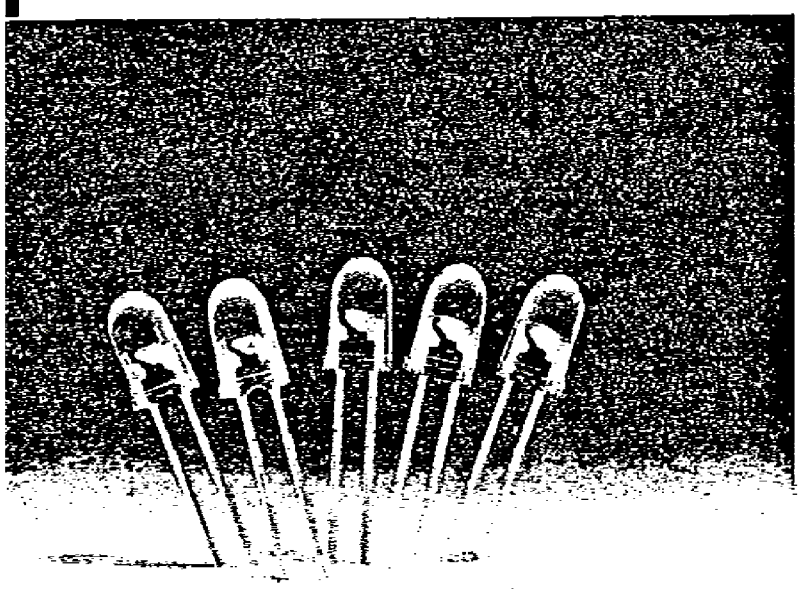
STANLEY

STANLEY SUPER BRIGHT LED LAMP

φ5(T-1¾)TYPE

5566X SERIES



■SELECTION GUIDE

COLOR	MATERIAL	PART NUMBER
Red	GaAlAs	HBR 5566X
Green	GaP	HBG 5566X
		HPG 5566X
Yellow	GaP	HPY 5566X
	GaAsP/GaP	HAY 5566X
Orange	GaAsP/GaP	HAA 5566X

■FEATURES

- Four-colors(red, green, yellow or orange), high-intensity output series
- Paraboloid lens surface, ideal for light output
- 5mm diameter pastel colored molded packages
- Large allowable current and high reliability
- Ideal for pulse drives

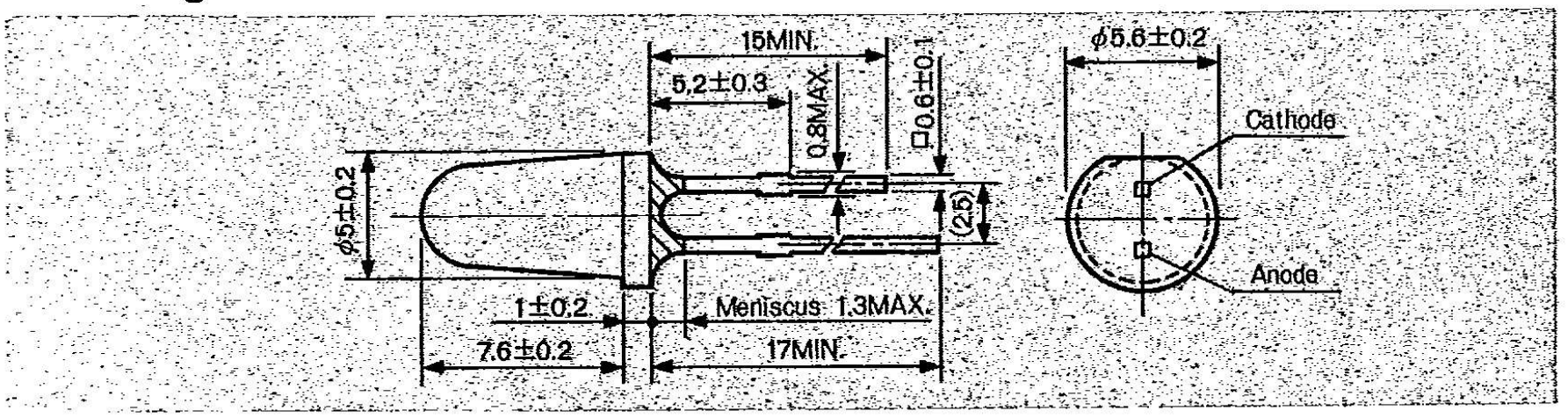
■APPLICATIONS

- Information displays
- Indoor/outdoor displays
- Photosensor light sources
- Automotive applications
- Safety equipment
- Optical data transmission

