



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Phototransistor, surface mount type

RPM-075PT

Quite new phototransistor which peak sensitivity is designed as same level as human eye. Best sensor to detect illuminance. (Peak sensitivity is 600nm.) Small and light weight package which can be used for reflow soldering and Pd free soldering.

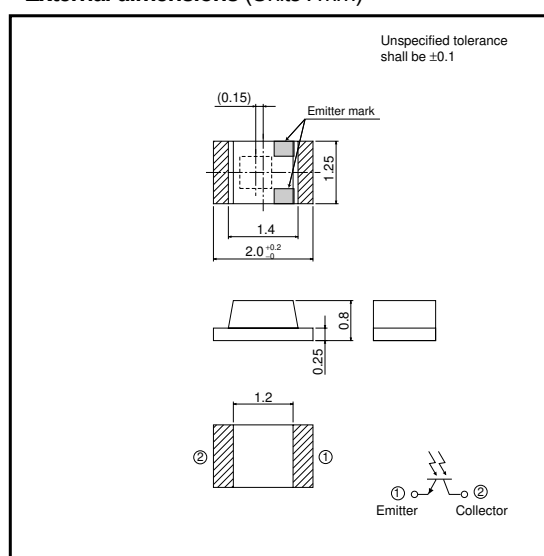
●Application

Control of lighting cellular phones, LCD displays, etc.
Control of strobe. (DSC, camcorder, etc.)

●Features

- 1) Best sensor to detect illuminance.
(Peak sensitivity is 600nm.)
- 2) Small (2125) and light weight package (3mg) which can be used for reflow soldering and Pd free soldering.
- 3) Linear against wide range of illuminance from a few Lx to 10000Lx over.
- 4) Use Si good for an environ. ment. (not CdS)

●External dimensions (Units : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-emitter voltage	V_{CE0}	20	V
Emitter-collector voltage	V_{ECO}	5	V
Collector current	I_C	10	mA
Collector power dissipation	P_C	50	mW
Operating temperature	T_{opr}	-30~+85	°C
Storage temperature	T_{stg}	-40~+100	°C

●Electrical and optical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Light current	I_C	0.25	0.4	0.6	mA	$V_{CE}=5V$, $E=500Lx$
Dark current	I_{CEO}	-	-	0.5	μA	$V_{CE}=10V$ (Black box)
Peak sensitivity wavelength	λ_P	-	600	-	nm	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.4	V	$I_C=0.1mA$, $E=500Lx$
Half-angle	$\theta_{1/2}$	-	± 60	-	deg	-
Response time	$tr-tf$	-	10	-	μs	$V_{CC}=5V$, $I_C=1mA$, $R_L=100\Omega$

Sensors

●Electrical and optical characteristic curves

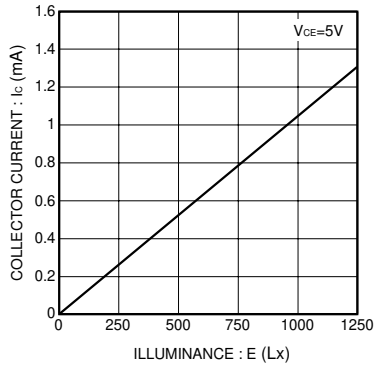


Fig.1 Collector current-Illuminance

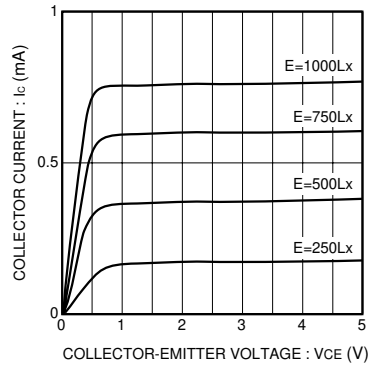


Fig.2 Output characteristics

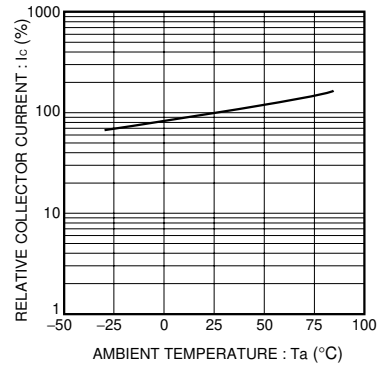


Fig.3 Relative output-Ambient temperature

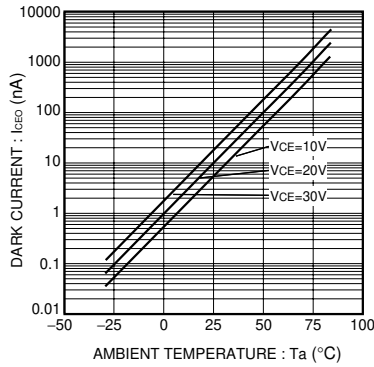


Fig.4 Dark current-Ambient temperature

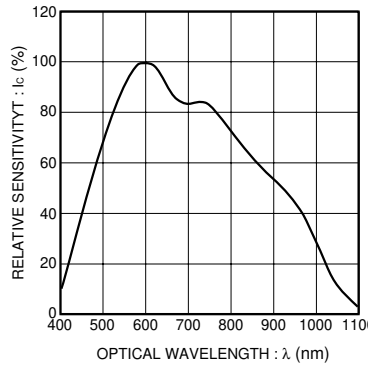


Fig.7 Spectral sensitivity characteristics

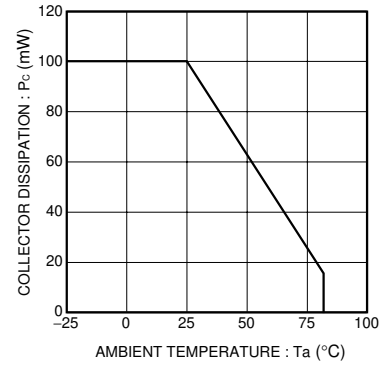


Fig.6 Collector dissipation-Ambient temperature

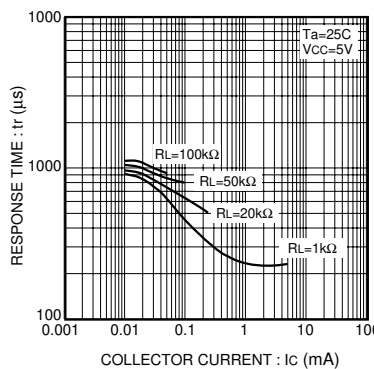


Fig.7 Response time-Collector current

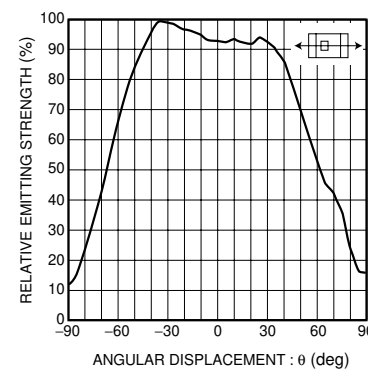


Fig.8 Directional pattern

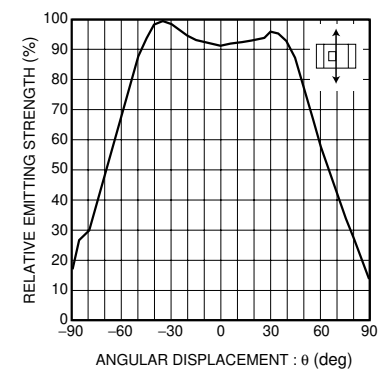


Fig.9 Directional pattern