



# SUPER BRIGHT LED LAMP

RECTANGLE TYPE  
2X4 mm

## 4543K/4553K/4503K-5/4523K-5 SERIES

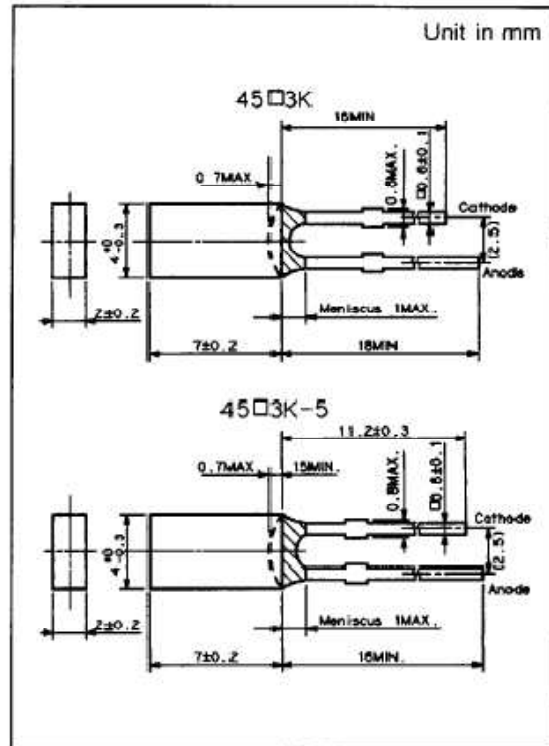
### FEATURES

- AVAILABLE IN 4 COLORS; RED, GREEN, YELLOW AND ORANGE
- 4×2 mm RECTANGLE UNIFORM LIGHT EMISSION SURFACE
- AVAILABLE IN 2 TYPES; CLEAR AND DIFFUSED
- LOW CURRENT DRIVE
- LARGE ALLOWABLE CURRENT CAPACITY, EXCELLENT FOR PULSE DRIVE
- HIGH RELIABILITY, LONG LIFE

### APPLICATION

- FOR GENERAL PURPOSE DISPLAYS AS IN AV EQUIPMENT
- FOR SLIDE VOLUME

### Package Dimension



### Absolute Maximum Ratings

( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Red		Green		Yellow		Orange	Units
		BR	PR	BG	PG(Y)	PY	AY	AA	
Forward Current	$I_F$	50	30	50	50	50	50	50	mA
Peak Forward Current	$I_{FM}$	300	100	100	100	100	100	100	mA
Reverse Voltage	$V_R$	4		4		4		4	V
Power Dissipation	$P_d$	100	75	125	125	125	125	125	mW
Operating Temperature	$T_{opr}$	-30 ~ +85		-30 ~ +85		-30 ~ +85		-30 ~ +85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-30 ~ +100		-30 ~ +100		-30 ~ +100		-30 ~ +100	$^\circ\text{C}$

\* The current derating for operation above  $25^\circ\text{C}$  is  $0.67\text{mA}/^\circ\text{C}$  for BR/BG/PG/PY/AY/AA,  $0.40\text{mA}/^\circ\text{C}$  for MVR/MPR/MPY/MAY and  $0.33\text{mA}/^\circ\text{C}$  for VR/PR/MBG/MPG/MAA.

## Electro-Optical Characteristics

(Ta=25°C)

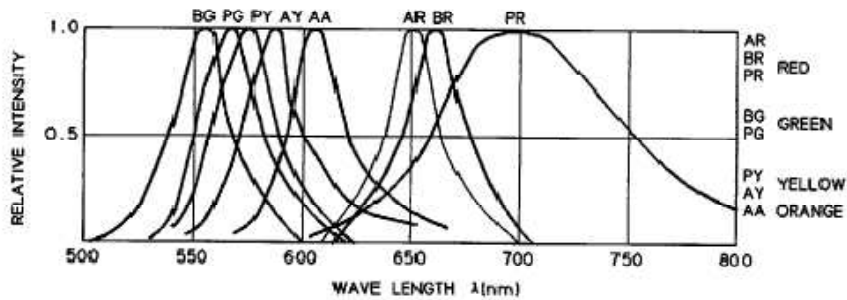
Type No.	Chip		Lens *	Iv(mcd)		at If (mA)	Peak Wave Length $\lambda_p$ (nm)	Spectral Line Half Width $\Delta\lambda$ (nm)	Vf(V)		at If (mA)	at Vf4V If( $\mu$ A)	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR4503K-5 (23K-5)	GaAlAs	Red	W.C (C.C)	3.0	6.0	20	660	30	1.7	2.0	20	100	50
PR4503K-5 (23K-5)	GaP	Red	W.C (C.C)	0.8	1.6	10	700	100	2.1	2.5	10	100	70
PR4553K (43K)	GaP	Red	C.S.D (W.S.D)	0.3	0.5	10	700	100	2.1	2.5	10	100	70
BG4503-5 (23K-5)	GaP	Pure Green	W.C (C.C)	1.5	3.0	20	555	30	2.1	2.5	20	100	50
BG4553K (43K)	GaP	Green	C.S.D (W.S.D)	0.5	1.0	20	555	30	2.1	2.5	20	100	50
(E) BG4503K-5 (23K-5)	GaP	Pure Green	W.C (C.C)	3.0	4.5	20	555	30	2.1	2.5	20	100	50
PG4553KY	GaP	Green	C.S.D	1.5	3.0	20	565	30	2.1	2.5	20	100	40
PY4553K (43K)	GaP	Yellow	C.S.D (W.S.D)	2.0	4.0	20	570	30	2.1	2.5	20	100	40
AY4503K-5 (23K-5)	GaAsP/GaP	Yellow	W.C (C.C)	2.0	4.0	20	580	30	2.2	2.5	20	100	40
AY4553K (43K)	GaAsP/GaP	Yellow	C.S.D (W.S.D)	1.0	2.0	20	580	30	2.2	2.5	20	100	40
AA4503K-5 (23K-5)	GaAsP/GaP	Orange	W.C (C.C)	2.0	4.0	20	605	30	2.2	2.5	20	100	50
4553K (43K)	GaAsP/GaP	Orange	C.S.D (W.S.D)	1.0	2.0	20	605	30	2.2	2.5	20	100	50

\* W.C = Water Clear  
W.D = Water Diffused  
C.C = Color Clear

C.D = Color Diffused  
W.S.D = White Surface Diffused  
C.S.D = Color Surface Diffused

P.C = Pastel Color  
P.D = Pastel Diffused  
P.S.D = Pastel Surface Diffused

## ■ SPECTRAL DISTRIBUTION



# RED

