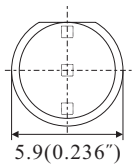
TOYO LED ELECTRONICS LIMITED

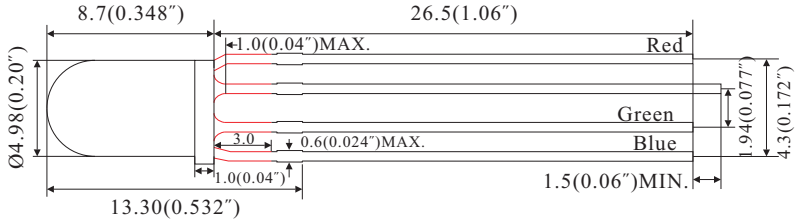
http://www.toyo-led.com e-mail: sales@toyo-led.com

PACKAGE DIMENSION

TY-50RGB1

Pb-free





Selection Guide

Part No.	Dice		Lens Color	(If=20mA)	Viewing Angle
	Raw Material	Emitted Color		TYP. (Mcd)	
TY-50RGB1	AlGaInP	Ultra Bright Red	Water Clear	1500	20°
	InGaN	Pure Green		6000	
	InGaN	Blue		1500	

Absolute Maximum Ratings at T_A=25°C

Parameter	Symbol	Maximum Rating			Units
		R	G	B	
Power Dissipation	PD	72	120	120	mW
Peak Forward Current[4]	IFP	150	100	100	mA
Forward Current	IF	30	30	30	mA
Reverse Voltage	V_R	5	5	5	V
Capacitance	C	25	20	100	pF
Operating/Storage Temperature	T_A/T_{STG}	-40°C to +85°C			
Lead Solder Temperature	T_{SOL}	260°C for 5 Seconds			

Electrical / Optical Characteristics at T_A=25°C

Parameter	Symbol	TYP.			MAX.			Units	Test Condition
		R	G	B	UR	PG	PG		
Peak Wavelength	λpeak	628	521	472	633	526	476	nm	I_F=20mA
Dominant Wavelength	λD	625	519	465	630	523	474	nm	I_F=20mA
Spectral Line Half-width	Δλ	18	20	35	-	-	-	nm	I_F=20mA
Forward Voltage	V_F	1.80	3.00	3.00	2.50	3.60	3.60	V	I_F=20mA
Reverse Current	I_R	-	-	-	10			uA	V_R=5V

Notes:
1. All dimension are in millimeter (inches);
2. Tolerance is ±0.25mm(0.01″) unless otherwise specified;
3. Not recommend to solder within 3mm from the resin;
4. 1/10 Duty Cycle, 0.1ms Pulse Width.