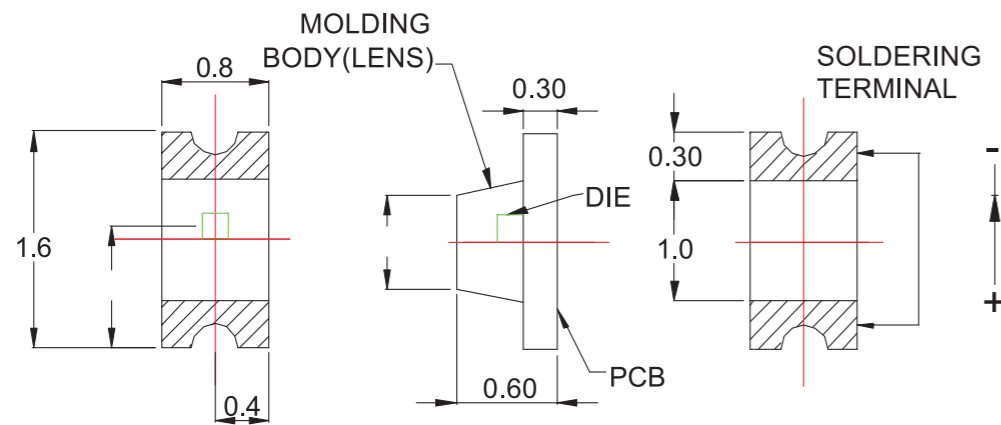


## BW-150 Series

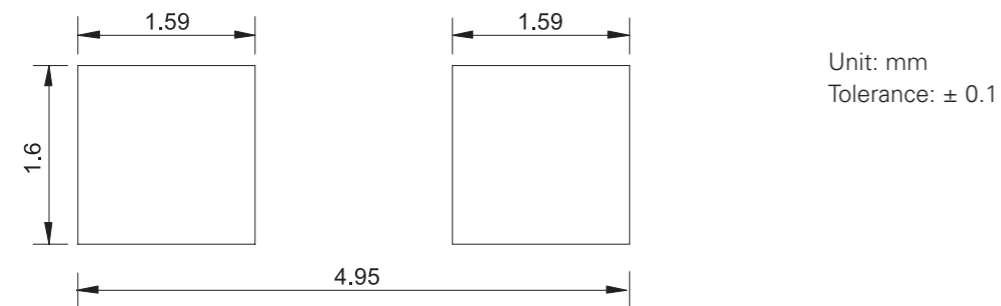
### Electro-Optical Characteristics

Code for Parts BW-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ(nm)			I <sub>V</sub> (mcd)	Internal Circuit
			Typ.	Max.	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	Typ	
BW-150URO	Red	AlGaInP	2.00	2.30	633	640	19	73	
BW-150USD	Red	AlGaInP	2.00	2.30	625	632	18	65	
BW-150UD	Amber	AlGaInP	2.00	2.30	605	610	17	79	
BW-150UY	Yellow	AlGaInP	2.00	2.30	591	592	15	72	
BW-150UYG	Green	AlGaInP	2.00	2.30	572	570	17	37	
BW-150GR	Green	InGaN	3.20	3.60	525	523	37	170	
BW-150WT	White	InGaN	3.30	3.60	(x,y)=(0.29,0.31)		-	200	
BW-150BL	Blue	InGaN	3.40	3.60	470	468	25	35	
BW-150CBS	Blue	GaN/ SiC	3.80	4.00	465	430	60	8	

### Package Dimension



### Suggest Soldering Pad Dimensions



### Absolute Maximum Rating (T<sub>d</sub>= 25°C)

Series	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
BW-150 Series	30	100	5	-30~+80	-40~+85

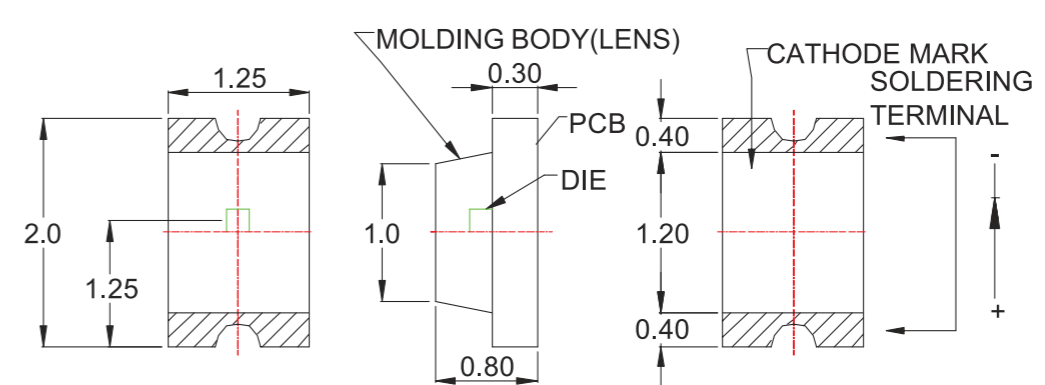
7 inch Anti-Static Reel  
3000 pcs / reel

