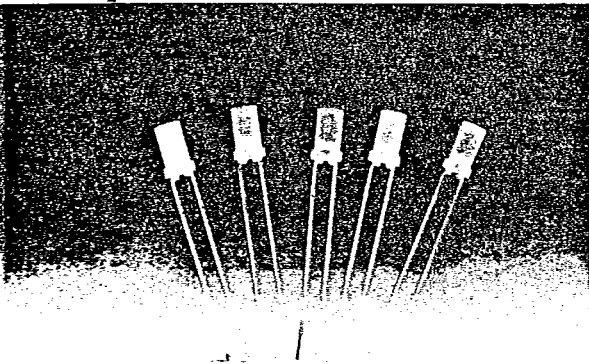


STANLEY

T-41-23

**STANLEY
SUPER BRIGHT
LED LAMP** $\phi 3(T-1)$ TYPE**3889S****SERIES****SELECTION GUIDE**

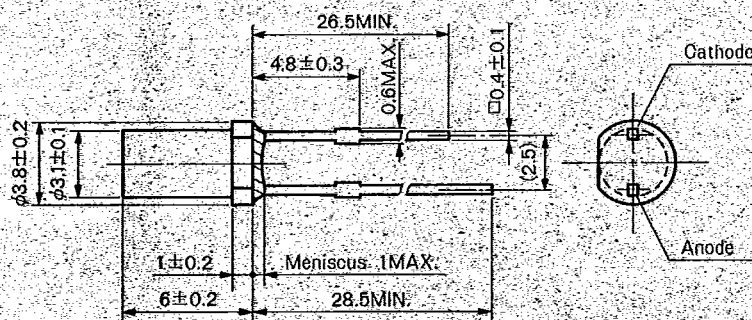
COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	BR 3889S
	GaAsP/GaP	VR 3889S
	GaP	PR 3889S
Green	GaP	BG 3889S
		PG 3889S
Yellow	GaP	PY 3889S
	GaAsP/GaP	AY 3889S
Orange	GaAsP/GaP	AA 3889S

DESCRIPTION

This series was developed for use as compact surface displays.

It is housed in the 3mm diameter cylindrical molded packages and features a flat display surface for uniform brightness when used on panels.

Ideal for telephone and audio-visual equipment displays

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 _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)								