■DESCRIPTION

The H□□5566X Series of LEDs provides a selection of extremely bright red, green, yellow, or orange output. They are housed in 5mm diameter pastel colored molded packages and feature an ideal paraboloid lens surface configuration to ensure high radiation emission efficiency. They were designed for a wide range of applications in such new fields as automobiles and outdoor displays.

■Package Dimensions–Unit in mm



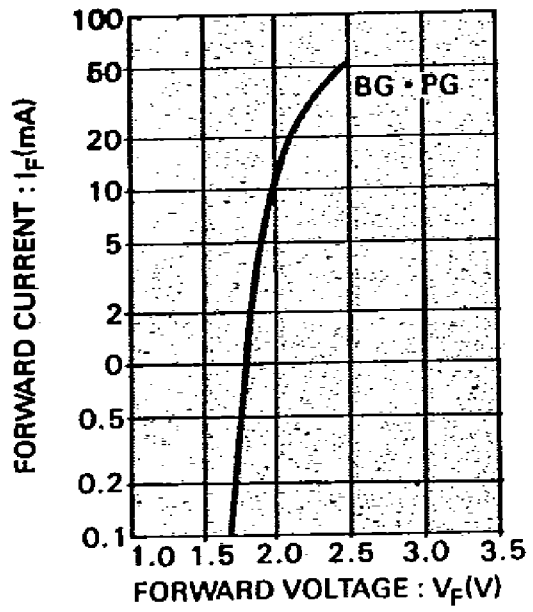
■Absolute Maximum Ratings (Ta=25°C

Parameter	Symbol	Red			Green		Yellow		Orange	Units
		BR	PR	VR	BG	PG	PY	AY	AA	
Forward Current	I_F	50			50	50	50	50	50	mA
Peak Forward Current	I_{FM}	300			100	100	100	100	100	mA
Reverse Voltage	V_R	4			4		4		4	V
Power Dissipation	Pd	100			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)								

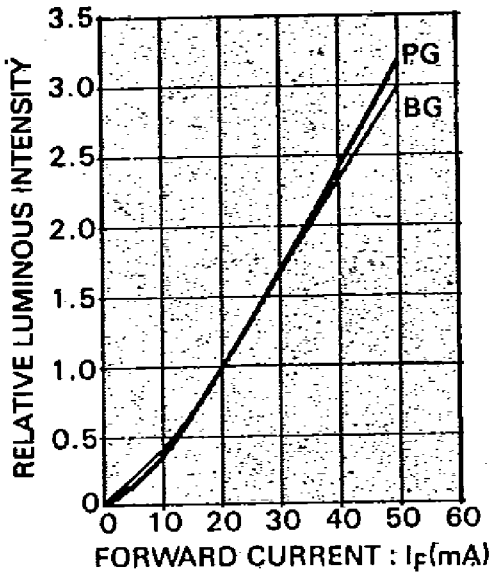
■Electro-Optical Characteristics (Ta=25°C)

Type No.	Chip		Lens	Iv(mcd)		at I_F (mA)	Peak Wave Length λp(nm)	Spectral Line Half Width Δλ(nm)	V_F(V)		at I_F (mA)	at V_R4V I_R(μA)	Capacitance Co(pF)
	Material	Emitted Color		Min.	Typ.				Typ.	Max.			
HBR5666X	GaAlAs	Red	P.C	200	300	20	660	30	1.7	2.0	20	20	50
HBG5666X	GaP	Green	P.C	100	150	20	555	30	2.1	2.5	20	20	50
HPG5566X	GaP	Green	P.C	150	200	20	560	30	2.1	2.5	20	20	40
HPY5666X	GaP	Yellow	P.C	200	300	20	570	30	2.1	2.5	20	20	40
HAY5666X	GaAsP/GaP	Yellow	P.C	100	150	20	580	30	2.2	2.5	20	20	40
HAA5666X	GaAsP/GaP	Orange	P.C	160	250	20	605	30	2.2	2.5	20	20	50

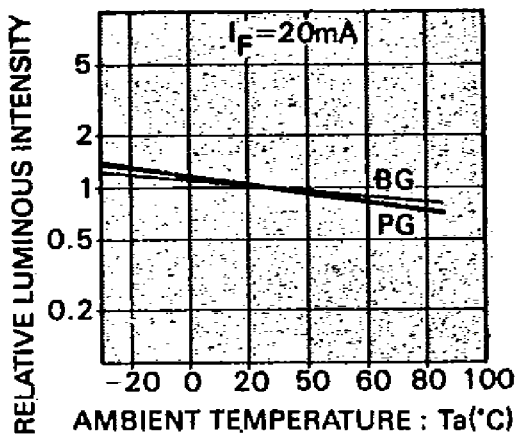
■GREEN



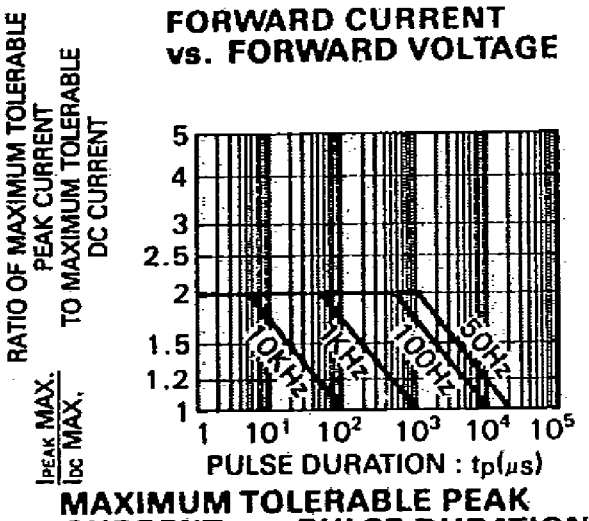
FORWARD CURRENT vs. FORWARD VOLTAGE



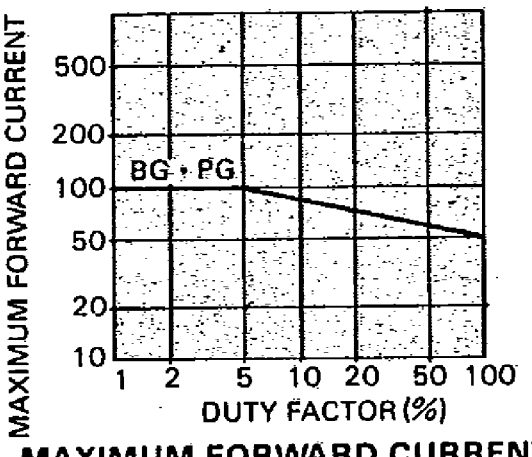
RELATIVE LUMINOUS INTENSITY vs. FORWARD CURRENT



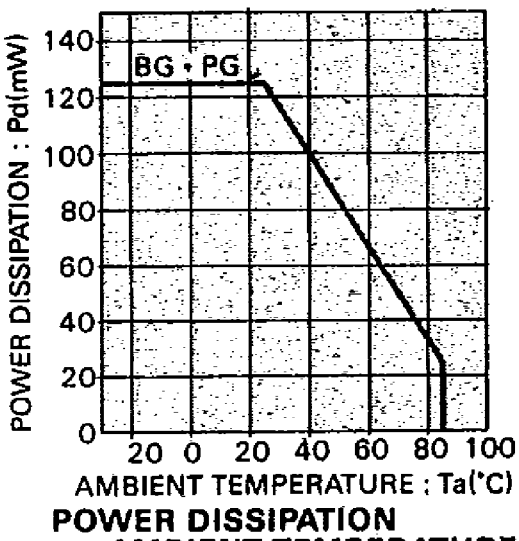
RELATIVE LUMINOUS INTENSITY vs. AMBIENT TEMPERATURE



