



YETDA INDUSTRY LTD.

**5mm Phototransistor LED
P500M5D**

5mm with Phototransistor Dice ◦

Encapsulated with water color Package ◦

The epoxy package itself is an IR filter, spectrally matched to GaAs IR emitters with $\lambda_p \geq 700\text{nm}$ ◦

Long Leads ◦

Absolute Maximum Ratings:

Parameter	Maximum Rating	Unit
Peak Forward Current	120	mA
Continuous Forward Current	30	mA
Operating Temperature Range	-20°C to +75°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature	260°C for 3 seconds 1.6mm(0.063 inch) from body	

Electro-Optical Characteristics (Ta = 25°C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Dark current	VR=10V Ee=0mW/c m ²	ICEO			100	nA
C-E Saturation Voltage	IC=0.5Ma Ee=10mW/c m ²	VCE(Sat)			0.8	V
Light Current	VCE=5V Ee=1mW/c m ²	Ic(on)	200		1400	uA
Rise Time(10%to90%)	Vce=5V Ic=1mA			10		uS
Fail Time(90%to10%)	RL=100ohms			10		
Wavelength of Peak Sensitivity		λ_p		940		nm
Range of Spectral Bandwidth		λ 0.5	840-1200			nm
Collector-Emitter Down Voltage		VCEO	30			V
Emitter-Collector Down Voltage		VCEO	5			
Collector Current		IC	20			mA
C-Power dissipation		PC	100			mW

Package

Item: 500