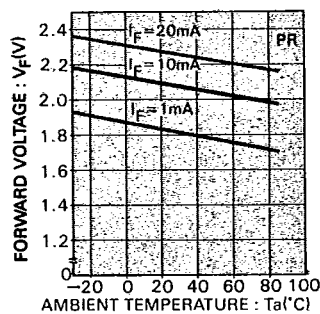
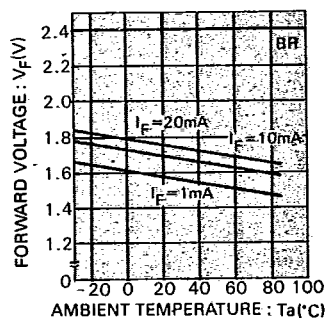
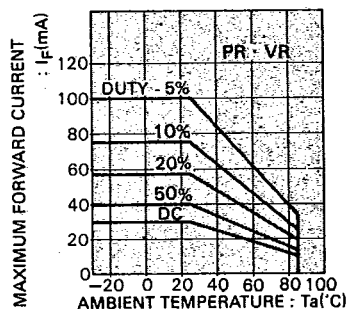
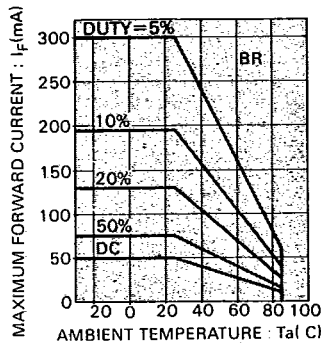
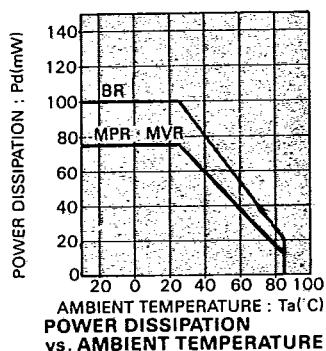
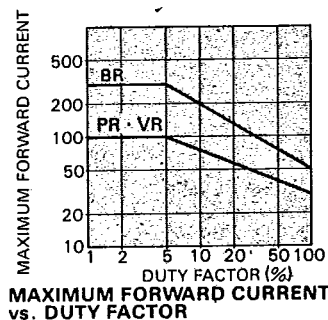
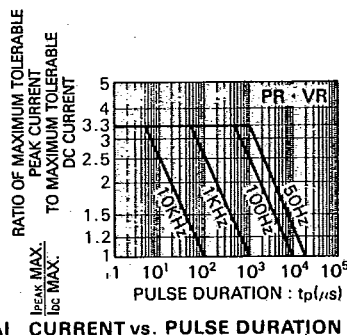
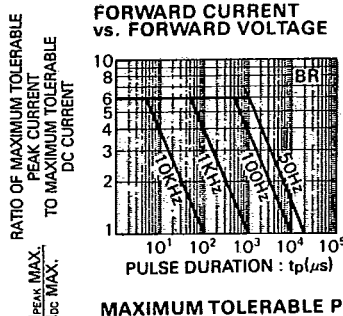
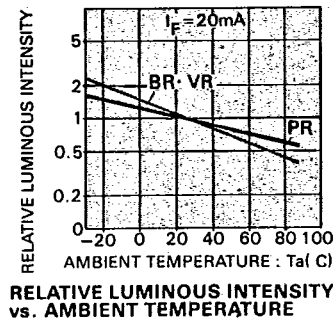
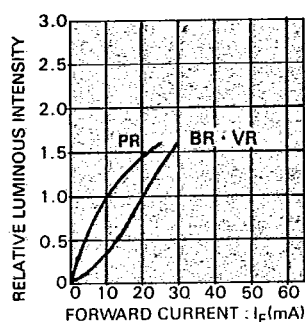
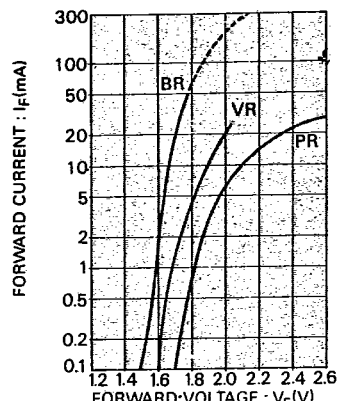
Electro-Optical Characteristics (Ta=25°C)

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 _F =4V I _s (μA)	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
BR3889S	GaAlAs	Red	P.S.D	4	8	20	660	30	1.7	2.0	20	20	50
PR3889S	GaP	Red	P.S.D	0.6	0.9	10	700	100	2.1	2.5	10	20	70
VR3889S	GaAsP/GaP	Red	P.S.D	3	6	20	630	30	2.0	2.5	20	20	35
BG3889S	GaP	Green	P.S.D	0.8	1.6	20	555	30	2.1	2.5	20	20	50
PG3889S	GaP	Green	P.S.D	2	4	20	560	30	2.1	2.5	20	20	40
PY3889S	GaP	Yellow	P.S.D	2.5	5	20	570	30	2.1	2.5	20	20	40
AY3889S	GaAsP/GaP	Yellow	P.S.D	2	4	20	580	30	2.2	2.5	20	20	40
AA3889S	GaAsP/GaP	Orange	P.S.D	2.5	5	20	605	30	2.2	2.5	20	20	50