## BW-171 Series

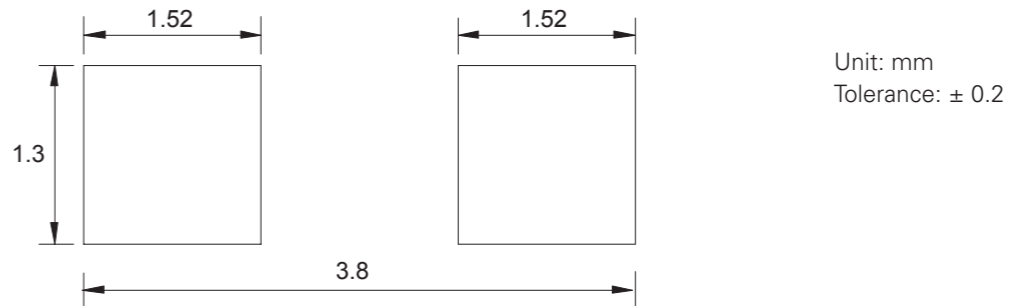
### Electro-Optical Characteristics

Code for Parts BW-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ(nm)			I <sub>V</sub> (mcd)	Internal Circuit
			Typ.	Max.	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	Typ	
BW-171URO	Red	AlGaInP	2.00	2.30	633	640	19	78	
BW-171USD	Red	AlGaInP	2.00	2.30	625	632	18	75	
BW-171UD	Amber	AlGaInP	2.00	2.30	605	610	17	81	
BW-171UY	Yellow	AlGaInP	2.00	2.30	591	592	15	76	
BW-171UYG	Green	AlGaInP	2.00	2.30	572	570	18	37	
BW-171GR	Green	InGaN	3.20	3.60	525	523	40	180	
BW-171WT	White	InGaN	3.30	3.60	(x,y)=(0.29,0.31)		-	210	
BW-171BL	Blue	InGaN	3.23	3.60	470	468	28	36	
BW-171CBS	Blue	GaN/ SiC	3.80	4.00	465	430	60	8	

### Package Dimension



### Suggest Soldering Pad Dimensions



### Absolute Maximum Rating (T<sub>d</sub>=25°C)

Series	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
BW-171 Series	30	100	5	-30~+80	-40~+85

\*Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1 msec width

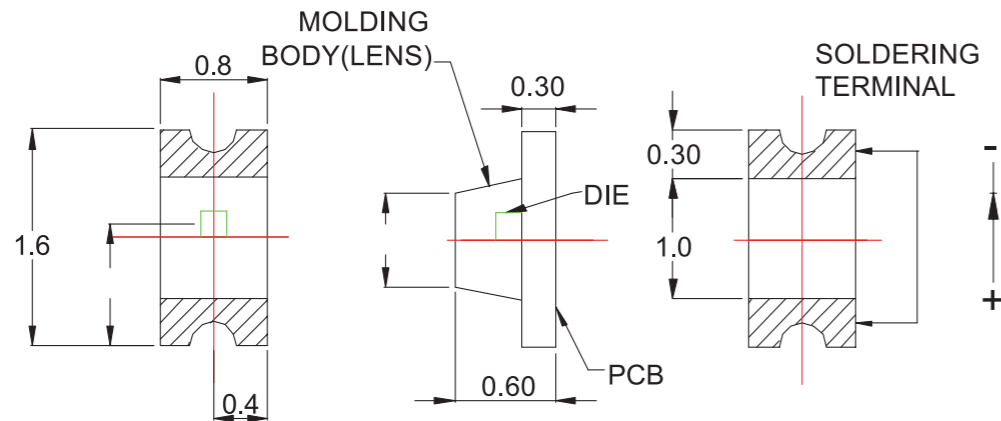
7 inch Anti-Static Reel  
4000 pcs / reel

