



T-41-23

SUPER BRIGHT LED LAMP

RECTANGLE TYPE
2.5X5 mm

5546K/5556K SERIES

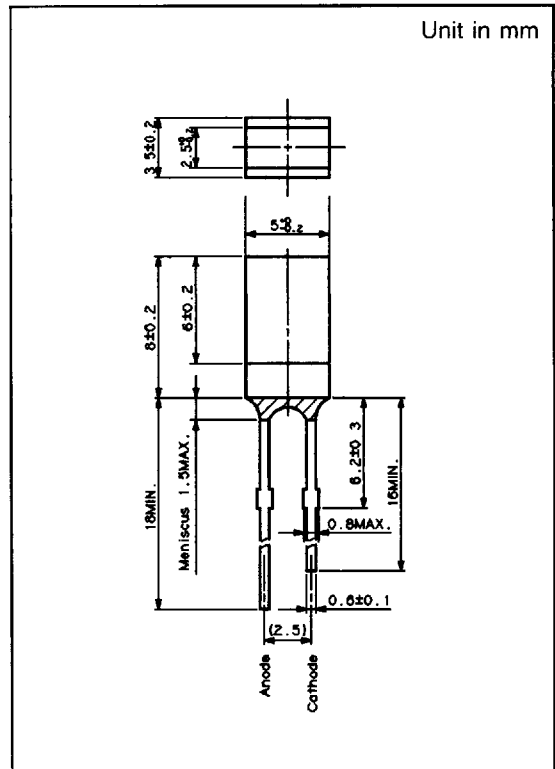
FEATURES

- AVAILABLE IN 4 COLORS; RED, GREEN, YELLOW AND ORANGE
- 2.5×5 mm RECTANGLE UNIFORM LIGHT EMISSION SURFACE
- DIFFUSED TYPE
- LOW CURRENT DRIVE
- LARGE ALLOWABLE CURRENT CAPACITY, EXCELLENT FOR PULSE DRIVE
- HIGH RELIABILITY, LONG LIFE

APPLICATION

- FOR GENERAL PURPOSE DISPLAYS AS IN AV EQUIPMENT

Package Dimension



Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Red		Green		Yellow		Orange	Units
		BR	PR	BG	PG	PY(Y)	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	°C
Storage Temperature	T _{stg}	-30~+100		-30~+100		-30~+100		-30~+100	°C

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

Electro-Optical Characteristics

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(Ta=25°C)

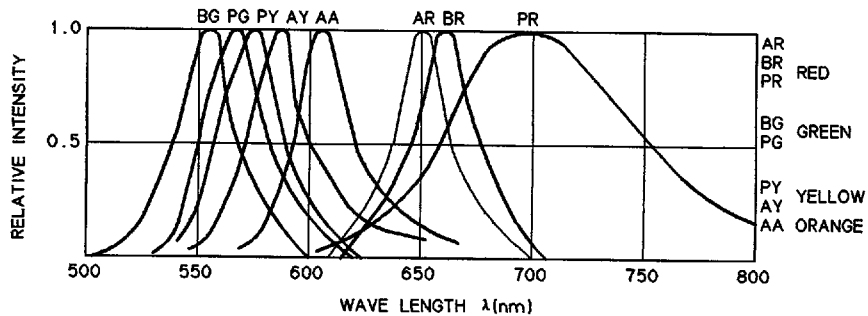
Type No.	Chip		Lens *	Iv(mcd)		at If (mA)	Peak Wave Length λ_p (nm)	Spectral Line Half Width $\Delta\lambda$ (nm)	V _F (V)		at If (mA)	at V _{R4V} I _R (μ A)	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR5556K (46K)	GaAlAs	Red	C.S.D (W.S.D)	1.0	2.0	20	660	30	1.7	2.0	20	100	50
PR5556K (46K)	GaP	Red	C.S.D (W.S.D)	0.3	0.5	10	700	100	2.1	2.5	10	100	70
BG5556K (46K)	GaP	Pure Green	C.S.D (W.S.D)	0.4	0.8	20	555	30	2.1	2.5	20	100	50
PG5556KY	Gap	Green	C.S.D	1.5	3.0	20	565	30	2.1	2.5	20	100	40
PY5556K (46K)	GaP	Yellow	C.S.D (W.S.D)	1.5	3.0	20	570	30	2.1	2.5	20	100	40
AY5556K (46K)	GaAsP/GaP	Yellow	C.S.D (W.S.D)	1.0	2.0	20	580	30	2.2	2.5	20	100	40
AA5556K (46K)	GaAsP/GaP	Orange	C.S.D (W.S.D)	1.0	2.0	20	605	30	2.2	2.5	20	100	50