RED

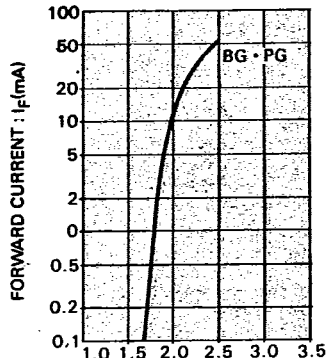
T-41-23



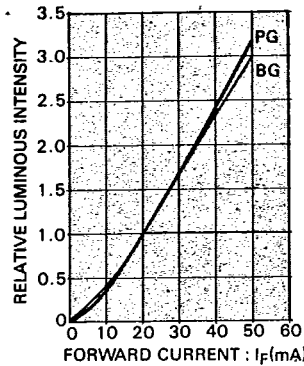
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

GREEN

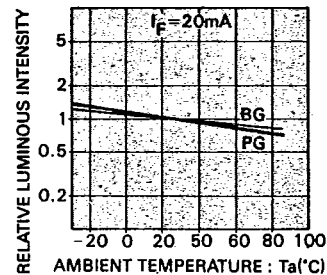
T-41-23



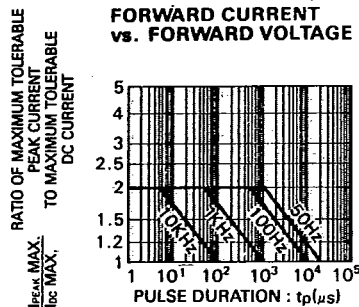
FORWARD CURRENT : I_F (mA)
FORWARD VOLTAGE : V_F (V)
FORWARD CURRENT vs. FORWARD VOLTAGE



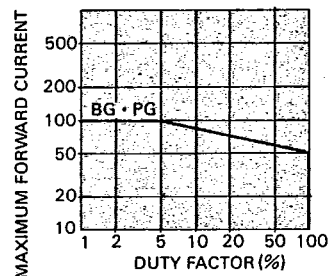
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



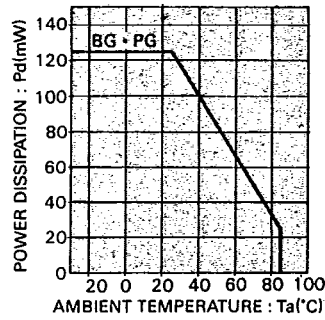
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



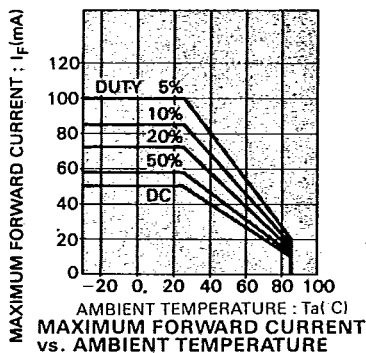
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



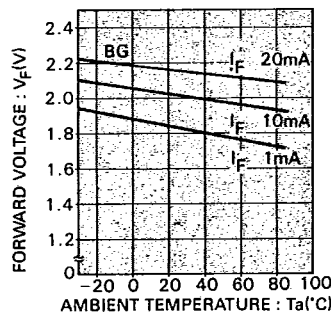
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



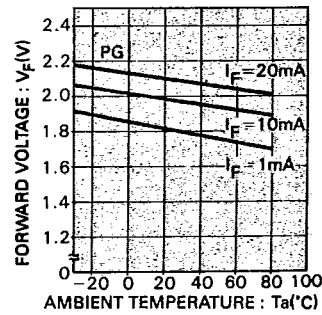
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



