



**STANLEY  
SUPER BRIGHT  
LED LAMP**

T-41-21

T-1( $\phi$ 3)TYPE

**3668S**

**SERIES**

**SELECTION GUIDE**

COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	BR 3668S
	GaP	PR 3668S
	GaAsP/GaP	VR 3668S
Green	GaP	BG 3668S
	GaP	PG 3668S
Yellow	GaP	PY 3668S
	GaAsP/GaP	AY 3668S
Orange	GaAsP/GaP	AA 3668S

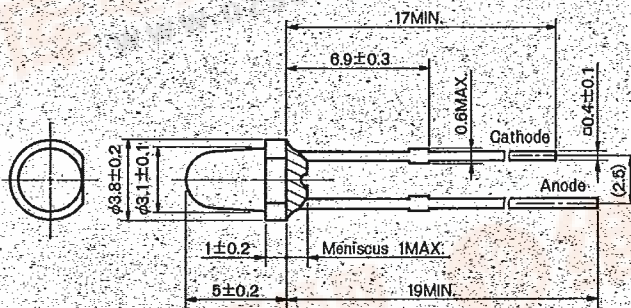
**FEATURE**

- AVAILABLE IN 4 PASTEL COLORS; RED, GREEN, YELLOW AND ORANGE
- 3mm DIA EPOXY PACKAGE
- AVAILABLE IN BOTH WIDE AND NARROW VIEWING ANGLES
- IDEAL FOR BACK LIGHTING
- LOW CURRENT DRIVE, DIRECTLY COMPATIBLE WITH IC
- QUICK RESPONSE, ALLOWING PULSED OPERATION
- HIGH RELIABILITY

**DESCRIPTION**

These series have a reflector where an LED die is placed to maximize the brightness. The 3668S series are Super Bright LEDs encapsulated in 3mm DIA epoxy packages in four different elegant pastel colors.

**Package Dimensions—Unit in mm**



**Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	PR	VR	BG	PG	PY	AY	AA	
Forward Current	I <sub>F</sub>	50	30	30	50	50	50	50	50	mA
Peak Forward Current	I <sub>FM</sub>	300	100	100	100	100	100	100	100	mA
Reverse Voltage	V <sub>R</sub>	4			4		4		4	V
Power Dissipation	P <sub>d</sub>	100	75	75	125	125	125	125	125	mW
Operating Temperature	Topr	-30~+85			-30~+85		-30~+85		-30~+85	°C
Storage Temperature	Tstg	-30~+100			-30~+100		-30~+100		-30~+100	°C
Lead Soldering Temperature		260°C for 5 seconds (3.0mm from body)								

**Electro-Optical Characteristics (Ta=25°C)**

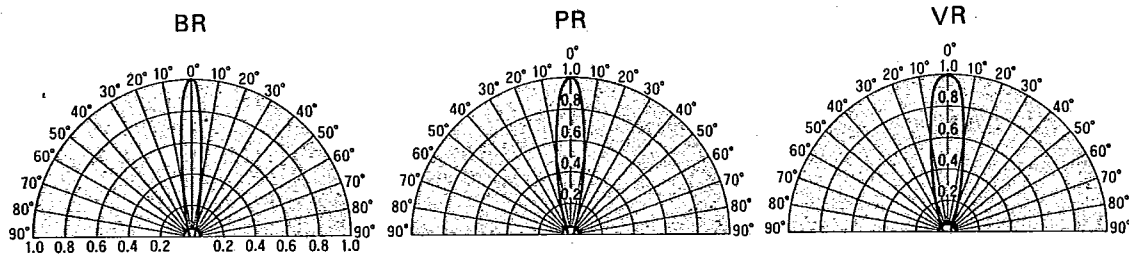
T-41-21

Type No.	Chip		Lens	I <sub>v</sub> (mcd)		at I <sub>F</sub> (mA)	Peak Wave Length λ <sub>p</sub> (nm)	Spectral Line Half Width Δλ(nm)	V <sub>F</sub> (V)		at I <sub>F</sub> (mA)	at V <sub>R</sub> 4V I <sub>R</sub> (μA)	Capacitance Col(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



