



深圳市晶创和立科技有限公司

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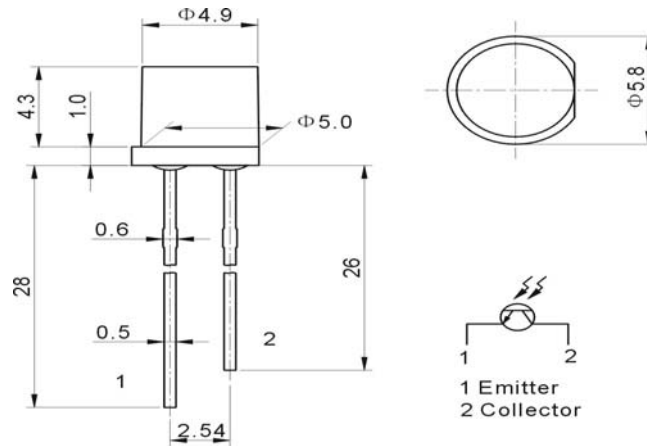
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Room 9CF013, Temple security building, Niulanqian Minzhi street, Longhua district Shenzhen P. R. C

Part No.: (HL504HP) PT523C-EE1

UNIT: mm



NOTE: TOLERANCE $\pm 0.5\text{mm}$

Parameter	Symbol	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Collector dark current	I_{CEO}			100	nA	$V_{CE}=20V$ $E_e=0\text{mW/cm}^2$
On State Collector Current	$I_{C(on)}$	0.7	2.0		mA	$E_e=1\text{mW/cm}^2$ $V_{CE}=5V$
Collector-Emitter Breakdown Voltage	V_{CEO}	30		100	V	$I_C=100\mu A$ $E_e=0\text{mW/cm}^2$
Emitter-Collector Breakdown Voltage	V_{ECO}	6.5				
C-E Saturation Voltage	$V_{CE(Sat)}$			0.2	V	$I_C=2\text{mA}$ $I_B=100\mu A$
Current gain	h_{FE}	1000		1800	μA	$V_{CE}=5V$ $I_c=2\text{mA}$
Wavelength of Peak Sensitivity	λ_p		940		nm	
Range of Spectral Bandwidth	$\lambda_{0.5}$	400		1200	nm	
Rise Time(10%to90%)	t_r		15		uS	$V_{CE}=5V$ $I_c=1\text{mA}$ $R_L=100\text{ohms}$
Fail Time(90%to10%)	t_f		15			
Half sensitivity angle	$\Delta \lambda$		± 30		deg	
C-Power dissipation	P_C		165		mW	
Collector-base Capacitance	C_{CB}	5.4	6.4	7.4	PF	$f=1\text{MHZ}$ $V_{CB}=3V$



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Fig.1 Collector Power Dissipation vs. Ambient Temperature