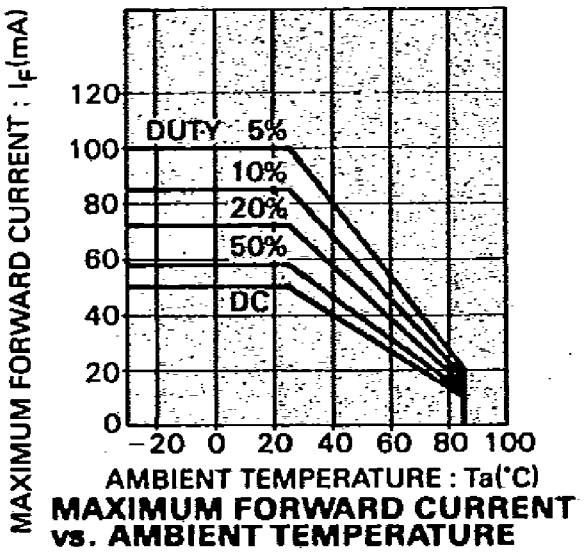
MAXIMUM TOLERABLE PEAK CURRENT vs. PULSE DURATION



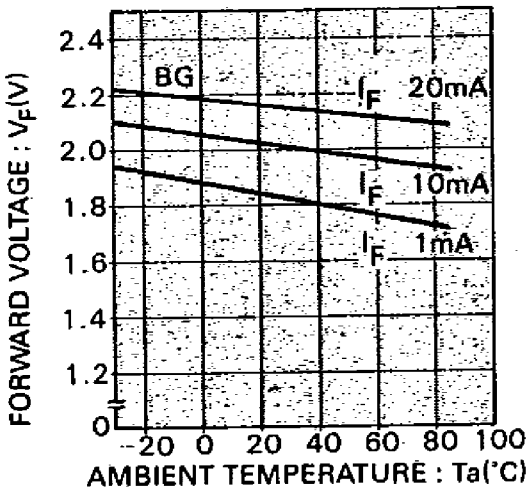
MAXIMUM FORWARD CURRENT vs. DUTY FACTOR

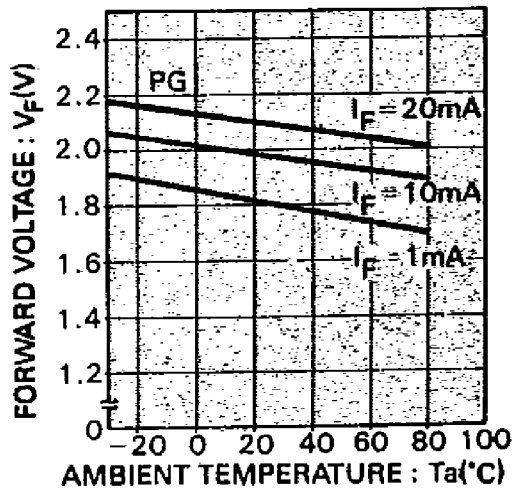


POWER DISSIPATION vs. AMBIENT TEMPERATURE



MAXIMUM FORWARD CURRENT vs. AMBIENT TEMPERATURE

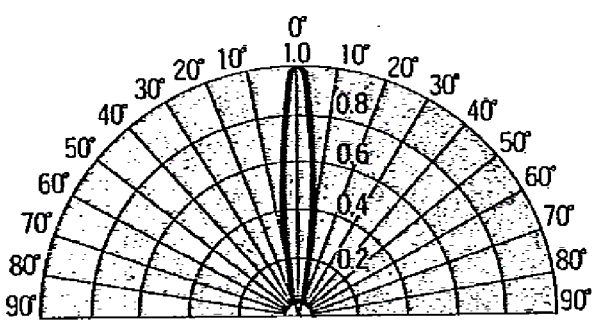




FORWARD VOLTAGE vs. AMBIENT TEMPERATURE

■SPATIAL DISTRIBUTION

BG



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