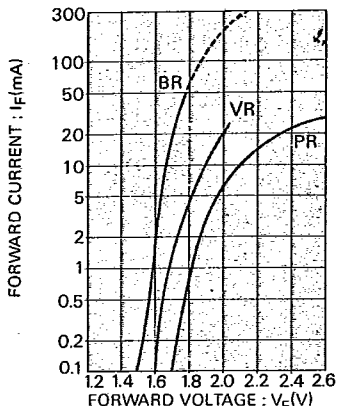
**RED**

**SPATIAL DISTRIBUTION**

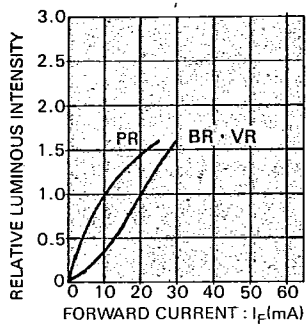


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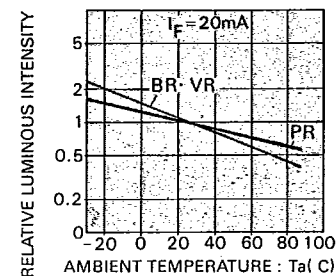
RED



FORWARD CURRENT vs. FORWARD VOLTAGE

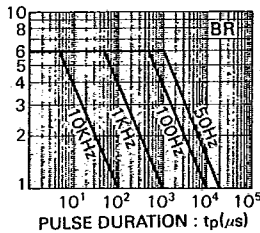


RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



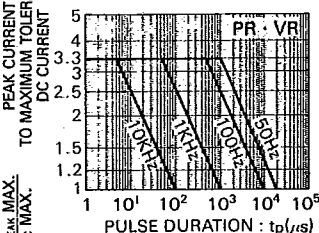
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE

RATIO OF MAXIMUM TOLERABLE PEAK CURRENT TO MAXIMUM TOLERABLE DC CURRENT

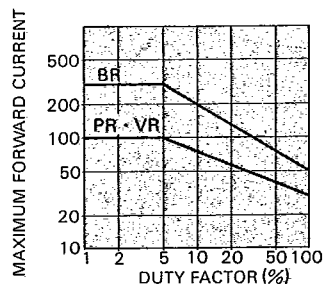


MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION

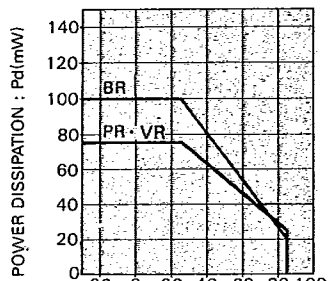
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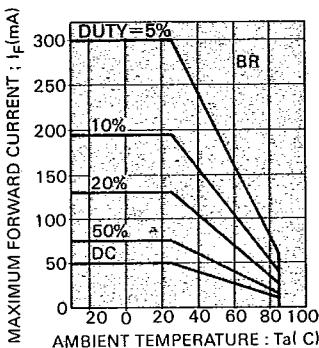
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



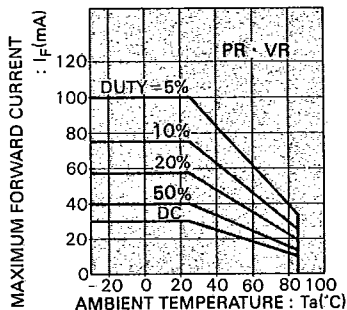
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



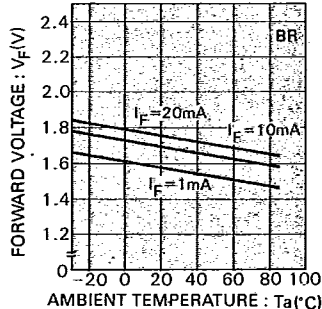
POWER DISSIPATION vs. AMBIENT TEMPERATURE



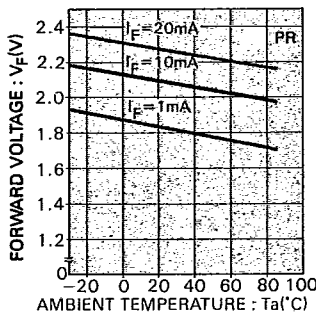
MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



