



Product Guide

1204W Series Bi-Color Standard Type SMT LED



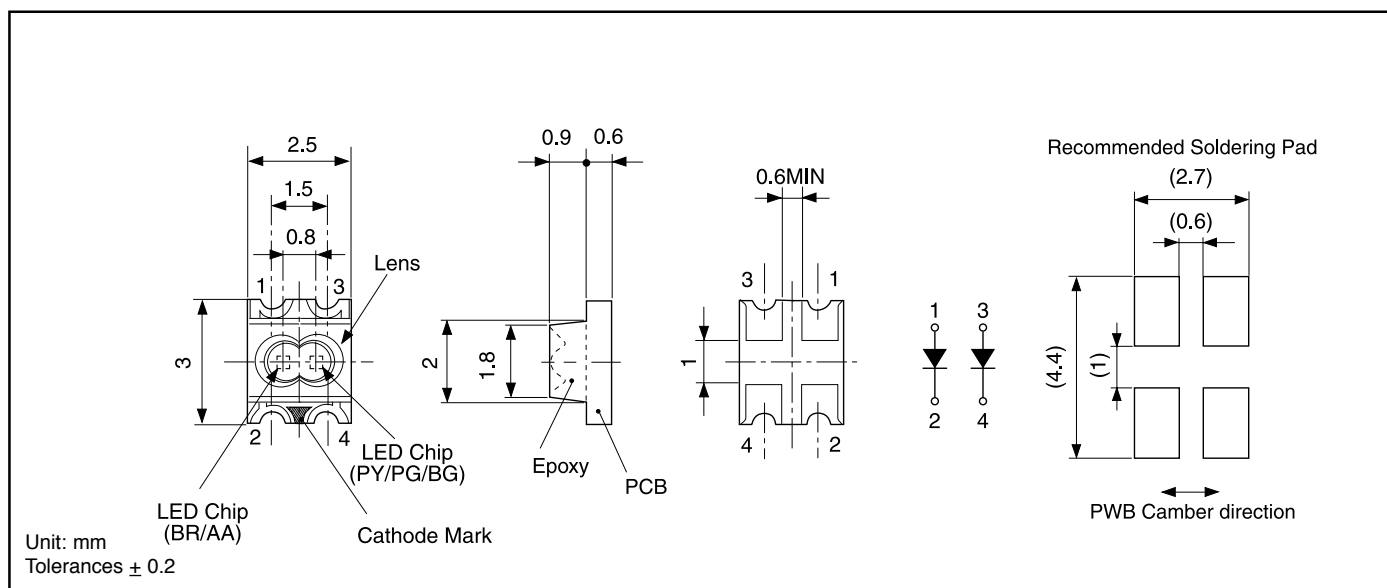
Features

- Bicolor package with 3225 (1210) footprint
- Inner lens design provides focused light beam
- Excellent for indicator backlighting and light pipe applications

Applications

- Mobile devices
- Computer / Telecommunications
- Industrial / Medical Instrumentation
- Audio visual equipment

Outline Dimensions



Electro-Optical Characteristics

(Ta=25°C)

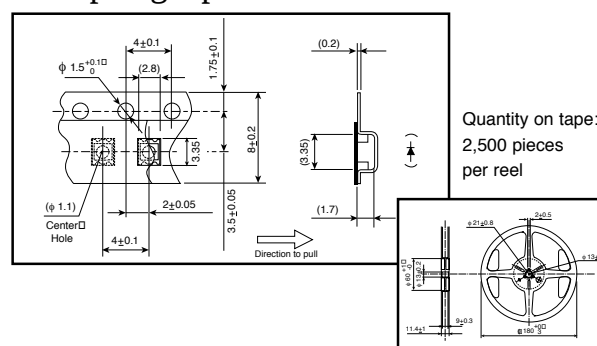
Part No.	Material	Emitted Color	Lens Color	Luminous Intensity I_V			Wavelength Spectral Line Half Width				Forward Voltage V_F			Reverse Current I_R		Viewing Angle (2θ 1/2)
				MIN.	TYP.	I_F	Peak λ_p TYP.	Dominant λ_d TYP.	$\Delta\lambda$ TYP.	I_F	TYP.	MAX.	I_F	MAX.	V_R	
BRPY1204W	GaAlAs	Red (BR)	Water Clear	6.0	33.6	20	660	647	30	20	1.7	2.0	20	100	4	100°
	GaP	Yellow-Green (PY)		6.0	24	20	570	572	30	20	2.1	2.5	20	100	4	80°
BRPG1204W	GaAlAs	Red (BR)		6.0	33.6	20	660	647	30	20	1.7	2.0	20	100	4	100°
	GaP	Green (PG)		3.0	12	20	560	567	30	20	2.1	2.5	20	100	4	80°
BRBG1204W	GaAlAs	Red (BR)		6.0	33.6	20	660	647	30	20	2.2	2.0	20	100	4	100°
	GaP	Pure Green (BG)		0.9	4.8	20	555	558	30	20	2.1	2.5	20	100	4	80°
AAPY1204W	GaAsP	Orange (AA)		5.0	9	20	605	606	30	20	2.2	2.5	20	100	4	80°
	GaP	Yellow-Green (PY)		6.0	12	20	570	572	30	20	2.1	2.5	20	100	4	80°
Units				mcd		mA	nm			mA	V		mA	μA	V	Deg.