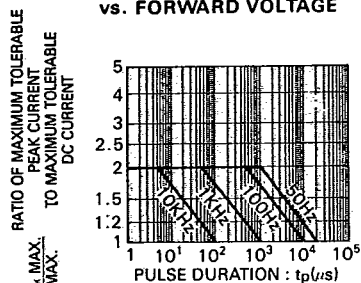
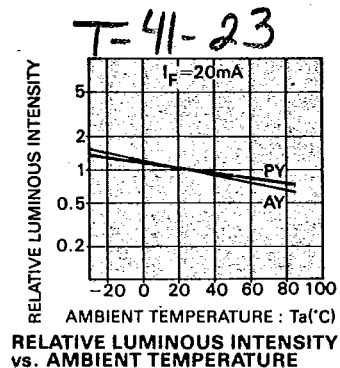
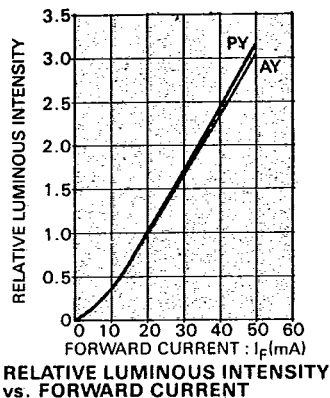
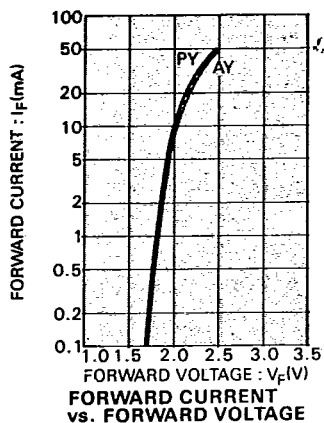
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



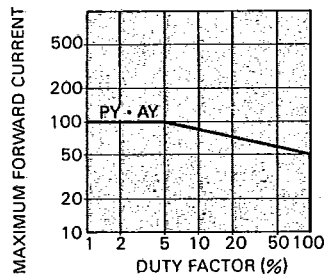
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



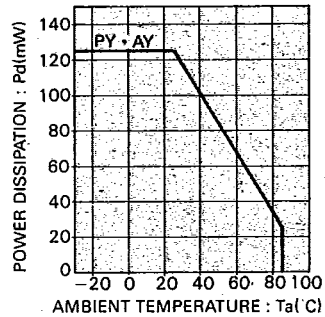
YELLOW



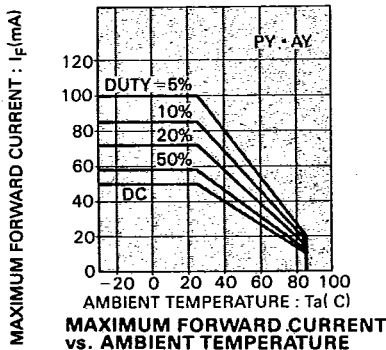
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



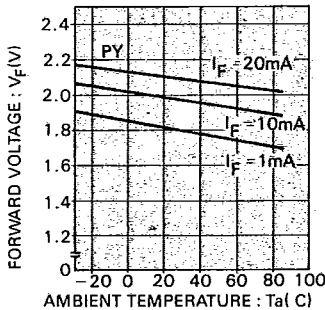
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



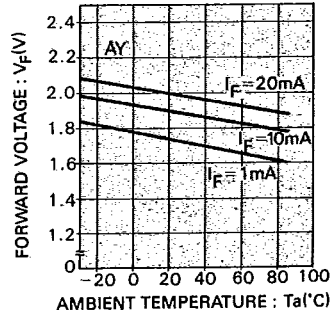
POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



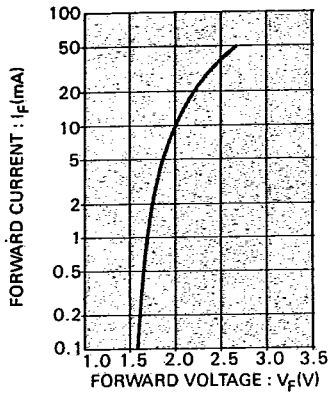
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

