



SUPER BRIGHT LED LAMP

ROUND SHAPE TYPE
φ3 (T-1)

3668S SERIES

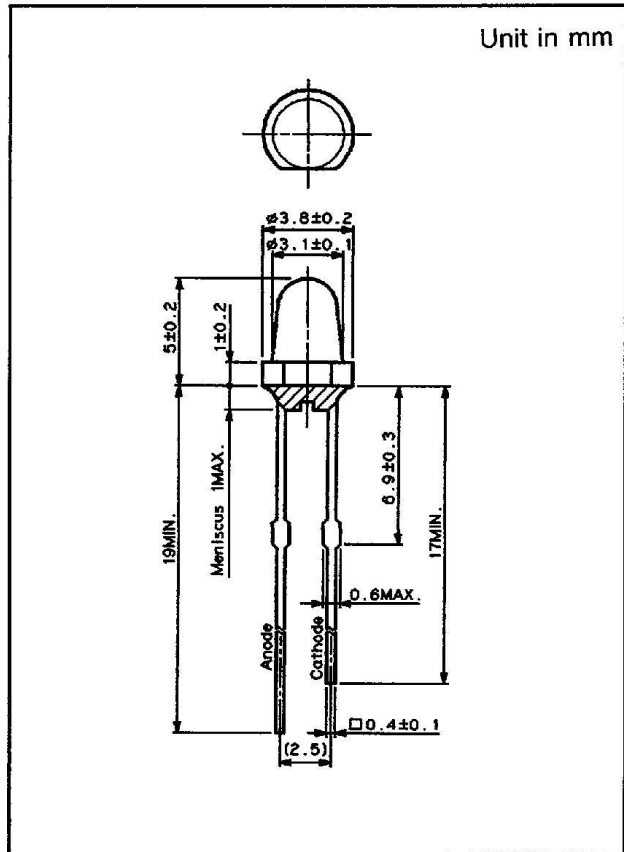
■ FEATURES

- AVAILABLE IN 4 COLORS; RED, GREEN, YELLOW AND ORANGE
- ALL RESIN MOLDED PACKAGE IN PASTEL COLORS
- AVAILABLE IN 2 TYPES; CLEAR AND DIFFUSED
- LOW CURRENT TYPE
- LOW CURRENT DRIVE
- LARGE ALLOWABLE CURRENT CAPACITY, EXCELLENT FOR PULSE DRIVE
- HIGH RELIABILITY, LONG LIFE

■ APPLICATION

- LIGHT SOURCE FOR TELEPHONES
- LIGHT SOURCE FOR OA EQUIPMENT
- LIGHT SOURCE FOR AV EQUIPMENT
- LIGHT SOURCE FOR ILLUMINATED SWITCH

■ Package Dimension



■ Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	PR	VR	BG	PG	PY	AY	AA	
Forward Current	I _F	50	30	30	50	50	50	50	50	mA
Peak Forward Current	I _{FM}	300	100	100	100	100	100	100	100	mA
Reverse Voltage	V _R	4			4		4		4	V
Power Dissipation	P _d	100	75	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.

3668S SERIES

Electro-Optical Characteristics

(Ta=25°C)

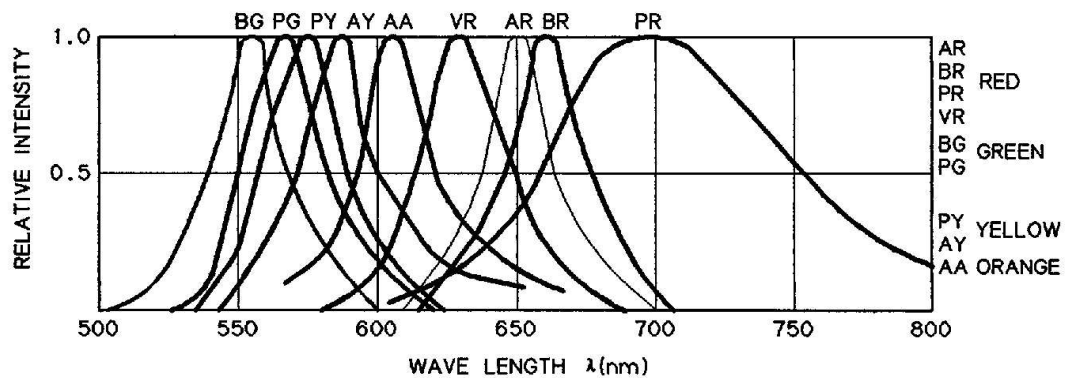
Type No.	Chip		Lens *	Iv(mcd)		at I _F (mA)	Peak Wave Length λ _p (nm)	Spectral Line Half Width Δλ(nm)	V _F (V)		at I _F (mA)	at V _{R4} V _I (μA)	Capacitance C _o (pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR3668S	GaAlAs	Red	P.C	40	80	20	660	30	1.7	2.0	20	100	50
PR3668S	GaP	Red	P.C	4	8	10	700	100	2.1	2.5	10	100	70
VR3668S	GaAsP/ GaP	Red	P.C	20	40	20	630	30	2.0	2.5	20	100	35
BG3668S	GaP	Green	P.C	10	20	20	555	30	2.1	2.5	20	100	50
PG3668S	GaP	Green	P.C	30	60	20	560	30	2.1	2.5	20	100	40
PY3668S	GaP	Yellow	P.C	30	60	20	570	30	2.1	2.5	20	100	40
AY3668S	GaAsP/ GaP	Yellow	P.C	20	40	20	580	30	2.2	2.5	20	100	40
AA3668S	GaAsP/ GaP	Orange	P.C	20	40	20	605	30	2.2	2.5	20	100	50