(Ta=25°C)

Item		Red	Yellow-Green	Red	Green	Red	Pure Green	Orange	Yellow-Green	Units	
	Symbol	BRPY		BRPG		BRBG		AAPY			
Power Dissipation	Pd	75		75		75		75		mW	
Forward Current	I _F	30		30		30		30		mA	
Peak Forward Current	I _{FM}	70		70		70		70		mA	
Reverse Voltage	V _R	4		4		4		4		V	
Operating Temperature	Topr	-30 to +85									°C
Storage Temperature	Tstg	-40 to +100									°C
Derating*	ΔI _F	0.42 (DC) 0.93 (Pulse)									mA/°C

* Ta=25°C, I_{FM} applies for the pulse width ≤ 1msec. and duty cycle ≤ 1/20.

■ Taping Specifications

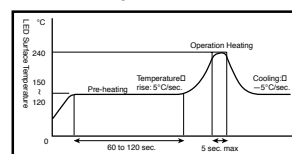


■ Precautions

Please follow these handling precautions to prevent damage to the chip and ensure its reliability.

1. Soldering conditions:

- **Soldering iron:** Temperature at tip of iron: 280°C max. (30W max.)
Soldering time: 3 sec. max.
- **Dip soldering:** Preheating: 120 ~ 150°C max. (resin surface temp.)
60 ~ 120 sec. max. Bath temperature: 260°C max. Dipping Time: 5 sec. max.
- **Reflow Soldering:**

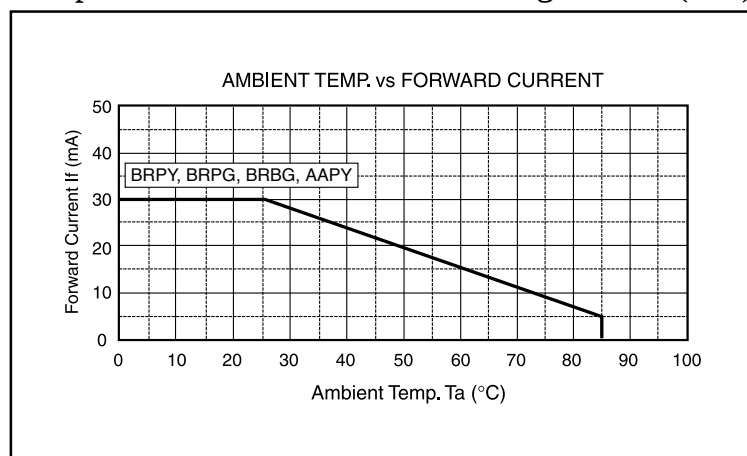


2. Cleaning:

- If cleaning is required, use the following solutions for less than 1 minute, at less than 40°C.
- Appropriate chemicals: Ethyl alcohol and isopropyl alcohol.
- Effect of ultrasonic cleaning on the LED resin body differs depending on such factors as the oscillator output, size of PCB and LED mounting method. The use of ultrasonic cleaning should be enforced at proper output after confirming there is no problem.

Product specifications subject to change without notice. PG1204W-0301

■ Operation Current Derating Chart (DC)



■ Spatial Distribution

