

STANLEY**STANLEY
SUPER BRIGHT
LED LAMP**

T-41-23

 $\phi 5(T-1\frac{3}{4})$ TYPE**5562X****SERIES****SELECTION GUIDE**

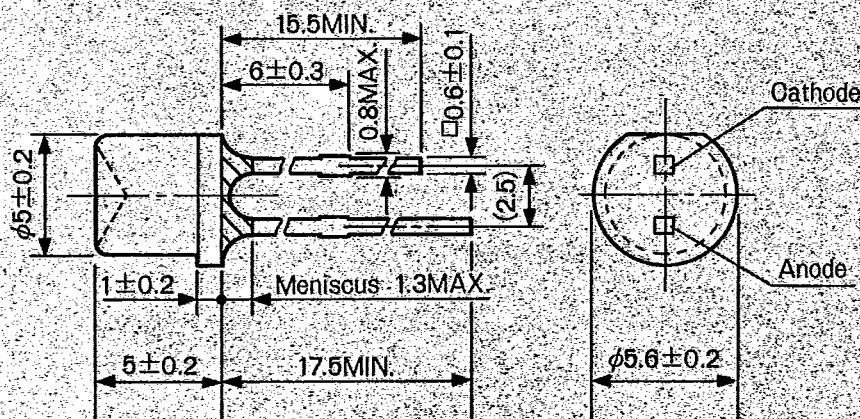
COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	BR 5562X
	GaAsP/GaP	VR 5562X
	GaP	PR 5562X
Green	GaP	BG 5562X
		PG 5562X
Yellow	GaP	PY 5562X
	GaAsP/GaP	AY 5562X
Orange	GaAsP/GaP	AA 5562X

DESCRIPTION

This series was developed for use in back-lighting of surface illumination display for audio-visual products.

It is housed in the 5mm diameter molded packages with a concave and features a laterally wide emission towards side so that use in combination with a reflector enables employment in surface display applications as well.

Ideal for audio-visual and office automation product displays

Package Dimensions—Unit in mm

Absolute Maximum Ratings (Ta=25°C) T-41-23

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)								

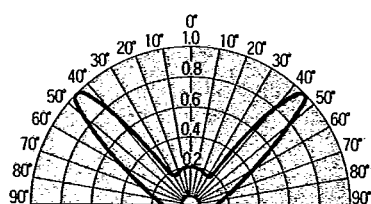
Electro-Optical Characteristics (Ta=25°C)

Type No.	Chip		Lens	I _v (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 _R 4V I _R (μA)	Capacitance C ₀ (pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR5562X	GaAlAs	Red	P.C	4	8	20	660	30	1.7	2.0	20	20	50
PR5562X	GaP	Red	P.C	0.4	0.6	10	700	100	2.1	2.5	10	20	70
VR5562X	GaAsP/GaP	Red	P.C	3	6	20	630	30	2.0	2.5	20	20	35
BG5562X	GaP	Green	P.C	0.8	1.6	20	555	30	2.1	2.5	20	20	50
PG5562X	GaP	Green	P.C	2	4	20	560	30	2.1	2.5	20	20	40
PY5562X	GaP	Yellow	P.C	3	6	20	570	30	2.1	2.5	20	20	40
AY5562X	GaAsP/GaP	Yellow	P.C	3	6	20	580	30	2.2	2.5	20	20	40
AA5562X	GaAsP/GaP	Orange	P.C	3	6	20	605	30	2.2	2.5	20	20	50

