YETDA INDUSTRY LTD.

PHOTOTRANSISTOR
P300M4G

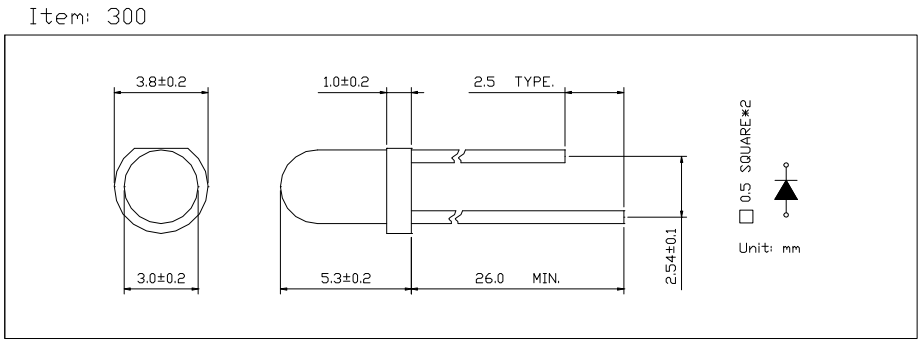
Absolute Maximum Ratings:

Parameter	Symbol	Maximum Rating	Unit
Operating Temperature Range	Topr	－20℃ to ＋75℃	℃
Storage Temperature Range	Tstg	－40℃ to ＋100℃	℃
Power dissipation	Pd	100	mW
Lead Soldering Temperature		260℃ for 3 seconds 1.6mm(0.063 inch) from body	

Electro-Optical Characteristics （Ta = 25℃）

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	Ic= 100 μA	BV_{CEO}	30		100	V
Emitter-collector breakdown voltage	IE= 100 μA	BV_{ECO}	6.5			V
Collector dark current	Vce= 20 V	I_{CEO}			100	nA
Light current	Vce= 10 V Ee= 0.5 mW/cm² λp= 940 nm	IL	2.0	4.0		mA
Collector-Emitter saturation voltage	Ic= 2 mA IB= 100 μA	Vce(sat)			0.2	V
Radiant sensitivity area		A		0.186		mm²
Peak sensitive wavelength		λp		850		nm
Rise/Fall time	Vce=5V,Ic=1mA RL= 1000 Ω	tr/tf		15/15		us
Current gain	Vce =5V Ic= 2 mA	h_{FE}	800	~	1400	
Viewing angle		2θ 1/2		20		deg

Package



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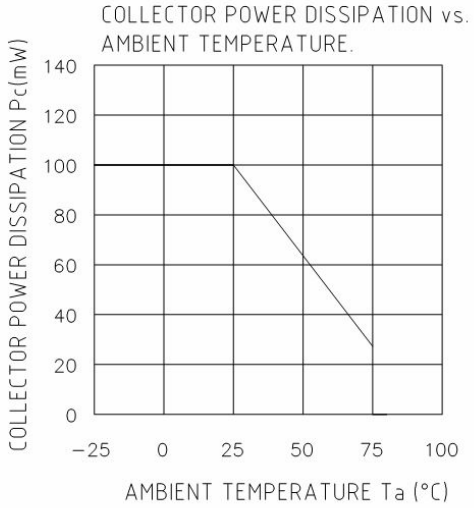
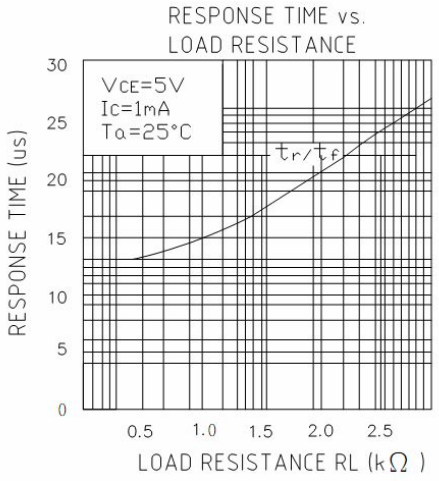
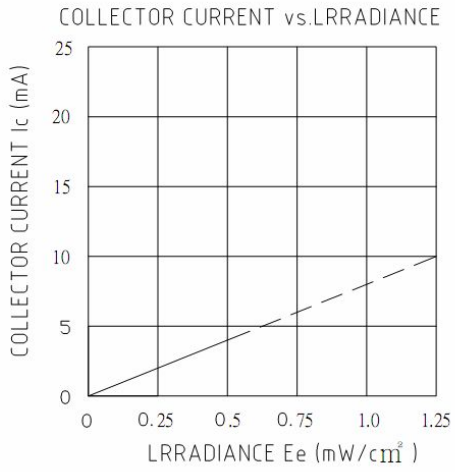
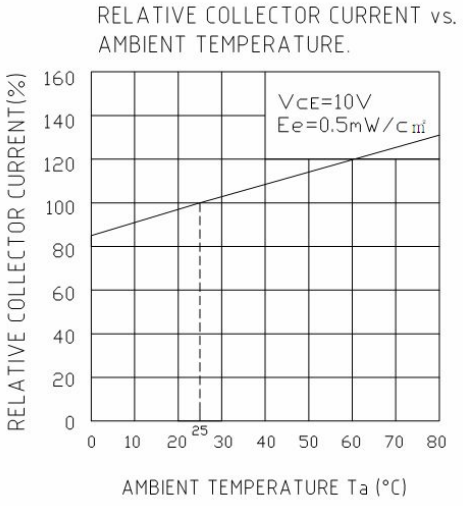
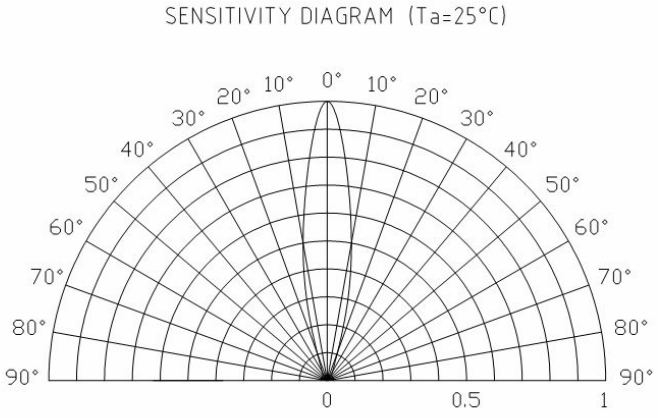
Typical Electro-Optical Characteristics Curve:

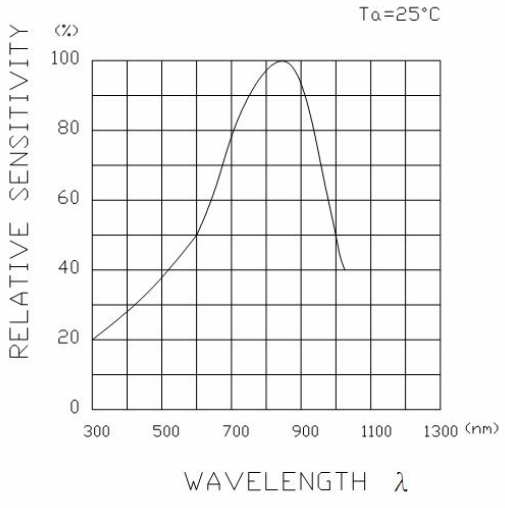










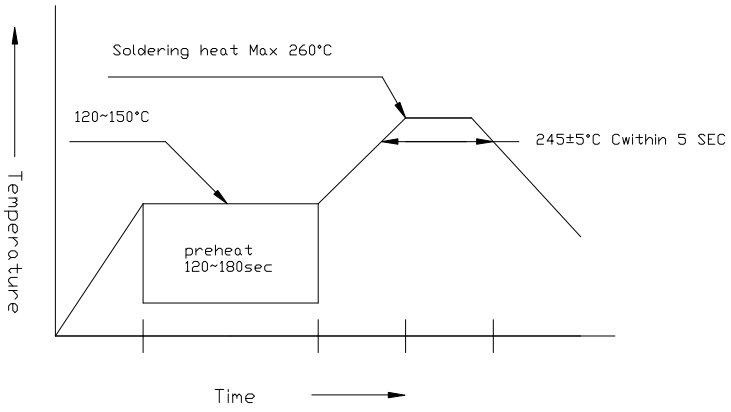


and is to be observed

1. DIP soldering (Wave Soldering):

Preheating:120℃~150℃ within 5 sec.260℃(Max)

Gradual Cooling (Avoid quenching)

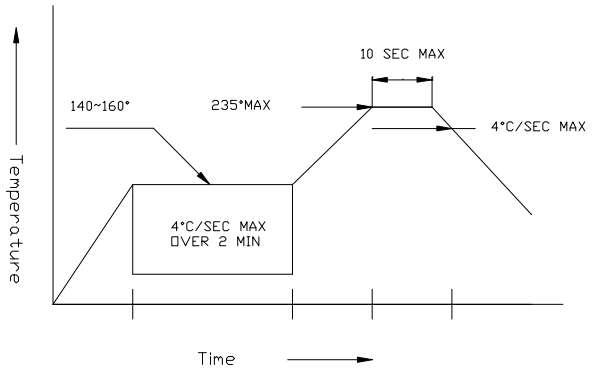


2. Reflow Soldering

Preheating:140℃~160℃±5℃,within 2 minutes.

Operation heating:235℃(Max)within 10 seconds(Max)

Gradual Cooling (Avoid quenching)



• **Handling:**

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook