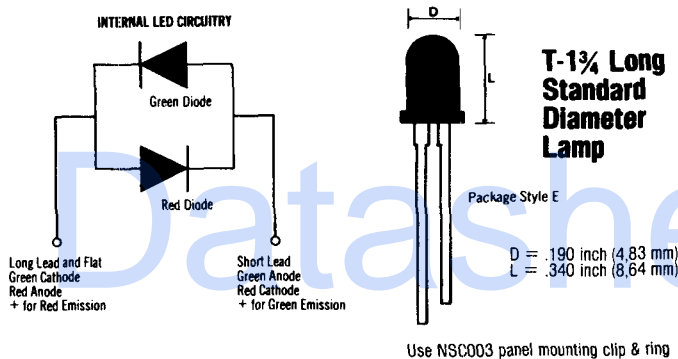


# BI-COLOR LED LAMP XC-5491

This unique lamp contains two LED dice. With one current polarity the XC-5491 emits bright red light. Reverse the current and bright green light is emitted. The XC-5491 is designed to produce uniform, bright light intensity at a modest 10 mA drive.

Applications include electronic music systems, alarm circuits, and instrumentation.

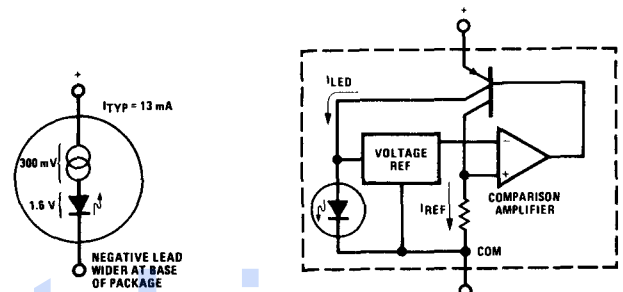
## RED – GREEN – OFF IN ONE PACKAGE



# NSL4944 Current Regulated, Universal RED LED Lamp

This lamp contains an internal current regulating IC that provides a constant intensity over a wide voltage range. The NSL-4944 emits red light and is packaged in a standard two leaded T-1-3/4 (5 mm) red diffused plastic package. This lamp may be either ac or dc driven.

Application include indicator lights, annunciators, PCB logic status indicators, and battery charging circuits.



## PACKAGE STYLE S

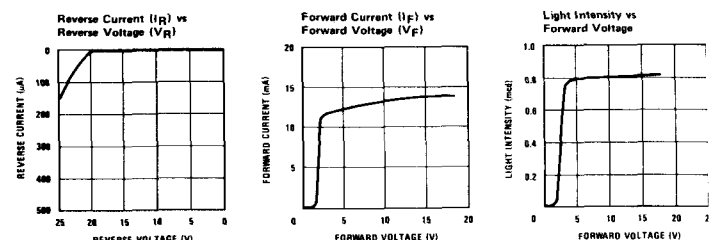
ELECTRICAL/OPTICAL CHARACTERISTICS (25°C)			
Forward Voltage at 10 mA	Typ	Volts	2.2
	Max	Volts	2.8
Dynamic Resistance	Typ	Ohms	25
Capacitance, V=0	Typ	pf	100
Peak Wavelength	Red	nm	697
	Grn	nm	565
Light Output (Red and Green) at 10 mA	Min	mcd	0.6
	Typ	mcd	1.8
ABSOLUTE MAXIMUM RATINGS at 25°C			
Maximum Continuous Current (Red and Green)	mA		25
Peak Pulse Current 0.5 mS, 500 Hz	mA		60
Maximum Power Dissipation	mW		115
Derate Linearly From 25°C	mW/°C		1.5
Storage and Operating Temp Range	°C		-55 to +100
Max Lead Solder Temperature (5 sec. immersion, 1/16 inch from plastic)	°C		260

## Electrical/Optical Characteristics (25°C)

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Forward Current ( $I_F$ )	$2.4 \leq V_F \leq 18V$	10	13	18	mA
Light Intensity (I)	$V_F \approx 5V$	0.2	0.8		mcd
Reverse Breakdown Voltage ( $BV_R$ )	$I_R = 100\mu A$	18.0			V
Peak Wavelength ( $\lambda_{pk}$ )	$V_F = 10V$		660		nm
Spectral Width	$V_F = 10V$		40		nm
Angle of Half Intensity	$V_F = 10V$		110		degrees
Minimum Operational Voltage	$I_F = 10 \text{ mA}$		1.9	2.4	V

See Applications Note AN-153 for further information.  
Use NSC003 Panel Mounting Clip & Ring.

## Typical Performance Characteristics (25°C)



High Efficiency RED, YELLOW & GREEN units are available on special order, consult National Sales Office