

# CHIP TYPE SURFACE MOUNT LED

Chip type LEDs were developed for low cost low profile, high density design applications. A wide variety of package styles and colors are available to suit virtually any requirement.

## DESCRIPTION ON TYPE NO. BR 1 1 0 1 W - TR

Chip element	Shape	Number	Package	PCB material	Taping
BR	Chip	of chips	Color	W:Glass	(Standard)
PR	Type	1: 1 Chip	0: Colorless	Shape	
VR		2: 2 Chips	clear	1: Flat lens	
AA				2: Inner lens	
AY				Bi-color	
PY				1: Flat lens	
PG				2: Dome lens	
BG				4: 2 lens	

## CHARACTERISTICS BY COLOR

Ta=25°C


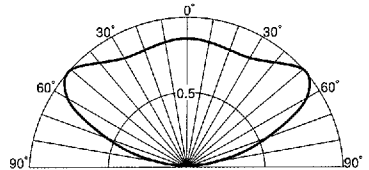

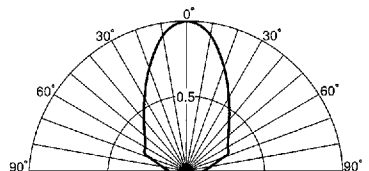

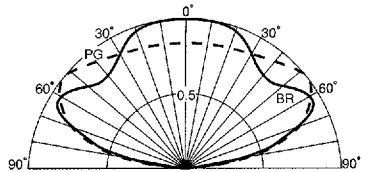


Type No.	Material Emitted Color	Absolute Maximum Ratings							Electro-Optical Characteristics								
		Power Dissipation	Forward Current	Peak Forward Current	Reverse Voltage	Operating Temperature	Storage Temperature	*1 Derating	Forward Voltage			Reverse Current		Wavelength			
		* Pd	* If	* Ifm	Vr	Topt	Tstg	ΔIf	TYP	MAX	If	MAX	Vr	MAX	μA	V	Peak λp TYP
BR	GaAlAs (Red)	60	30	70	4	-30~+85	-30~+90	0.42	1.7	2.0	20	100	4	660	30	20	
PR	GaP (Red)	75	30	70	4	-30~+85	-30~+90	0.42	2.1	2.5	10	100	4	700	100	10	
VR	GaAsP / GaP (Red)	75	30	70	4	-30~+85	-30~+90	0.42	2.0	2.5	20	100	4	630	30	20	
AA	GaAsP / GaP (Orange)	75	30	70	4	-30~+85	-30~+90	0.42	2.2	2.5	20	100	4	605	30	20	
AY	GaAsP / GaP (Yellow)	75	30	70	4	-30~+85	-30~+90	0.42	2.2	2.5	20	100	4	580	30	20	
PY	GaP (Yellow)	75	30	70	4	-30~+85	-30~+90	0.42	2.1	2.5	20	100	4	570	30	20	
PG	GaP (Green)	75	30	70	4	-30~+85	-30~+90	0.42	2.1	2.5	20	100	4	560	30	20	
BG	GaP (Pure Green)	75	30	70	4	-30~+85	-30~+90	0.42	2.1	2.5	20	100	4	555	30	20	
Units		mW	mA	mA	V	°C	°C	mA/°C	V			mA	μA	V	nm	mA	