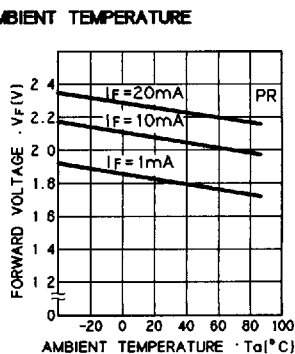
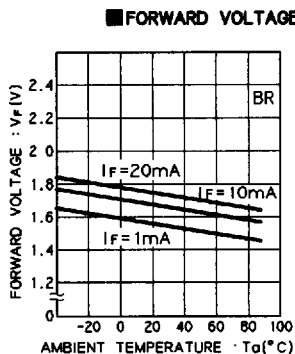
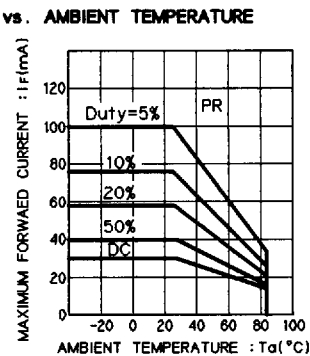
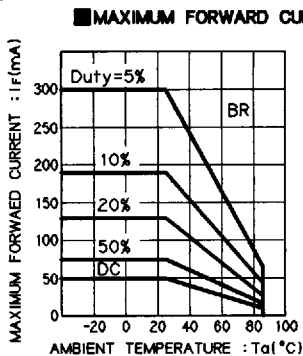
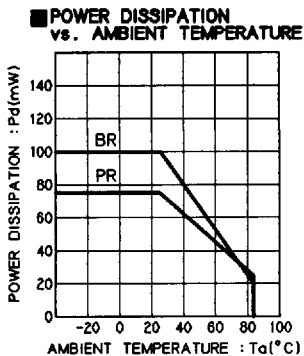
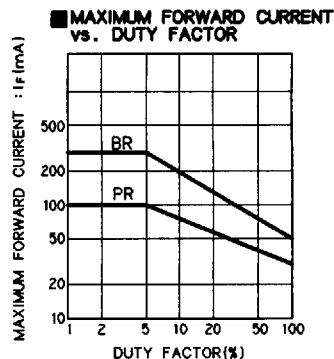
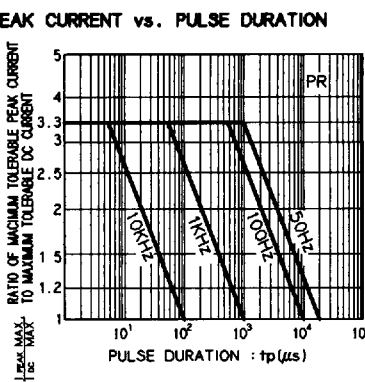
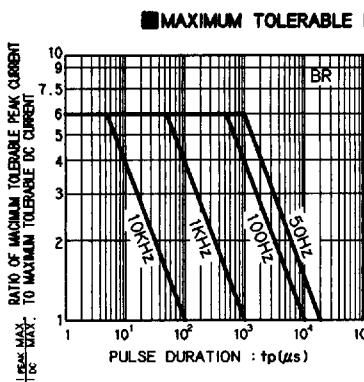
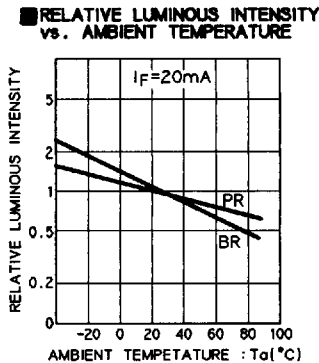
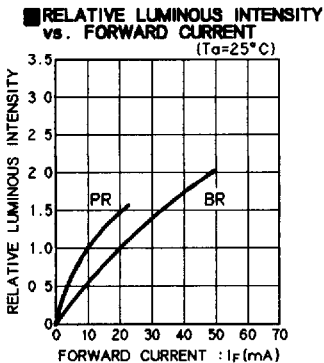
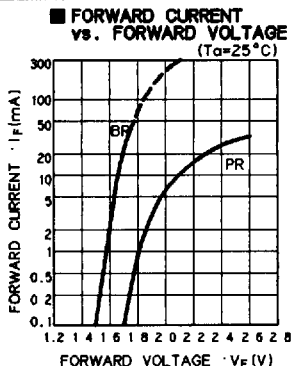
* W.C = Water Clear
W.D = Water Diffused
C.C = Color Clear

