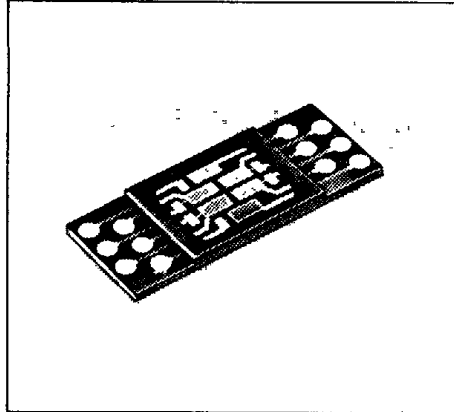


SIEMENS

KOM 0622033 A

**6-CHIP SILICON PHOTODIODE ARRAY
LOW DARK CURRENT**

T-41-55

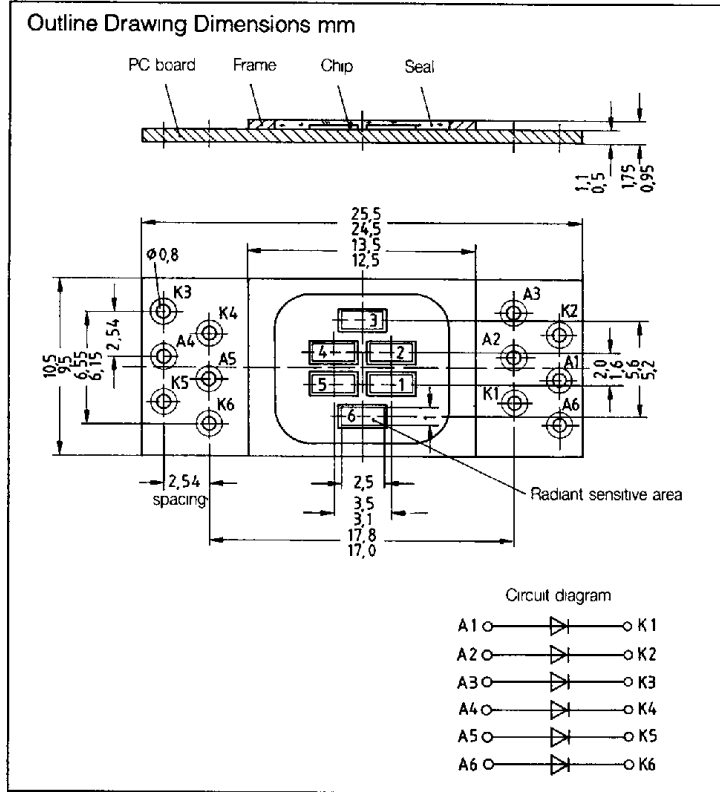


DESCRIPTION

The KOM 0622033 A is a 6 chip photodiode 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 solder lugs, cover frame with clear epoxy seal. See drawing for cathode marking.

The KOM 0622033 A can be used on general-purpose PC board for shaft encoders. The individually LED-out photodiodes permit external components to be connected (series, parallel, antiparallel).



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 (6 elements)	A	1 x 2.5	mm
Half Angle	ϕ	± 60	Deg
Dark Current ($V_R=5 \text{ V}$)	I_R	1 (≤ 50)	nA
Maximum Deviation of the Spectral Sensitivity of the Systems from the Average Value	Δ_s	± 10	%
Open-Circuit Voltage	V_O	425 (≥ 300)	mV
Photocurrent ($V_R=5 \text{ V}$)	I_P	26.5 (≥ 15)	μA
Forward Voltage ($I_F=10 \text{ mA}$)	V_F	0.7 (≤ 0.8)	V
Reverse Voltage ($I_R=5 \mu\text{A}$)	V_R	>20	V
Capacitance ($V_A=0 \text{ V}$) (chip)	C_0	150	pF

Photodiodes