

STANLEY**STANLEY
SUPER BRIGHT
LED LAMP**

T-41-21

T-1(ϕ 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

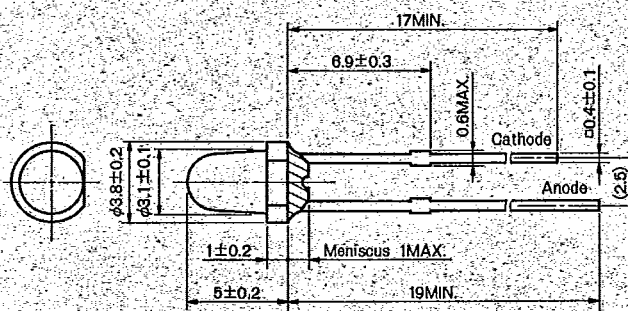
FEATURE

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

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
Lead Soldering Temperature		260°C for 5 seconds (3.0mm from body)								

■ Electro-Optical Characteristics ($T_a=25^\circ\text{C}$)

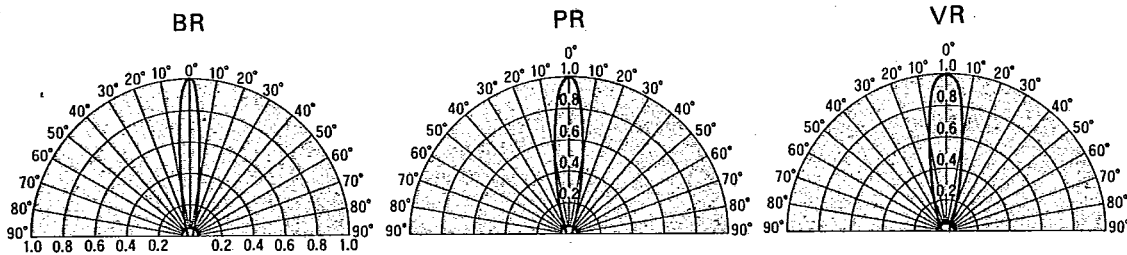
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Type No.	Chip		Lens	$I_v(\text{mcd})$		at I_F (mA)	Peak Wave Length $\lambda_p(\text{nm})$	Spectral Line Half Width $\Delta\lambda(\text{nm})$	$V_F(\text{V})$		at I_F (mA)	at V_{R4V} $I_R(\mu\text{A})$	Capacitance Co(pF)
	Material	Emitted Color		Min.	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

