

STANLEY**STANLEY
SUPER BRIGHT
LED LAMP**

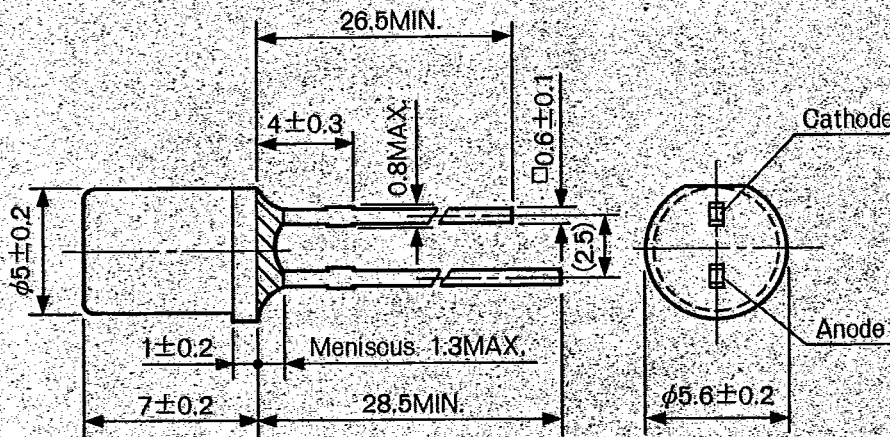
T-41-23

 $\phi 5(T-1\frac{3}{4})$ TYPE**5785X****SERIES****SELECTION GUIDE**

COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	BR 5785X
	GaAsP/GaP	VR 5785X
	GaP	PR 5785X
Green	GaP	BG 5785X
		PG 5785X
Yellow	GaP	PY 5785X
	GaAsP/GaP	AY 5785X
Orange	GaAsP/GaP	AA 5785X

DESCRIPTION

This series was developed for use as compact surface displays. It is housed in the 5 mm diameter cylindrical molded packages. It has a flat display for uniform brightness when used on panels. Ideal for telephone, audio-visual equipment and moving boards.

Package Dimensions—Unit in mm

■ Absolute Maximum Ratings (Ta=25°C)

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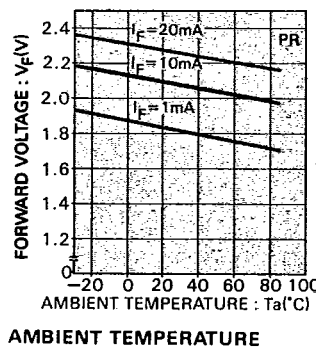
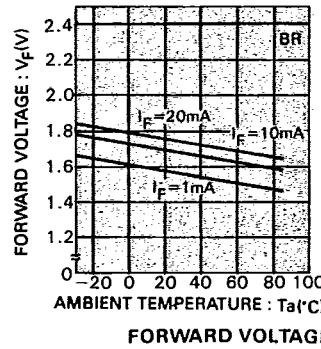
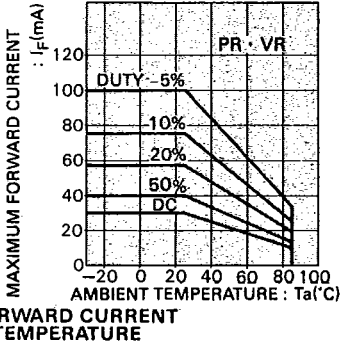
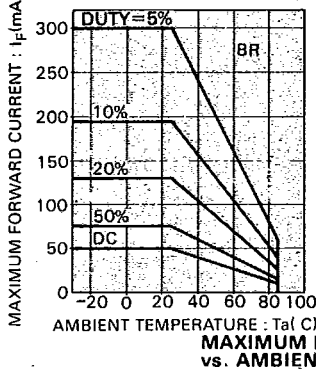
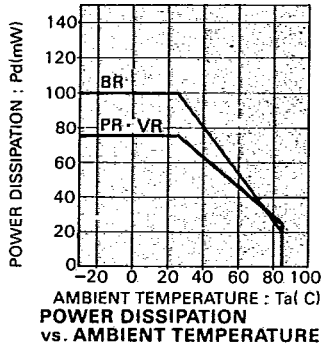
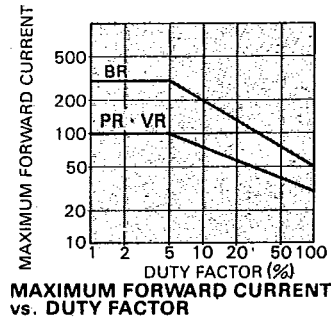
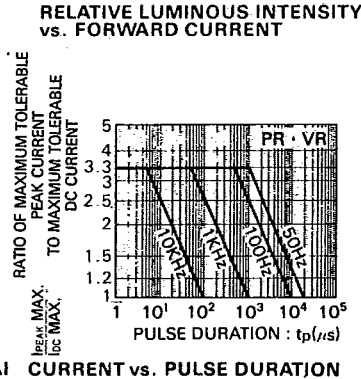
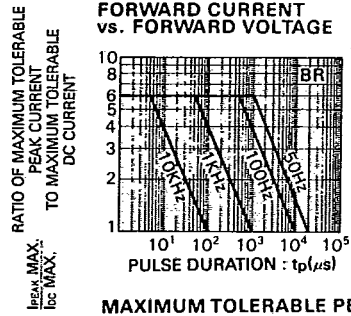
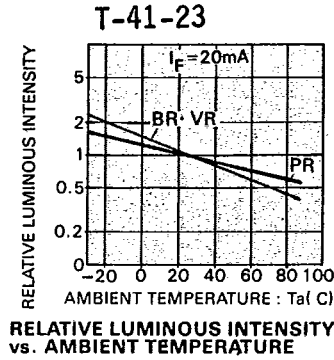
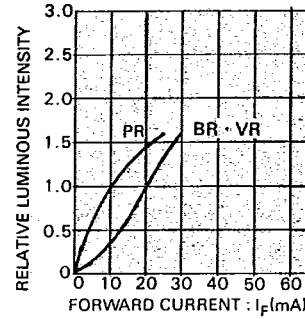
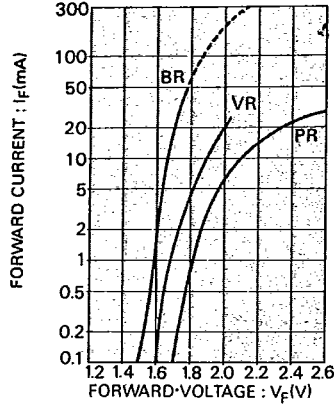
Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	PR	VR	BG	PG	PY	AY	AA	
Forward Current	I_F	50	30	30	50	50	50	50	50	mA
Peak Forward Current	I_{FM}	300	100	100	100	100	100	100	100	mA
Reverse Voltage	V_R	4			4		4		4	V
Power Dissipation	P_d	100	75	75	125	125	125	125	125	mW
Operating Temperature	T_{opr}	-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 Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR5785X	GaAlAs	Red	P.S.D	3	6	20	660	30	1.7	2.0	20	20	50
PR5785X	GaP	Red	P.S.D	0.6	0.9	10	700	100	2.1	2.5	10	20	70
VR5785X	GaAsP/GaP	Red	P.S.D	3	6	20	630	30	2.0	2.5	20	20	35
BG5785X	GaP	Green	P.S.D	0.8	1.6	20	555	30	2.1	2.5	20	20	50
PG5785X	GaP	Green	P.S.D	2.5	5	20	560	30	2.1	2.5	20	20	40
PY5785X	GaP	Yellow	P.S.D	3	6	20	570	30	2.1	2.5	20	20	40
AY5785X	GaAsP/GaP	Yellow	P.S.D	2.5	5	20	580	30	2.2	2.5	20	20	40
AA5785X	GaAsP/GaP	Orange	P.S.D	3	6	20	605	30	2.2	2.5	20	20	50

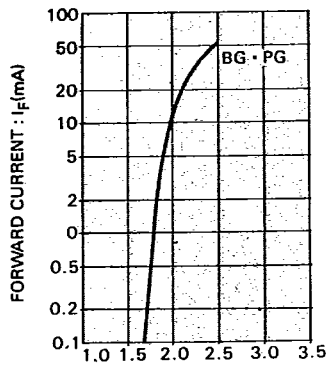


RED

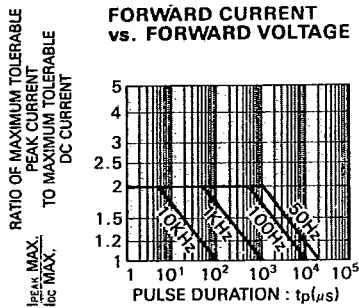


GREEN

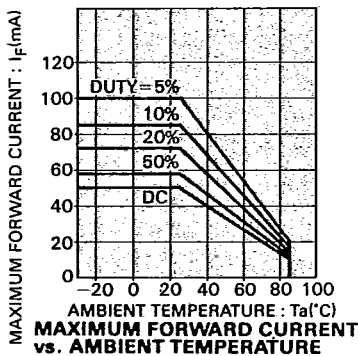
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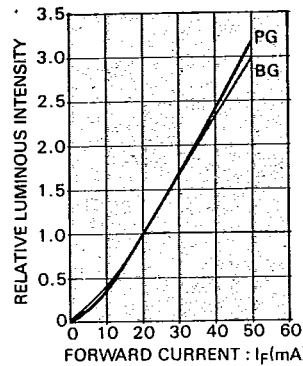
FORWARD CURRENT vs. FORWARD VOLTAGE



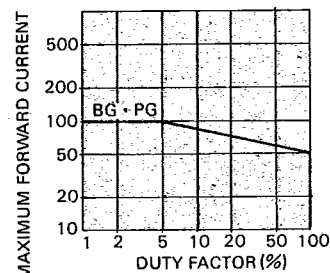
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



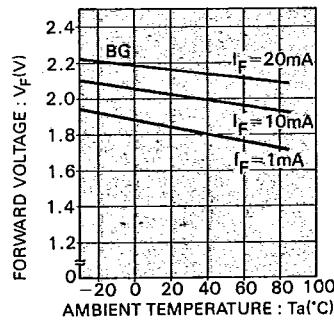
MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



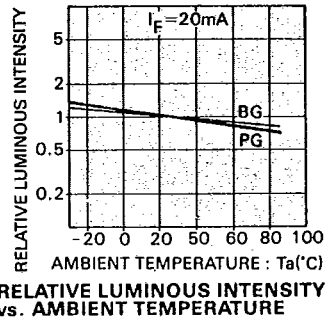
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



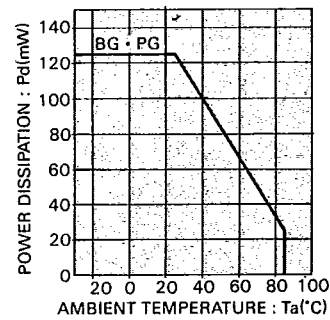
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



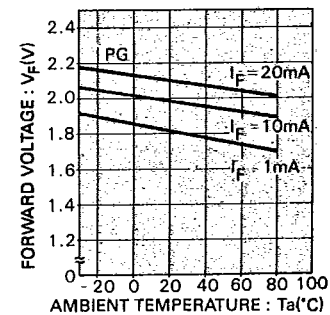
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