RED

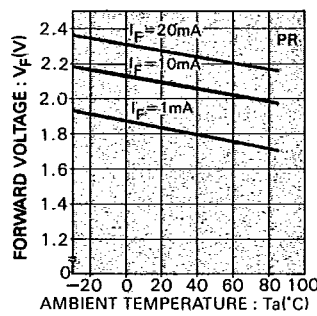
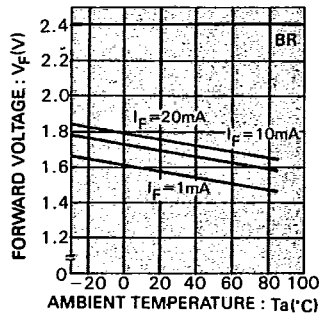
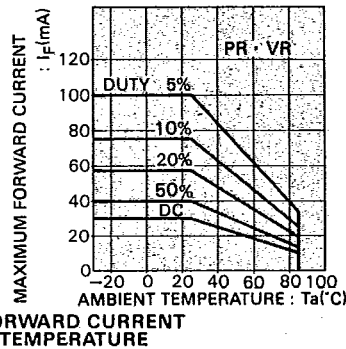
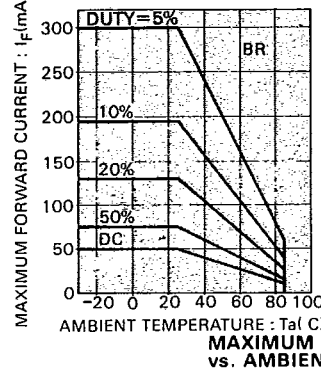
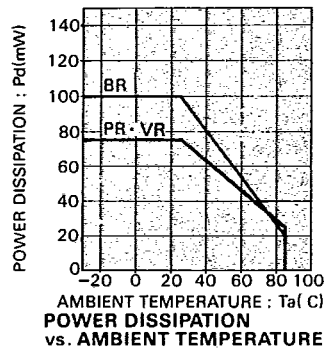
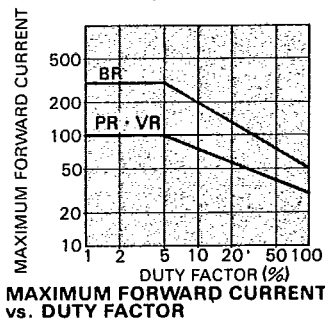
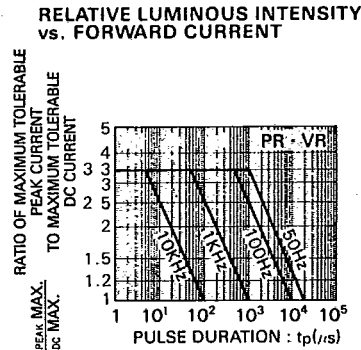
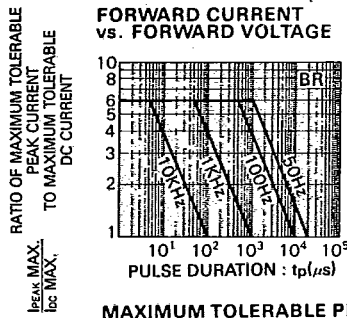
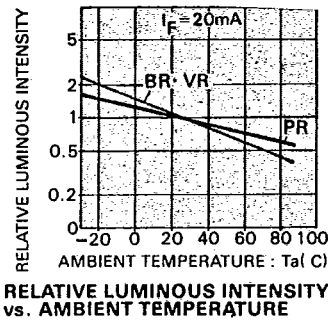
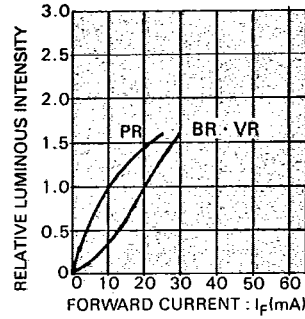
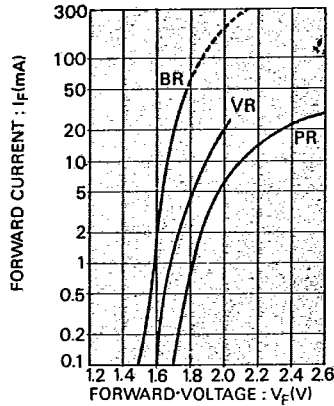
SPATIAL DISTRIBUTION

