODIODE ARRAY VERY LOW DARK CURRENT

T-41-55



Circuit diagram



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 (1/16") 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	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 × 2 mm
Half Angle	Φ	± 60 Deg
Dark Current ($V_R=5$ V)	I_R	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 ($V_R=5$ V)	I_p	17 (≥12) μ A
Forward Voltage ($I_p=10$ mA)	V_f	0.7 (≤0.8) V
Reverse Voltage ($I_R=5$ μ A)	V_R	>20 V
Capacitance ($V_R=0$ V) (chip)	C_g	235 pF