LED LAMP

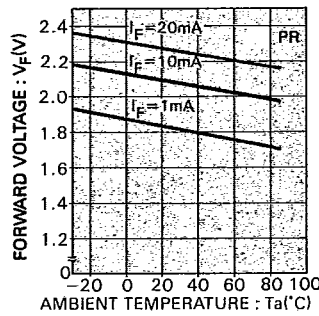
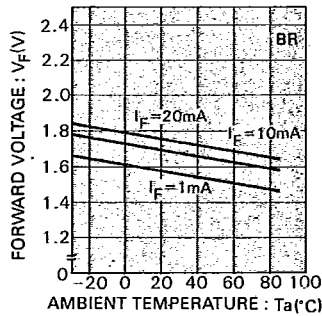
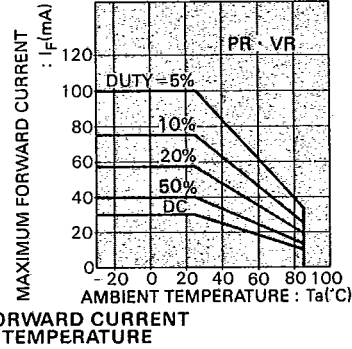
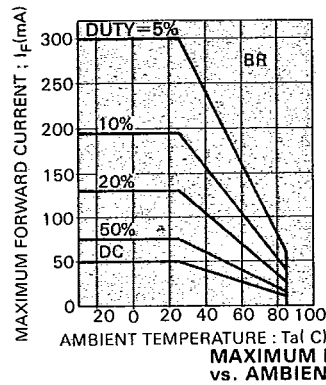
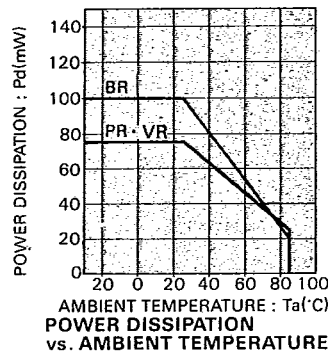
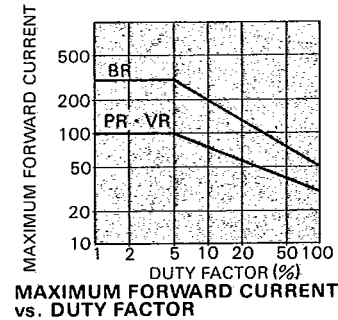
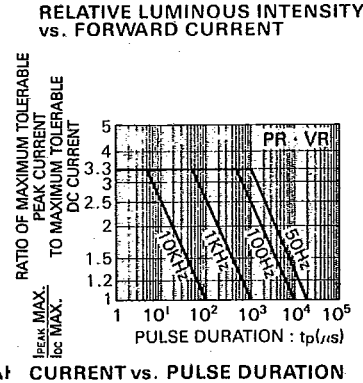
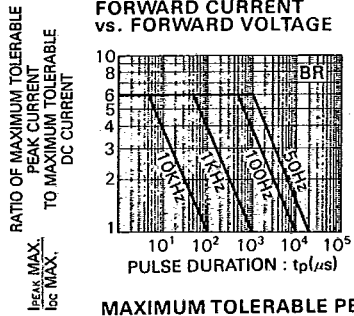
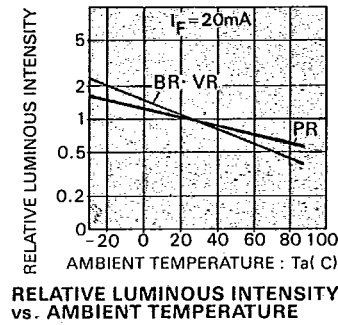
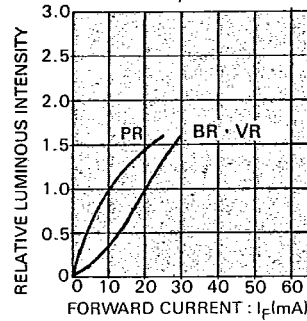
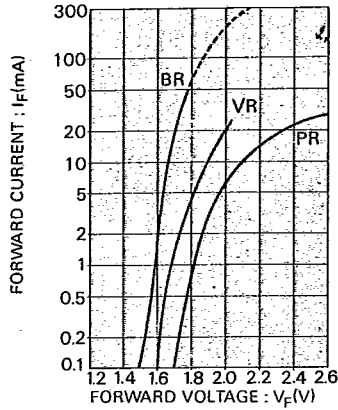
■ RED

■ SPATIAL DISTRIBUTION



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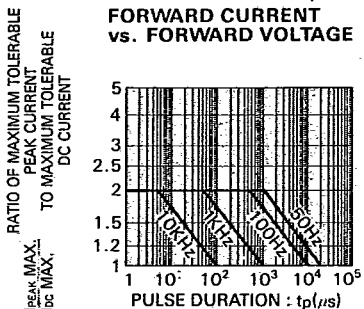
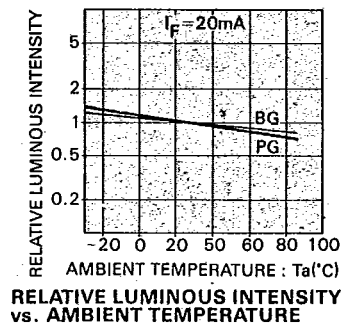
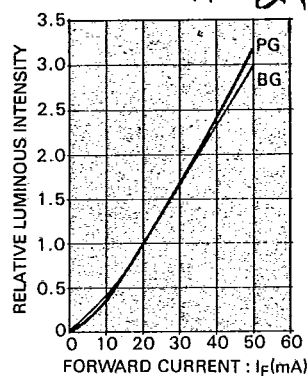
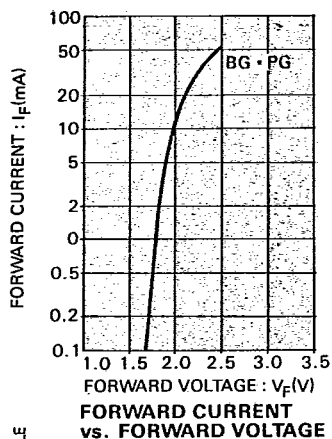
RED



FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

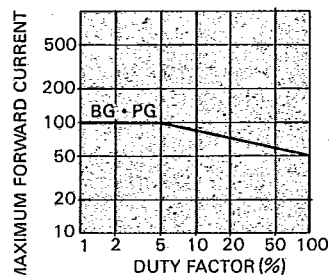
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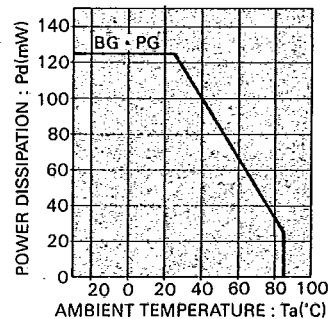


MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION

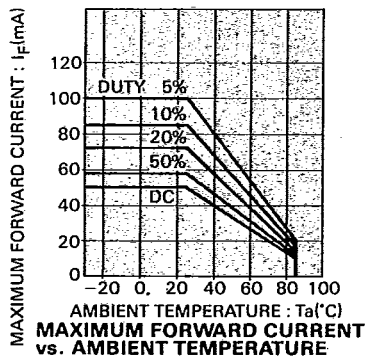
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



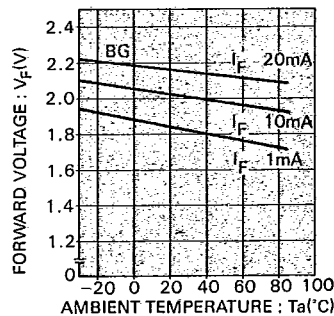
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



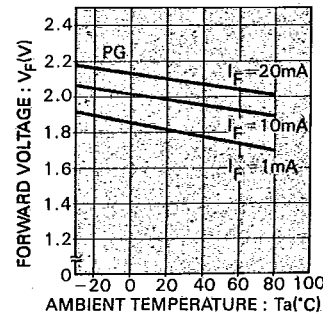
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



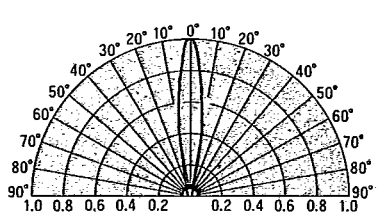
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



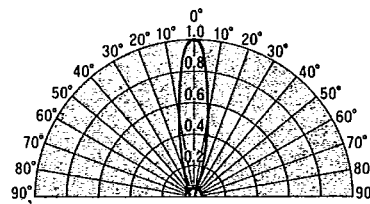
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION

BG

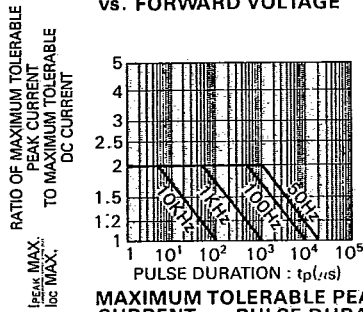
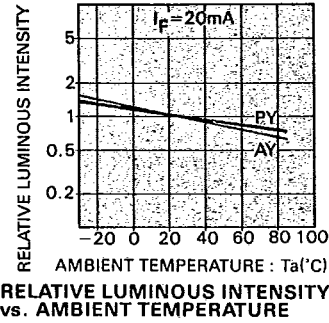
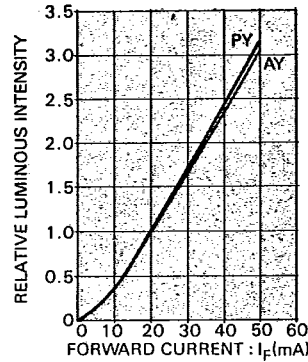
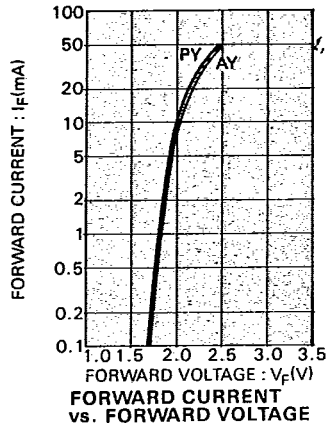


PG

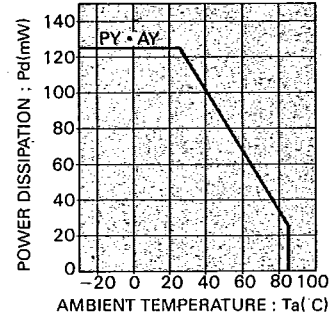
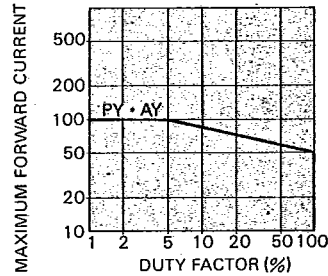