BR



RED

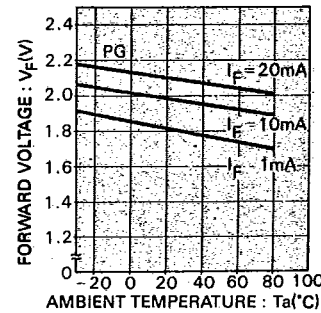
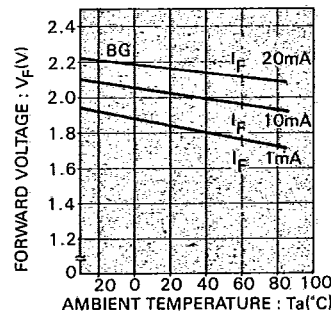
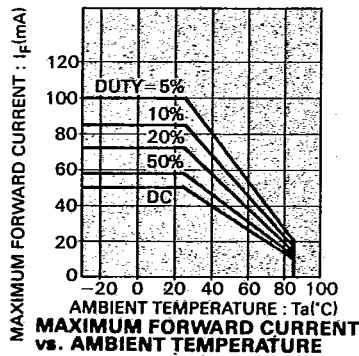
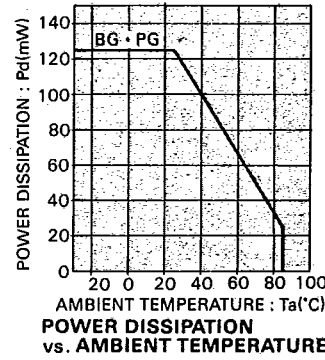
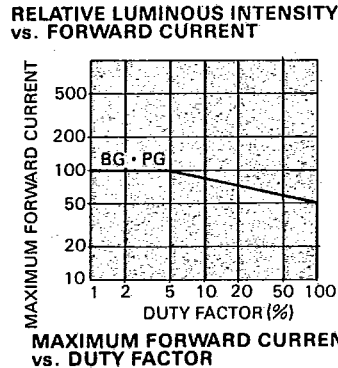
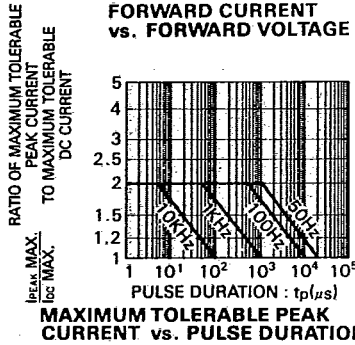
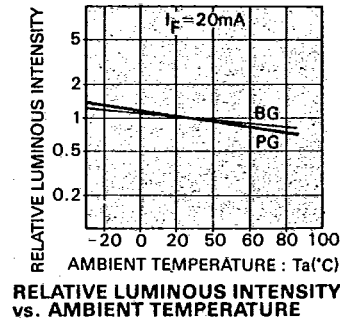
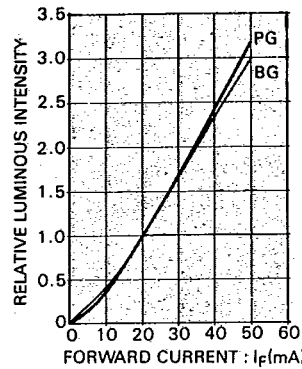
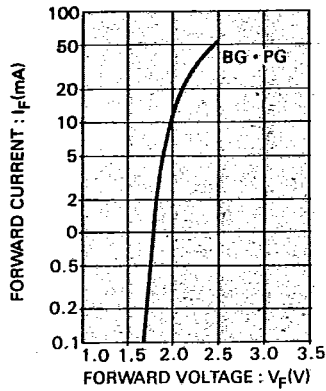
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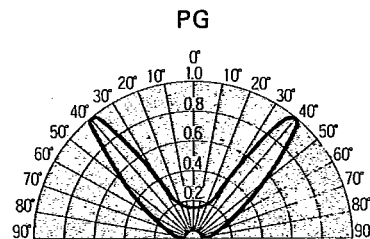
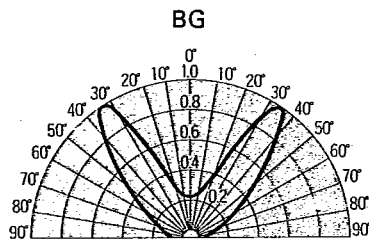
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

GREEN

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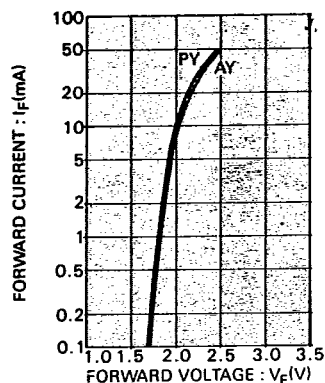