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

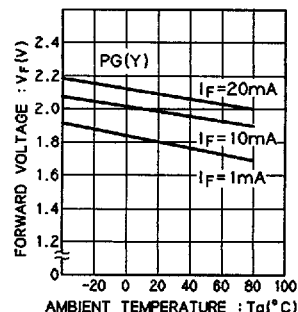
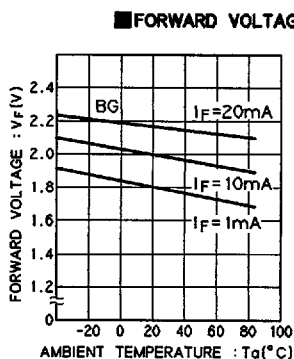
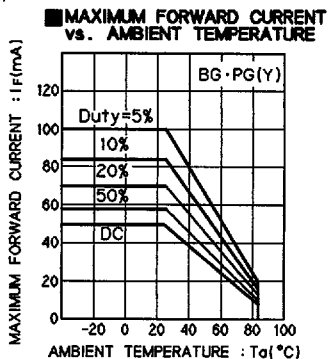
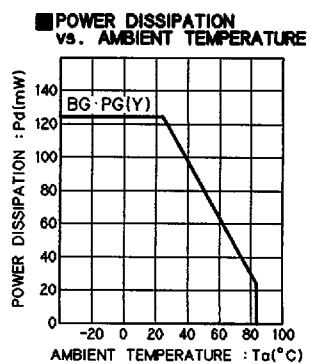
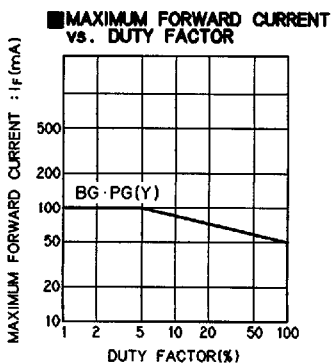
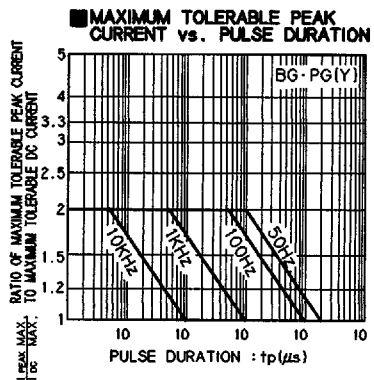
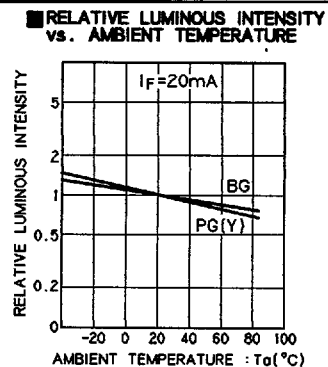
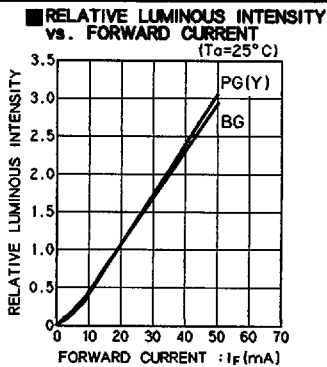
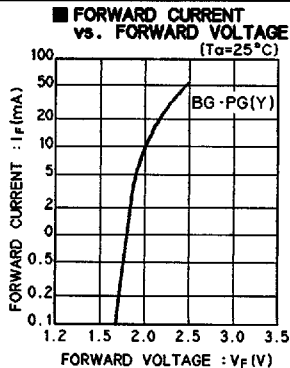
P.C = Pastel Color
P.D = Pastel Diffused
P.S.D = Pastel Surface Diffused