● Ifm condition:  $t_w \leq 1$  msec, and duty cycle  $\leq 1/20$

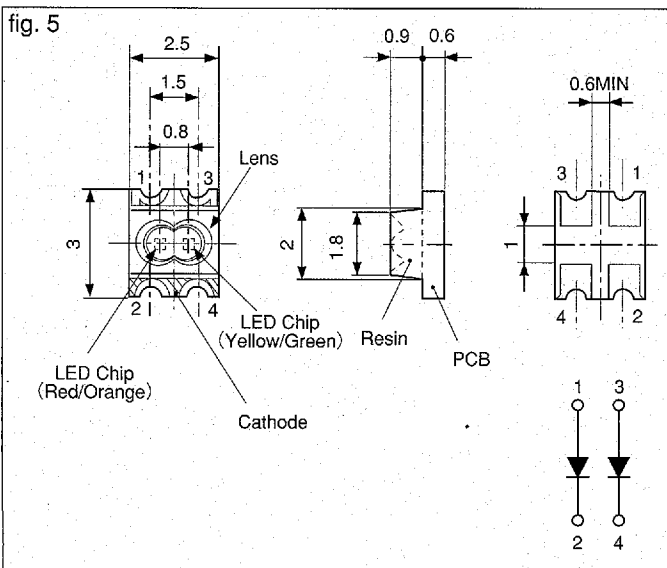
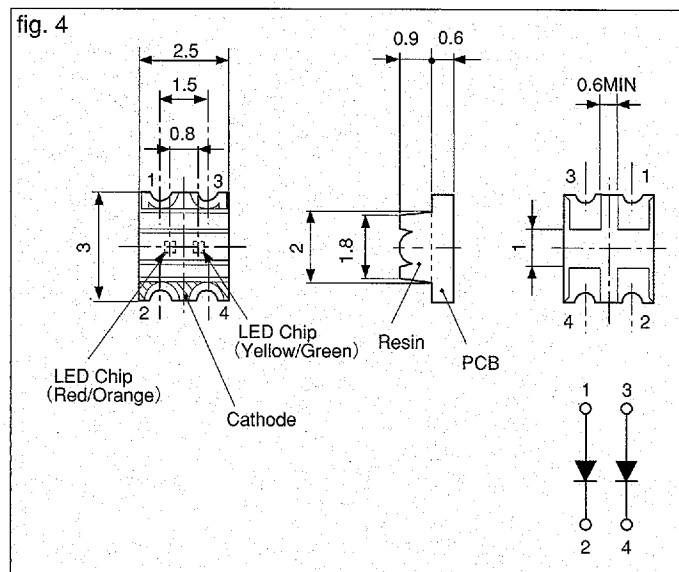
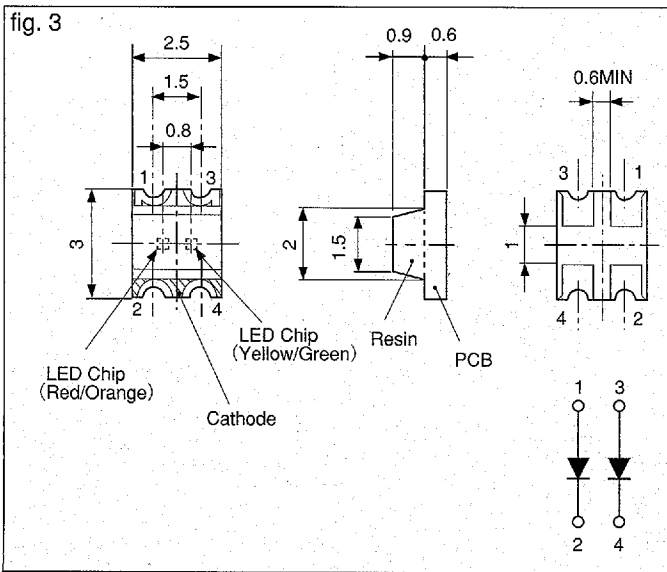
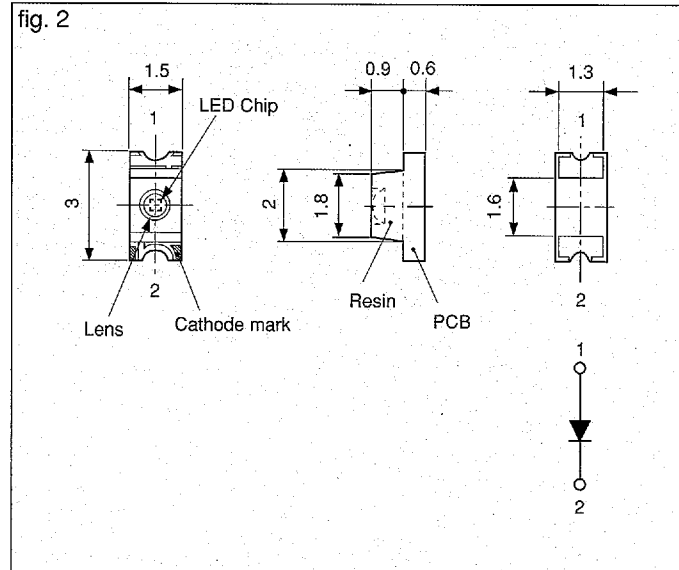
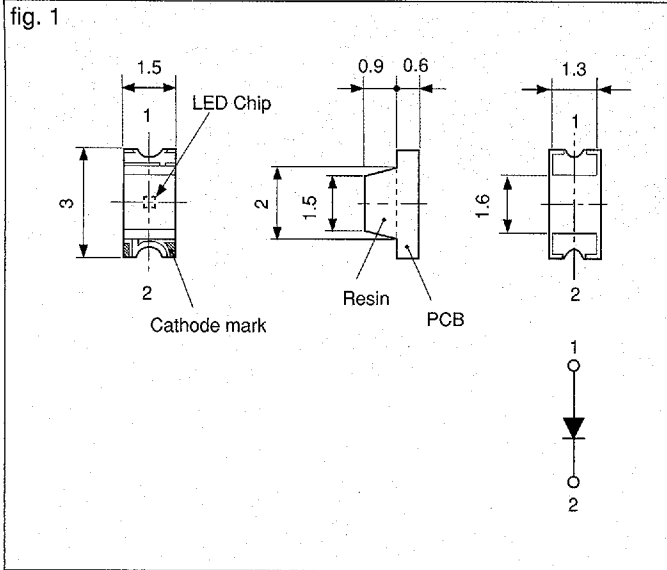
※2 Absolute maximum ratings required by the LED with 2 chips inside and driven simultaneously are: Pd=75mW, If=70mA