SPATIAL DISTRIBUTION



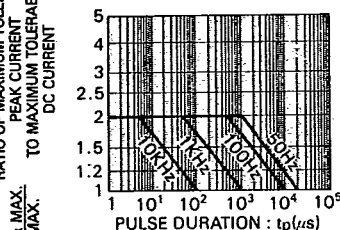
YELLOW

T-41-23

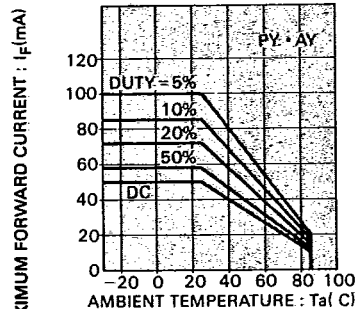


FORWARD CURRENT vs. FORWARD VOLTAGE

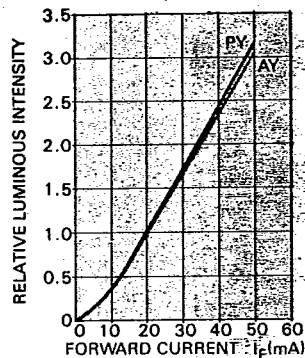
RATIO OF MAXIMUM TOLERABLE
PEAK CURRENT
TO MAXIMUM TOLERABLE
DC CURRENT



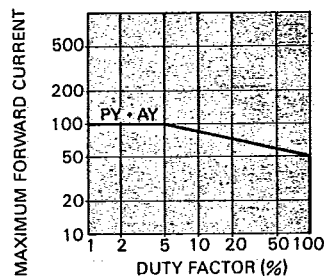
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



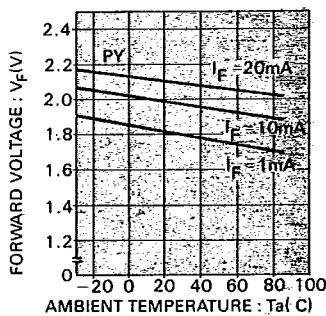
MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



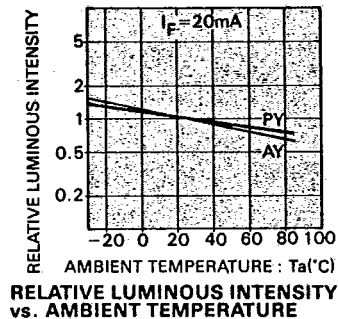
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



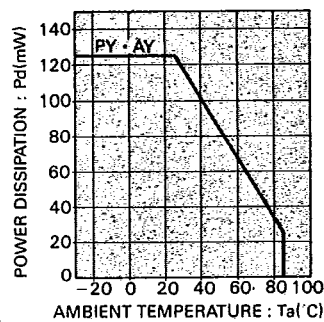
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



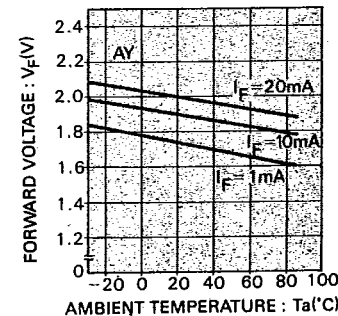
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



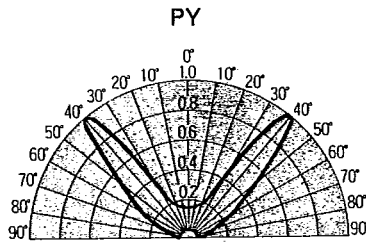
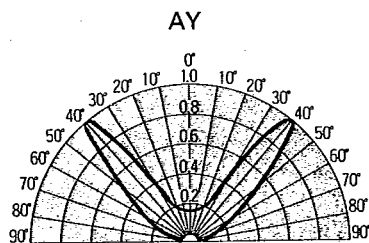
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



