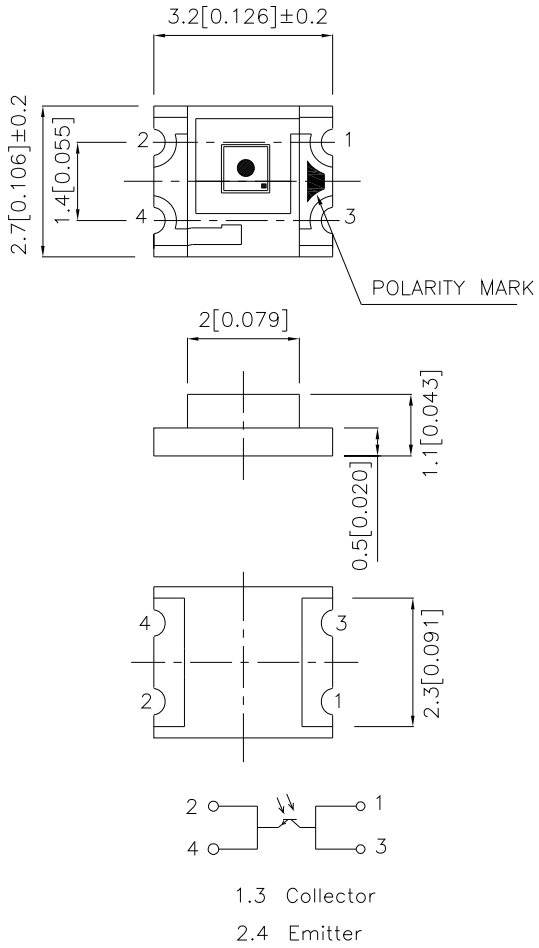
PRELIMINARY SPEC

Part Number: KPS-3227SP1C

Package Dimensions



UNIT : MM[INCH]
TOLERANCE :±0.1[0.004] UNLESS OTHERWISE NOTED.

Description

The KPS-3227SP1C is a NPN silicon phototransistor, It is a good effective solution to the power saving of display backlighting appliances.
and the device is sensitive to the visible spectrum.

Features

*Lead-free package.
*Component in accordance with RoHS.
*Adapted to human eye responsive.
*Wide angle of half sensitivity.

Applications

Detection of ambient light to control display backlighting in:
*mobile phones
*PDAs
*note books
*Video cameras

***Absolute Maximum Ratings(Ta=25°C unless otherwise specified)**

Parameter	Symbol	Rating	Unit
Collector Emitter Voltage	V_{CEO}	6	V
Emitter-Collector Voltage	V_{ECO}	1.5	V
Collector Current	I_C	20	mA
Total Power Dissipation	Ptot	100	mW
Operating Temperature	Topr	-40 to +85	ºC
Storage Temperature	Tsto	-40 to +85	ºC
Soldering Temperature	Tsd	260	ºC

***Electrical and Optical Characteristics (Ta=25°C,unless otherwise specified)**

Parameter	Symbol	Value		Unit	Conditions
		TYP.	Max.		
Collector Emitter Breakdown Voltage	Vceo	60	-	V	Iceo=100μA
Collector Emitter Breakdown Voltage	Veco	4	-	V	Ieco=100μA
Collector dark current	I_D	10	-	nA	V_{CE}=5V Lux=0
Angle of half sensitivity	2θ1/2	120	-	°	-
Collector light Current	I_{LIG1}	20	-	μA	Ev=20 Lux[1]
	I_{LIG2}	100	-	μA	Ev=100 Lux[1]
Wavelength of peak sensitivity	λP	580	-	nm	-
Collector Emitter Saturation Voltage	V_{CE} sat	0.4	-	V	I_C=10 mA, I_B=1mA

Note:
1.Illuminance by CIE standard light source (incandescet lamp).

Fig.1 Collector light Current vs. illuminance

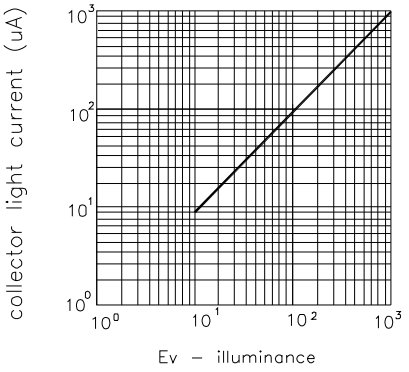


Fig.2 Relative Spectral Responsivity vs. Wavelength

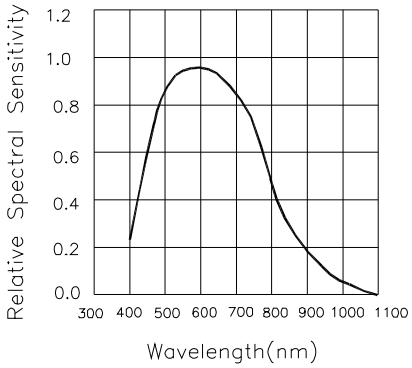


Fig.3 Relative radiant sensitivity vs. Angular displacement