## CHARACTERISTICS BY SHAPE

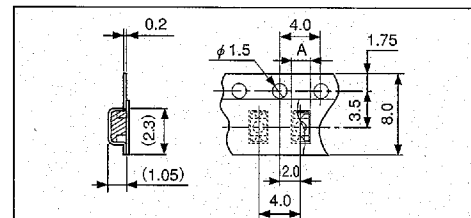
Ta=25°C

Lens Type	Shape	Type No.	Emitted Color	Lens	Peak Wave Length (nm)	Luminous Intensity (mcd)			Spatial Distribution (The typical distribution example of each shape is shown below.)	fig.
						MIN	TYP	If(mA)		
Flat lens type		BR1101W	Red	Water Clear	660	1.6	4.5	20		1
		PR1101W			700	0.4	0.7	10		
		VR1101W			630	0.9	2.5	20		
		AA1101W	Orange		605	1	3.6	20		
		AY1101W			580	2	3.2	20		
		PY1101W	Yellow		570	1.4	4	20		
		PG1101W			560	1.2	3	20		
		BG1101W	Pure Green		555	0.7	1.4	20		
Inner-lens type		BR1102W	Red	Water Clear	660	6	17	20		2
		PR1102W			700	0.8	1.5	10		
		VR1102W	630		3.5	6	20			
		AA1102W	Orange		605	5	9	20		
		AY1102W			580	3	6	20		
		PY1102W	Yellow		570	6	12	20		
		PG1102W			560	3	7.5	20		
		BG1102W	Pure Green		555	0.9	2.3	20		
Flat lens type		BRPY1201W	Red	Water Clear	660	1.6	4.5	20		3
		BRPG1201W	Yellow		570	1.4	4	20		
			Green		560	1.2	3	20		
		BRBG1201W	Red		660	1.6	4.5	20		
			Pure Green		555	0.7	1.4	20		
		AAPY1201W	Orange		605	1	3.6	20		
			Yellow		570	1.4	4	20		
		Dome lens type			BRPY1202W	Red	Water Clear	660		
BRPG1202W	Yellow			570	2.8	8		20		
	Green			560	2.4	6		20		
BRBG1202W	Red			660	3.2	9		20		
	Pure Green			555	0.8	1.8		20		
AAPY1202W	Orange			605	4	7.2		20		
	Yellow			570	2.8	8		20		
2 lens				BRPY1204W	Red	Water Clear		660	6	17
		BRPG1204W	Yellow	570	6		12	20		
			Green	560	3		7.5	20		
		BRBG1204W	Red	660	6		17	20		
			Pure Green	555	0.9		2.3	20		
		AAPY1204W	Orange	605	5		9	20		
			Yellow	570	6		12	20		

**▼PACKAGE DIMENSIONS** Unit : mm



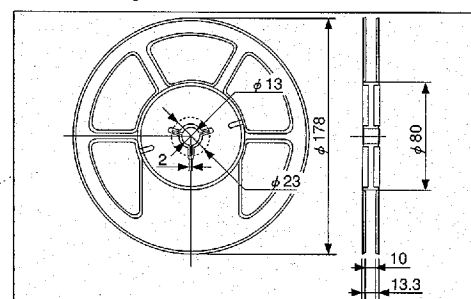
**▼Taping specification** Unit : mm



A Dimension  
(Tolerance : ±0.1)

1CHIP	1.8
2CHIPS	2.8

**▼Reel specification** Unit : mm



Quantity (Pcs./Reel)

1CHIP	2,500
2CHIPS	2,500