## BW-191 Series

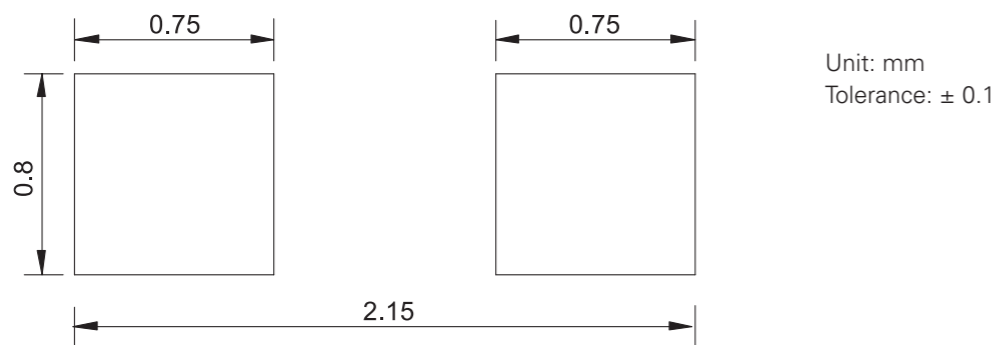
### Electro-Optical Characteristics

Code for Parts BW-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ(nm)			I <sub>V</sub> (mcd)	Internal Circuit
			Typ.	Max.	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	Typ.	
BW-191URO	Red	AlGaInP	2.00	2.30	633	640	23	70	
BW-191USD	Red	AlGaInP	2.00	2.30	625	632	25	67	
BW-191UD	Amber	AlGaInP	2.00	2.30	605	610	25	72	
BW-191UY	Yellow	AlGaInP	2.00	2.30	591	592	32	67	
BW-191UYG	Green	AlGaInP	2.00	2.30	572	570	18	37	
BW-191GR	Green	InGaN	3.20	3.60	527	525	37	170	
BW-191WT	White	InGaN	3.30	3.60	(x,y)=(0.29,0.31)		-	200	
BW-191BL	Blue	InGaN	3.20	3.60	470	468	25	36	
BW-191CBS	Blue	GaN/ SiC	3.80	4.00	465	430	60	8	

### Package Dimension



### Suggest Soldering Pad Dimensions



### Absolute Maximum Rating (T<sub>d</sub>= 25°C)

Series	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
BW-191 Series	30	100	5	-30~+80	-40~+85

\*Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1 msec width

7 inch Anti-Static Reel  
4000 pcs / reel

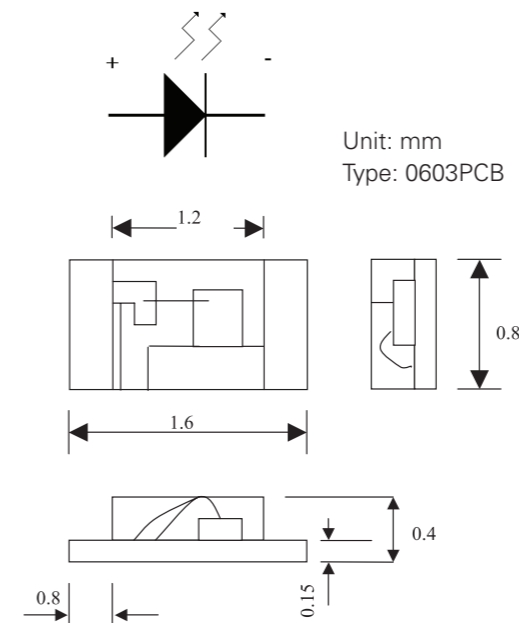
## BW-192 Series

### Electro-Optical Characteristics

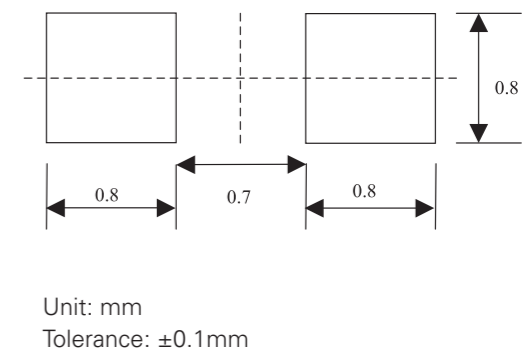
Code for Parts BW-XXXXX	Lighting Color	Material	V <sub>F</sub> (V)		λ(nm)			I <sub>V</sub> (mcd)	Internal Circuit
			Typ.	Max.	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	Typ.	
BW-192URO	Red	AlGaInP	2.00	2.30	633	640	23	53	
BW-192USD	Red	AlGaInP	2.00	2.30	625	632	25	68	
BW-192UD	Amber	AlGaInP	2.00	2.30	605	610	25	53	
BW-192UY	Yellow	AlGaInP	2.00	2.30	591	592	32	67	
BW-192UYG	Green	AlGaInP	2.00	2.30	572	570	18	37	
BW-192GR	Green	InGaN	3.20	3.60	527	525	37	180	
BW-192WT	White	InGaN	3.30	3.60	(x,y)=(0.29,0.31)		-	200	
BW-192BL	Blue	InGaN	3.20	3.60	470	468	25	36	

### Package Dimension

#### Pattern



#### Recommended Soldering PCB



### Absolute Maximum Rating (T<sub>d</sub>=25°C)

Series	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
BW-192 Series	30	100	5	-30~+80	-40~+85

\*Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1 msec width

7 inch Anti-Static Reel  
4000 pcs / reel