1. Scope :

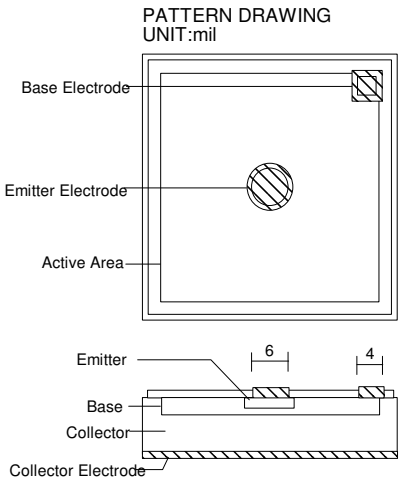
This specification applies to NPN silicon phototransistor chips,
Device No. ST-2124.

2. Structure :

2-1. Planar type.
2-2. Electrodes :
N (Collector) side : Gold alloy.
P (Base) side : Aluminum alloy.
N (Emitter) side : Aluminum alloy.

3. Size :

3-1. Chip size : 24 mils × 24 mils (0.610 mm × 0.610 mm).
3-2. Chip thickness : 7.0 ± 1.5 mils (0.178 ± 0.038 mm).
3-3. Active area : 17 mils × 17 mils (0.432 mm × 0.432 mm).
3-4. Pattern drawing : refer to the attached drawing.

4. Electrical characteristics (Ta = 25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C=100μA I_B=0	60			V
Emitter-collector Breakdown Voltage	BV_{ECO}	I_E=100μA I_B=0	5			V
Collector dark current	I_{CEO}	V_{CE}=20V H=0mw/cm^2			100	nA
Collector-emitter Saturation Voltage	$V_{CE(S)}$	Ic=2mA IB=100μA			0.3	V
Rise/fall time	t_R/t_F	V_{CE}=5V I_C=1mA R_L=1000Ω		15/15		μS
Current gain	h_{FE}	V_{CE}=5V I_C=2mA	200