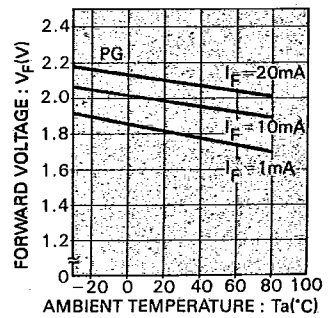
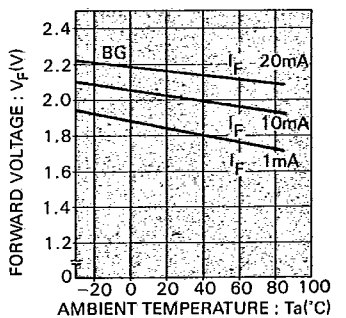
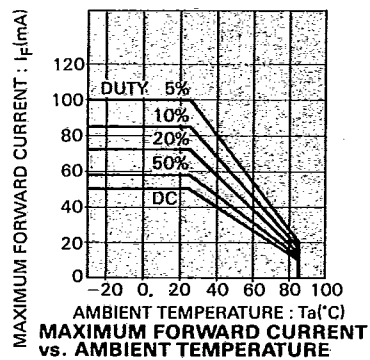
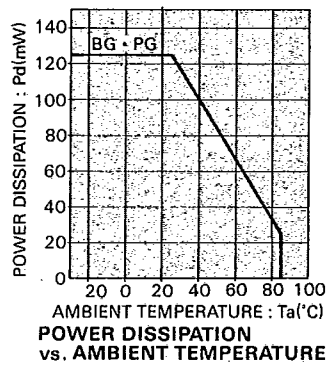
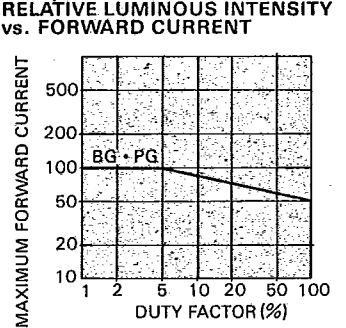
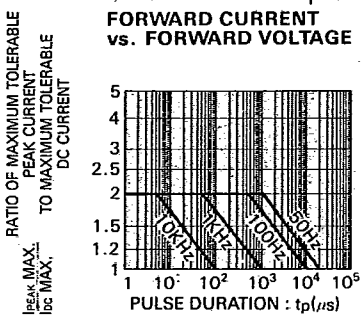
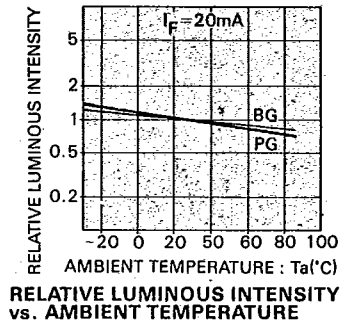
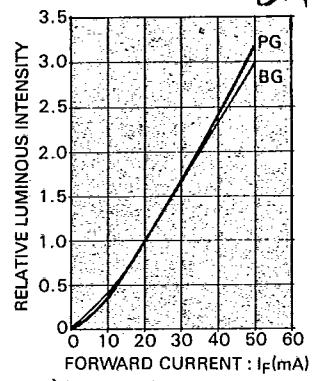
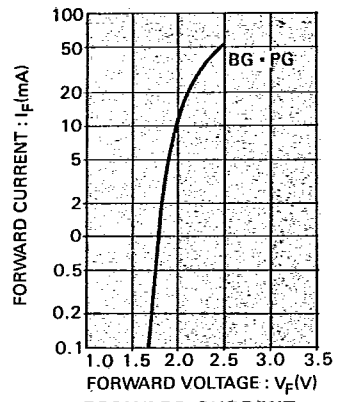
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



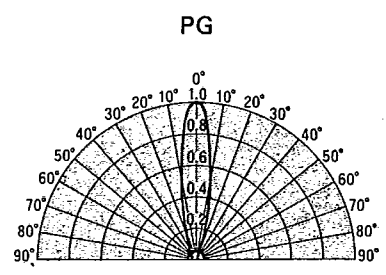
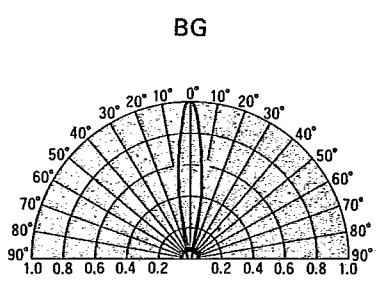
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