YELLOW

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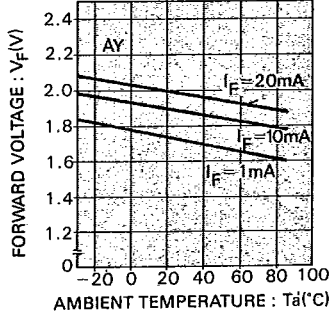
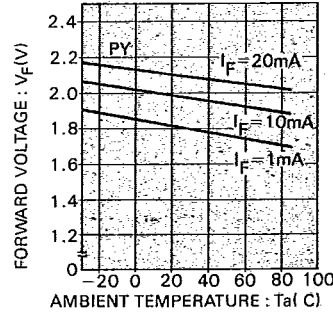
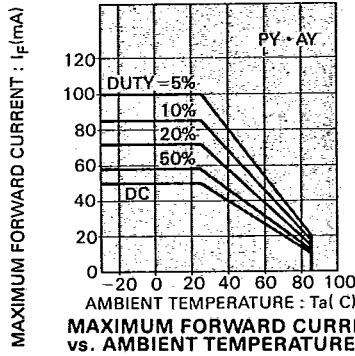
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION

MAXIMUM FORWARD CURRENT vs. DUTY FACTOR

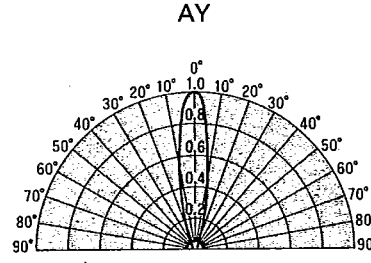
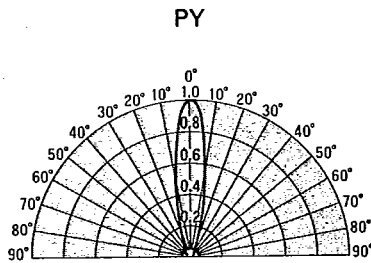
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE

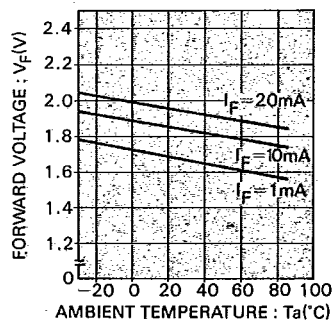
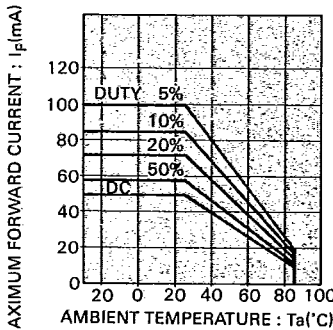
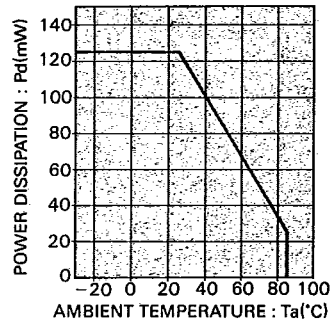
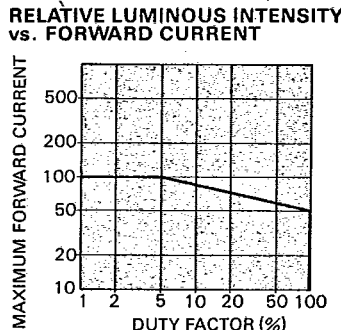
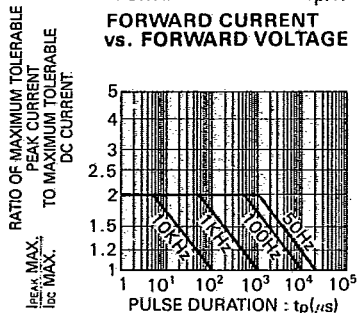
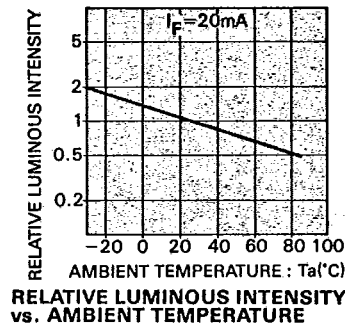
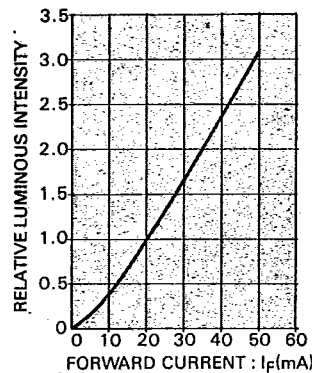
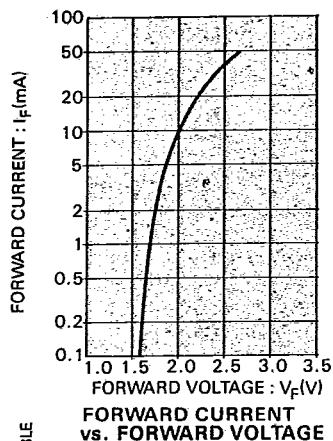
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION



ORANGE

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SPATIAL DISTRIBUTION