SPECTRAL DISTRIBUTION

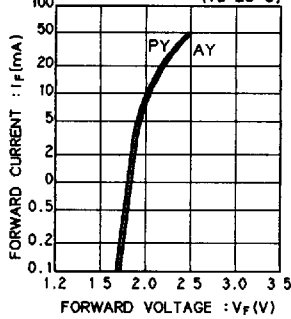




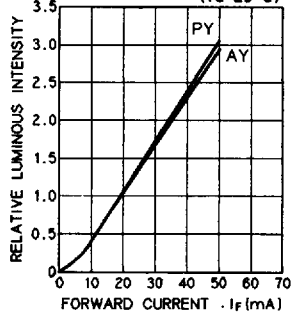
LED LAMP



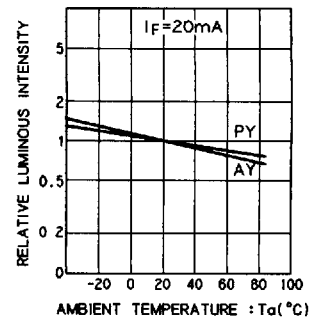
■ FORWARD CURRENT vs. FORWARD VOLTAGE (Ta=25°C)



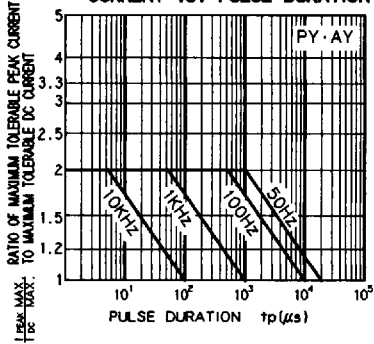
■ RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT (Ta=25°C)



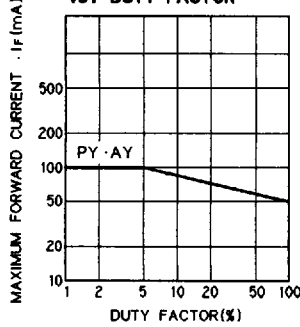
■ RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE (If=20mA)



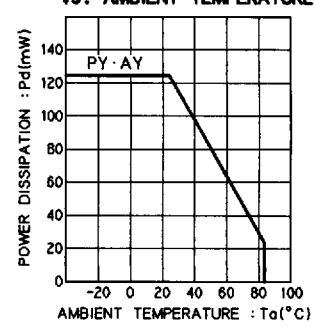
■ MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



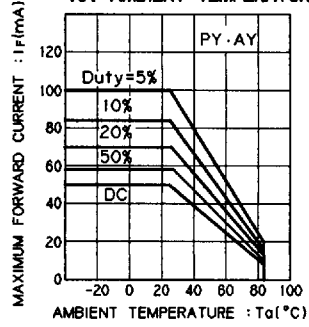
■ MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



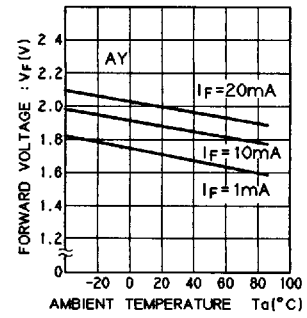
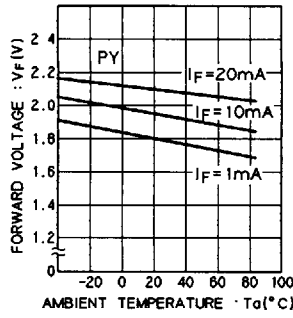
■ POWER DISSIPATION vs. AMBIENT TEMPERATURE



■ MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



■ FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



LED LAMP



ORANGE

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