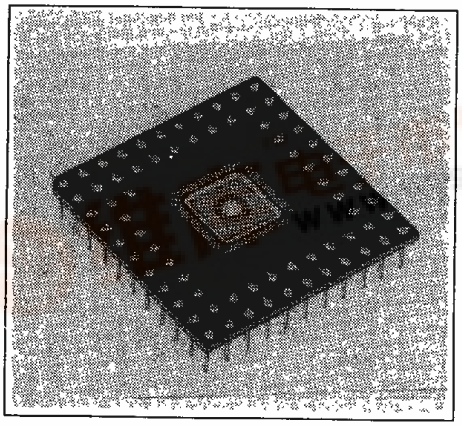
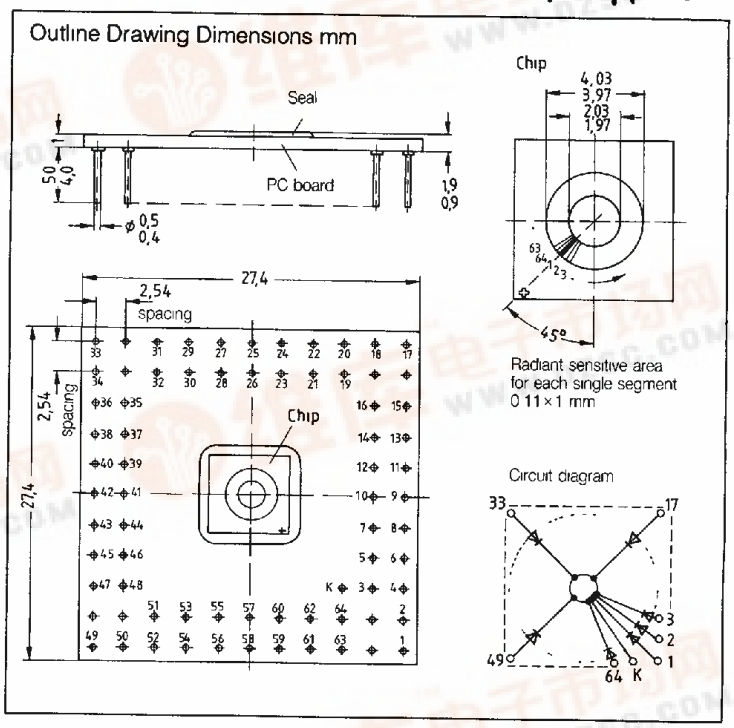
SIEMENS

KOM 0622059

64-ELEMENT SILICON CIRCULAR ARRAY
VERY LOW DARK CURRENT

T-41-45





DESCRIPTION

The KOM 0622059 is a 64-element circular 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 PIN-GRID array printed board with pin connectors[1] 2.54 mm (1/10") lead spacing, with clear epoxy seal. The cathode is Pin 65 and marked K (see outline drawing.)

Applications include circular coordinate recognition or adjustment control, angle increment detectors with a resolution of 5.625 degrees, surface control of ring-shaped areas, e.g. bottle necks.

Note:
1 Socket PIN GRID ARRAY SOCKET UX-1111-084-GH-Y-33

Characteristics (Single Segment)
(T_A=25°C, E_V=1000 lx, standard light A, T=2856 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 (64 elements)	A	0 12 × 1	mm
Resolution (single segment)		5 625	Deg
Half Angle	φ	± 60	Deg
Dark Current (V_R=5 V)	I_R	15 (≤150)	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	2 5 (≥1 8)	µA
Forward Voltage (I_F=10 mA)	V_F	0 9 (≤1)	V
Reverse Voltage (I_R=5 µA)	V_R	18 (≥10)	V
Capacitance			
(V_R=0 V)	C_O	23	pF
(V_R=5 V)	C_S	14	pF

Photodiodes