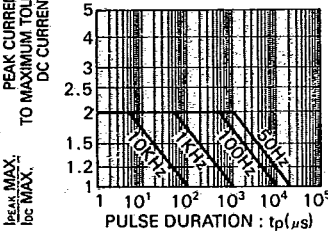
ORANGE

T-41-23

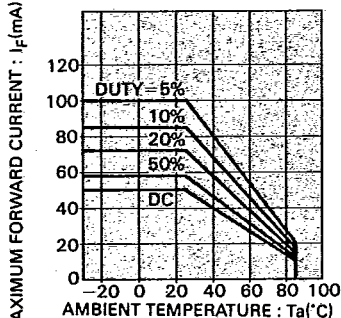


FORWARD CURRENT vs. FORWARD VOLTAGE

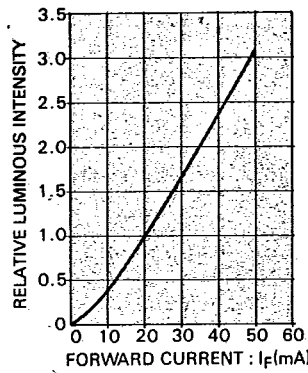
RATIO OF MAXIMUM TOLERABLE
PEAK CURRENT
TO MAXIMUM TOLERABLE
DC CURRENT



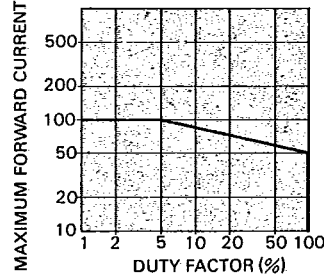
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



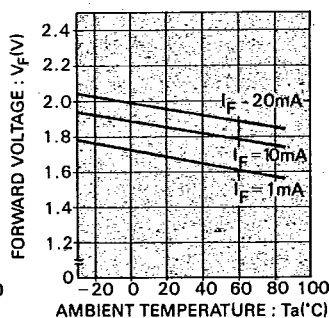
MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE



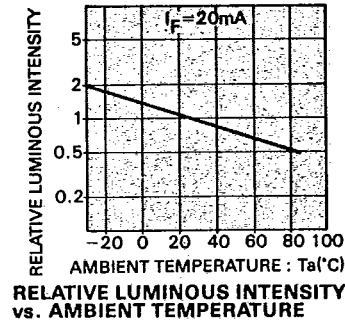
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



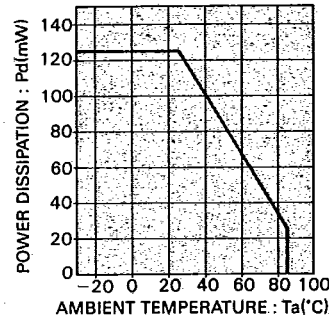
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR



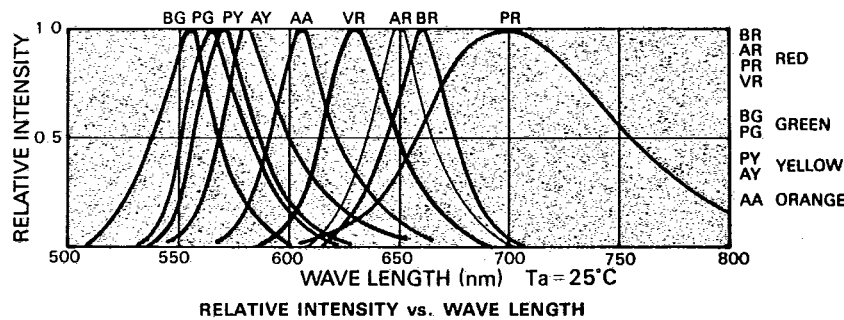
FORWARD VOLTAGE vs. AMBIENT TEMPERATURE



RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



POWER DISSIPATION vs. AMBIENT TEMPERATURE



RELATIVE INTENSITY vs. WAVE LENGTH

LED LAMP