**GREEN**

T-41-21

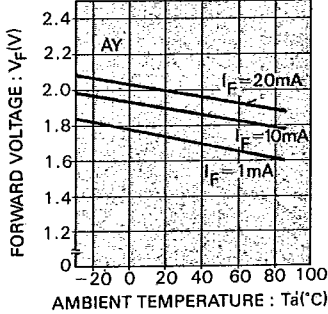
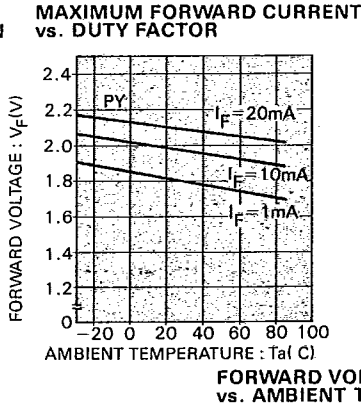
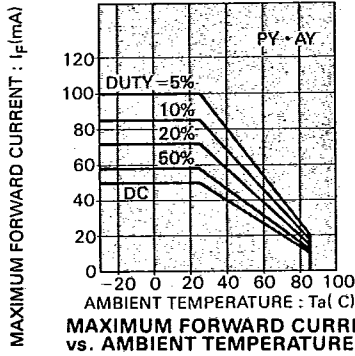
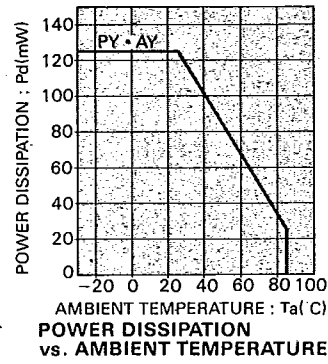
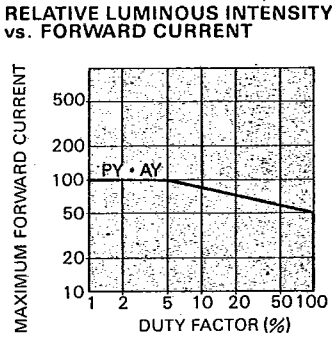
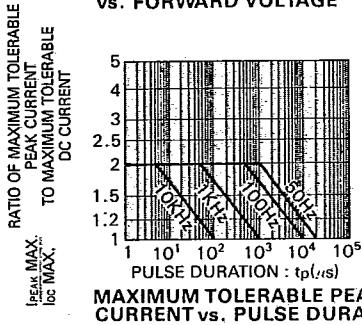
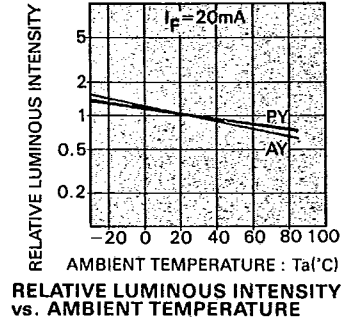
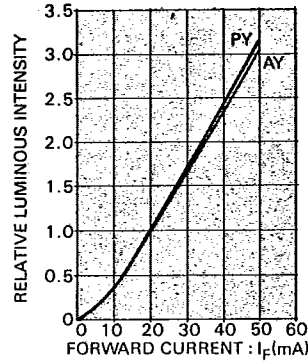
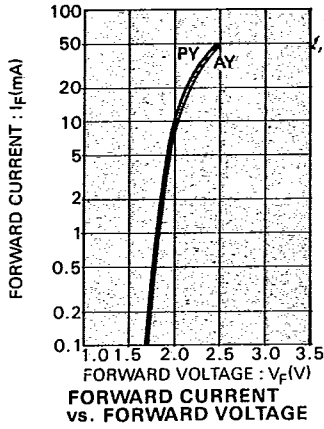


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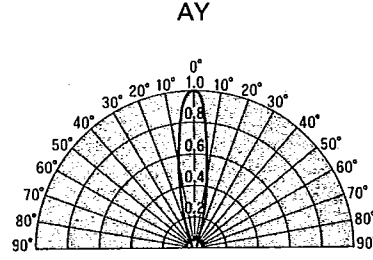
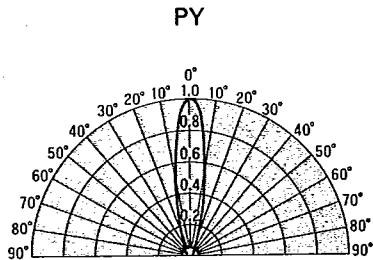


**YELLOW**

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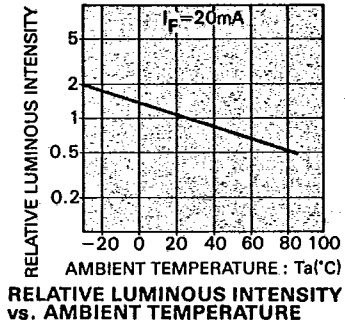
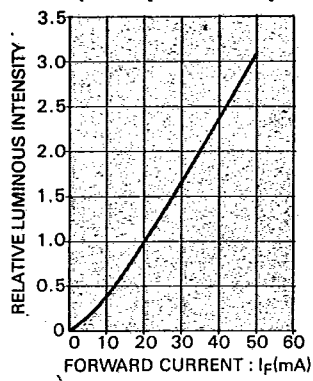
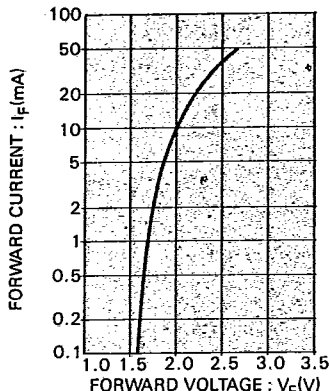


**SPATIAL DISTRIBUTION**



**ORANGE**

T-41-21



RATIO OF MAXIMUM TOLERABLE PEAK CURRENT TO MAXIMUM TOLERABLE DC CURRENT