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

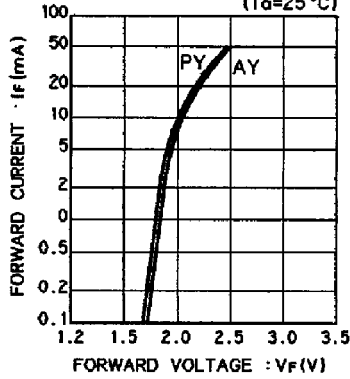
C.D = Color Diffused
W.S.D = White Surface Diffused
C.S.D = Color Surface Diffused

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

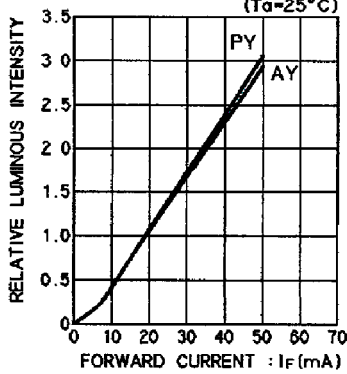
■ SPECTRAL DISTRIBUTION



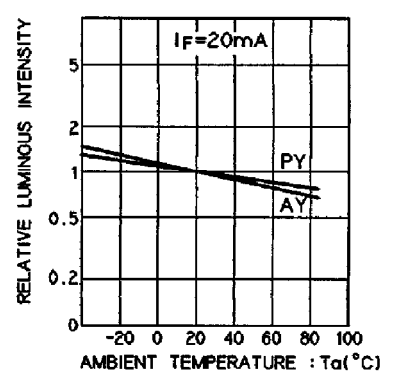
FORWARD CURRENT vs. FORWARD VOLTAGE
($T_a=25^\circ\text{C}$)



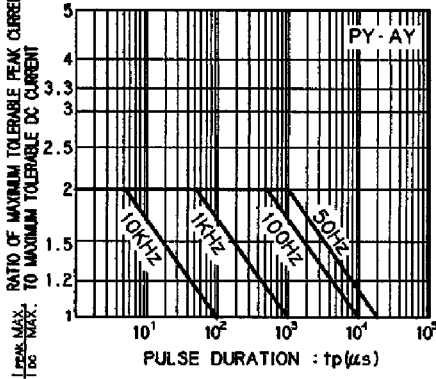
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT
($T_a=25^\circ\text{C}$)



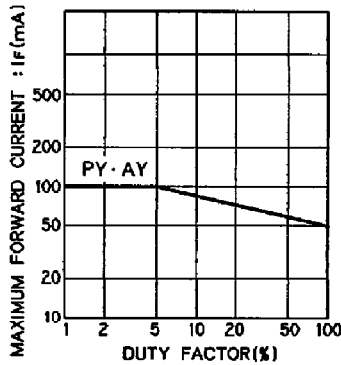
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



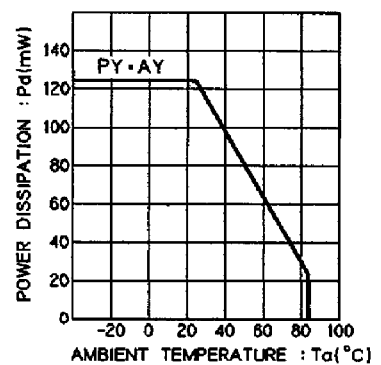
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



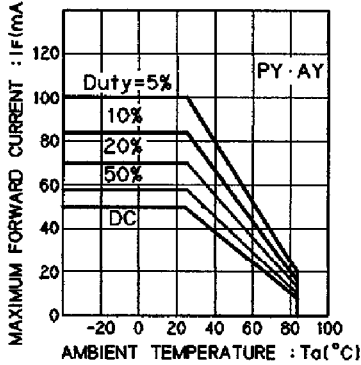
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



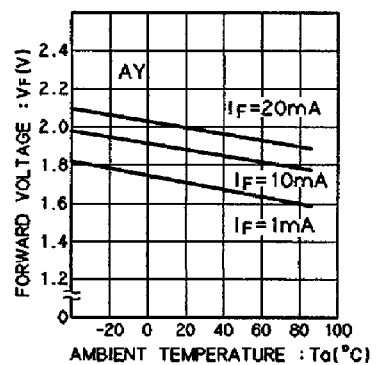
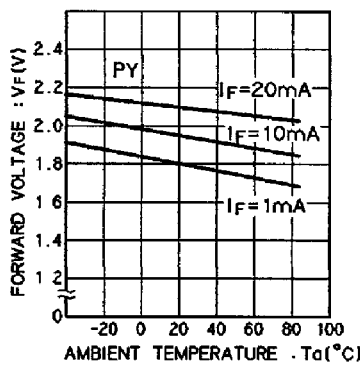
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

PY3668S

AY3668S