POWER DISSIPATION vs. AMBIENT TEMPERATURE

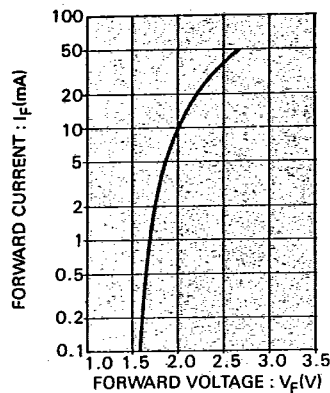


SPATIAL DISTRIBUTION

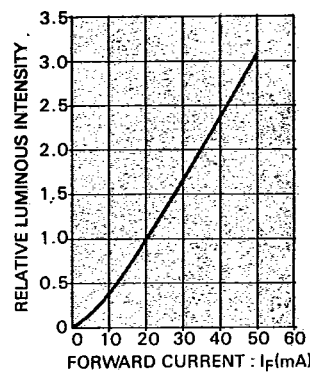


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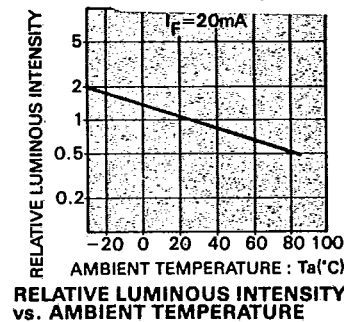
ORANGE



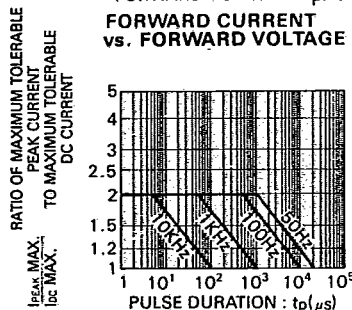
FORWARD CURRENT vs. FORWARD VOLTAGE



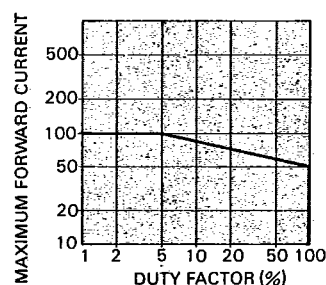
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



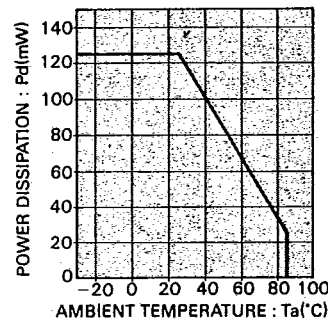
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



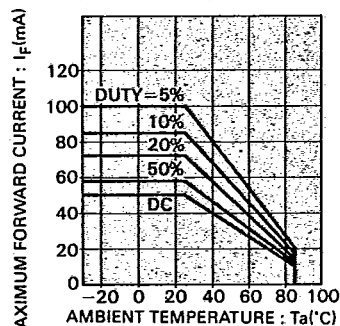
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



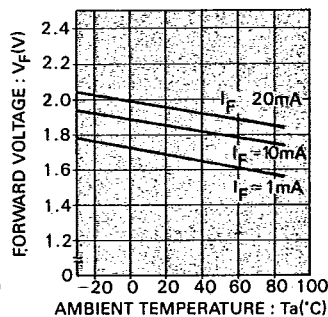
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



POWER DISSIPATION vs. AMBIENT TEMPERATURE

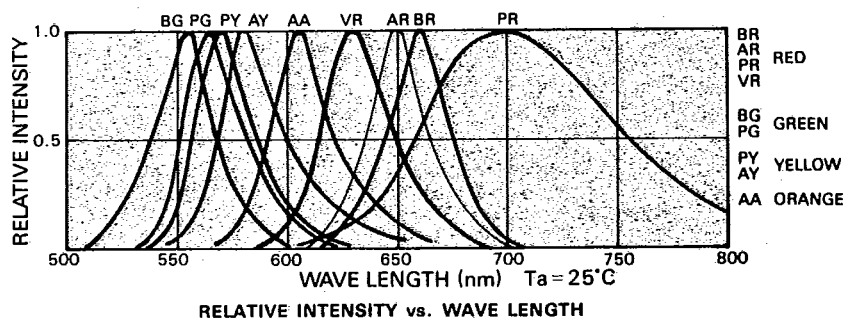
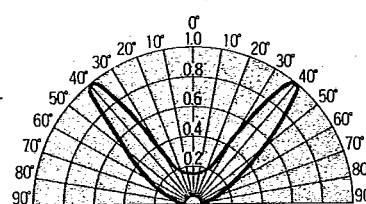


MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION
AA



RELATIVE INTENSITY vs. WAVE LENGTH