POWER DISSIPATION vs. AMBIENT TEMPERATURE

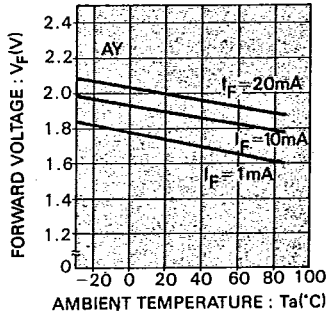
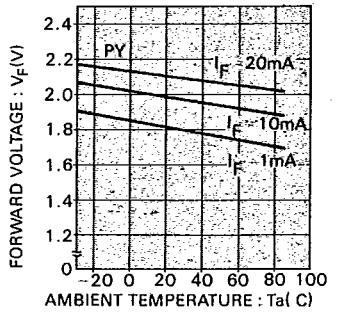
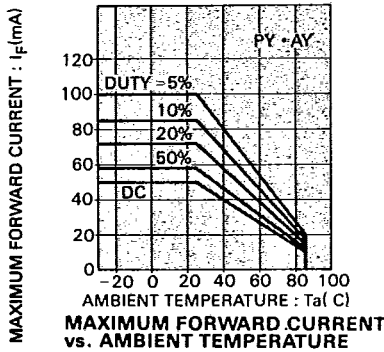
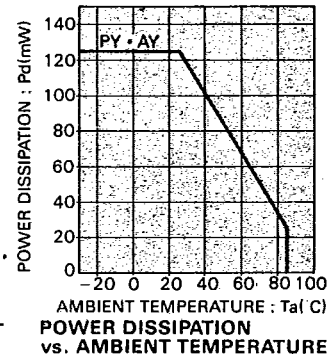
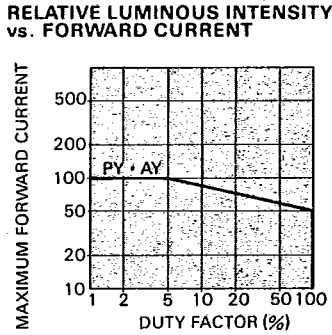
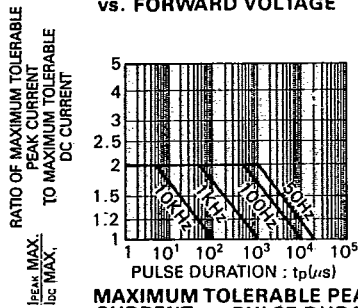
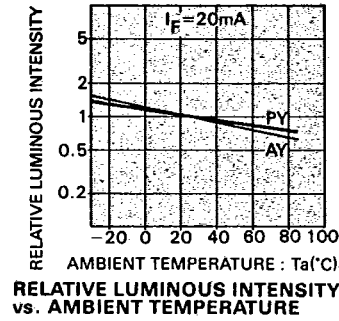
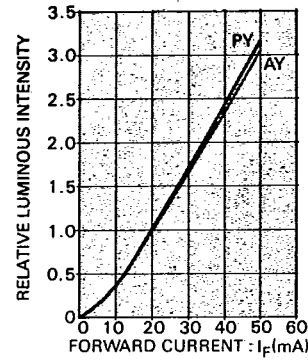
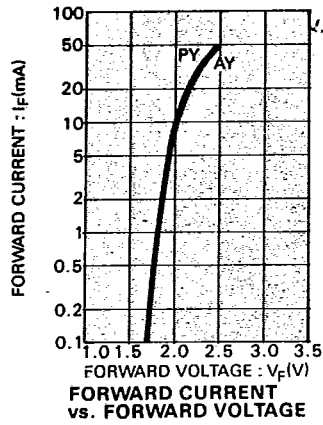


FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



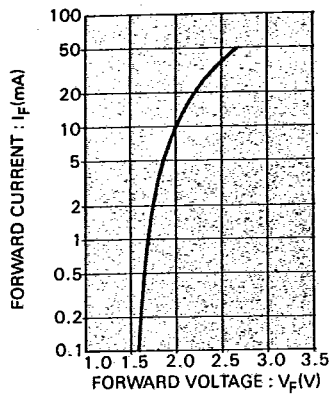
YELLOW

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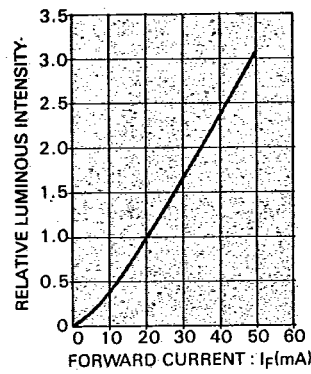


ORANGE

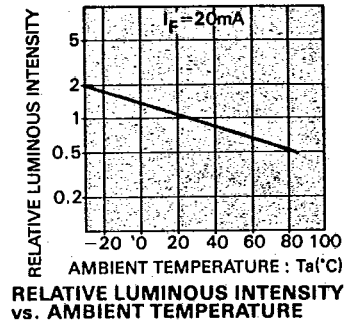
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FORWARD CURRENT vs. FORWARD VOLTAGE

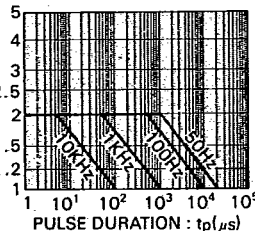


RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT

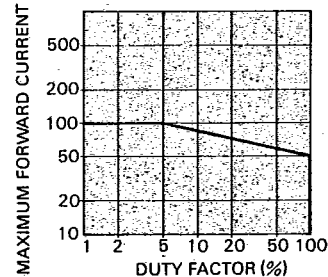


RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE

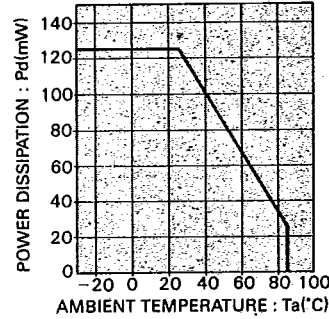
RATIO OF MAXIMUM TOLERABLE
PEAK CURRENT
TO MAXIMUM TOLERABLE
DC CURRENT



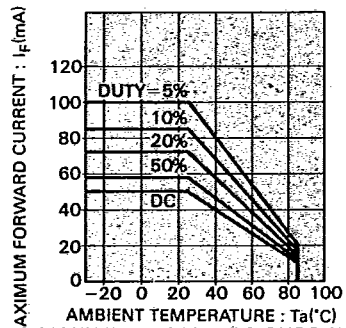
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



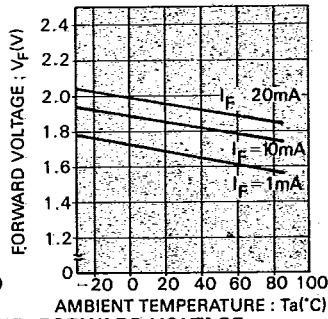
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



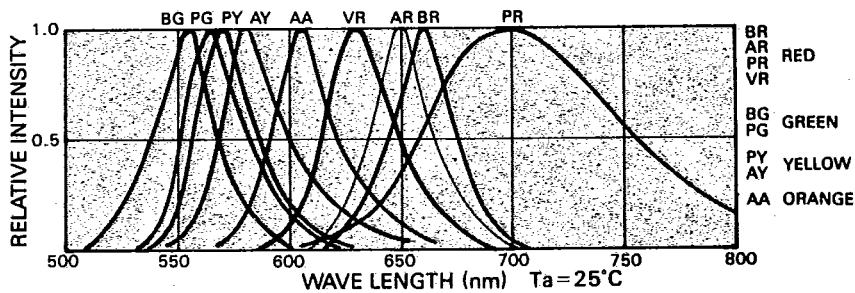
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



RELATIVE INTENSITY vs. WAVE LENGTH

LED LAMP