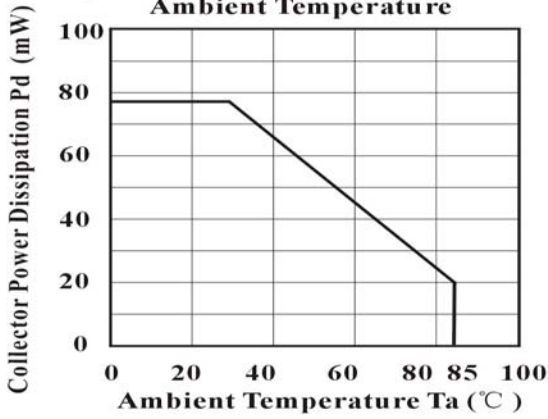


Fig.2 Spectral Sensitivity

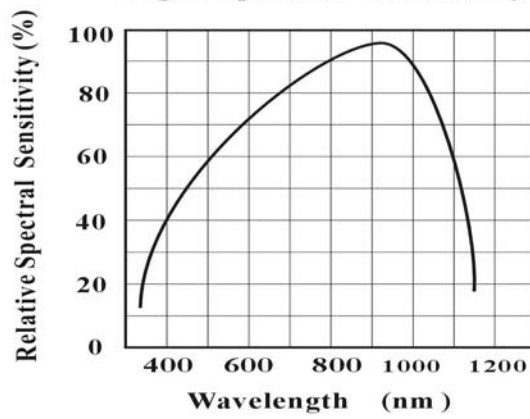


Fig.3 Normalized Collector Current Vs. Ambient Temperature

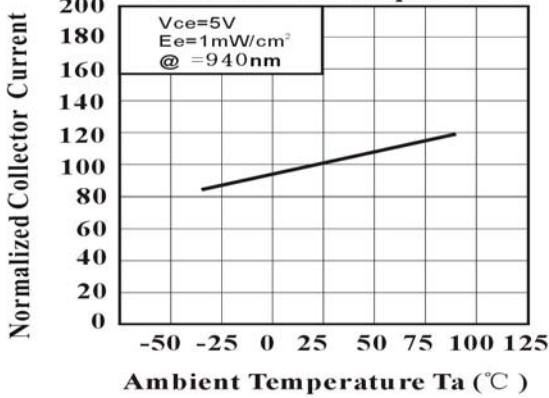


Fig.4 Relative Collector Current Vs. Irradiance

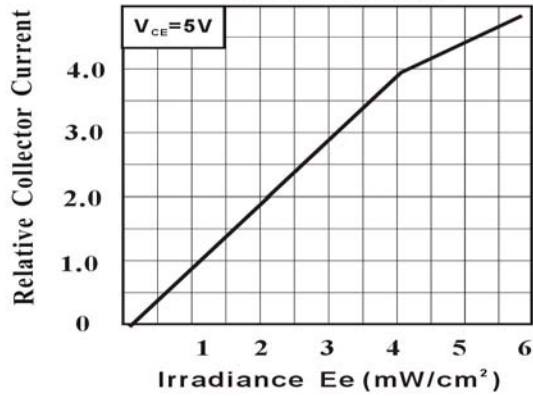


Fig.5 Collector Dark Current Vs. Ambient Temperature

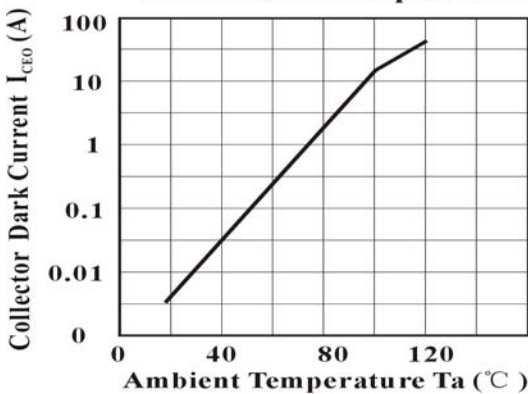
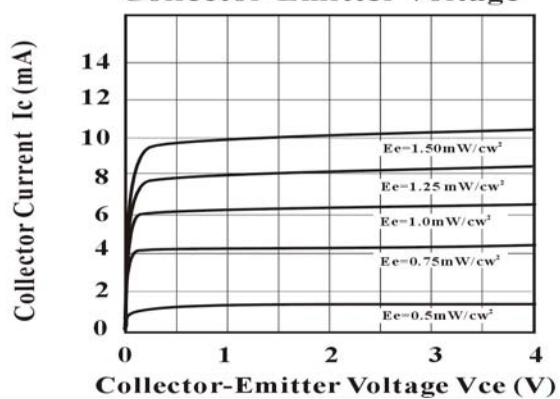


Fig.6 Collector Current vs. Collector-Emitter Voltage



- ABSOLUTE MAXIMUM RATINGS: ($T_a=25^\circ\text{C}$)
- OPERATING TEMPERATURE: -25°C TO $+85^\circ\text{C}$
- LEAD SOLDERING TEMPERATURE: 260°C FOR 5 SECONDS