NEC
NEC Electronics Inc.

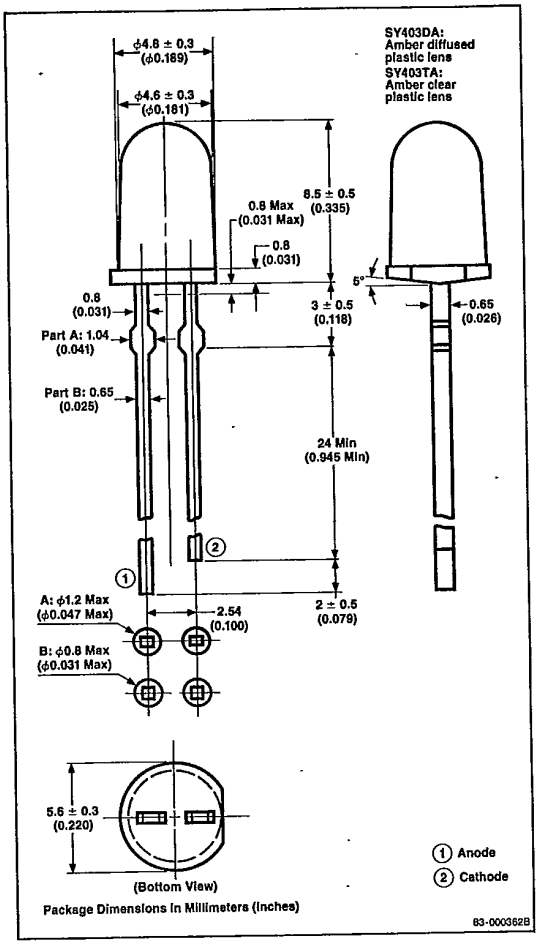
SY403DA/TA AMBER GaAsP(N) HIGH INTENSITY LEDs

NEPOC SERIES

Description

The SY403DA and SY403TA are full resin-molded lamps which emit bright, vivid amber light. They are especially suitable for electronic equipment in audio applications which require high-brightness displays.

Package Dimensions



Features

- ☐ High intensity
- ☐ Wide angle
- ☐ Long lead
- ☐ Good sensitivity—590nm
- ☐ Low cost
- ☐ Compatible and intgrated circuits

Applications

- ☐ Visual displays
- ☐ Guard systems
- ☐ Mobile equipment indicators
- ☐ Stereo equipment indicators
- ☐ Transceiver indicators

Absolute Maximum Ratings

$T_A = +25°C$

Power Dissipation, P_D	100mW
Forward Current, I_F	40mA
Reverse Voltage, V_R	5V
Junction Temperature, T_J	100°C
Storage Temperature, T_{STG}	−40°C to +100°C

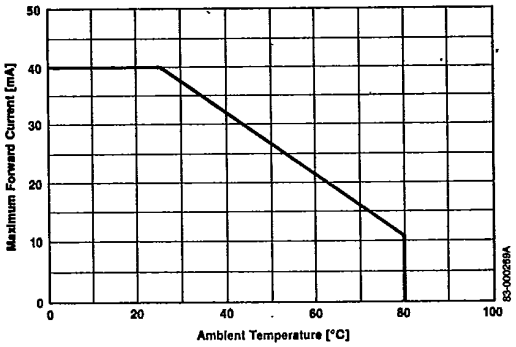
Electro-Optical Characteristics

$T_A = +25°C$

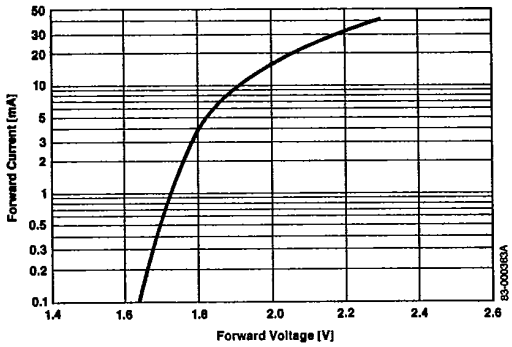
Parameters	Symbol	Limits Min	Typ	Max	Unit	Test Conditions
Forward Voltage	V_F		2.1	2.5	V	$I_F = 10mA$
Reverse Current	I_R		0.01	10	μA	$V_R = 4.5V$
Capacitance	C_T		60		pF	V = 0, f = 1.0MHz
Peak Emission Wavelength	λ_{PEAK}		590		nm	$I_F = 10mA$
Spectral Line Half Width	$\Delta\lambda$		40		nm	$I_F = 10mA$
Luminous Intensity SR403DA)	I_V	2	5		mcd	$I_F = 10mA$
Luminous Intensity (SR403TA)	I_V	5	10		mcd	$I_F = 10mA$

Typical Characteristics
T_A = +25°C

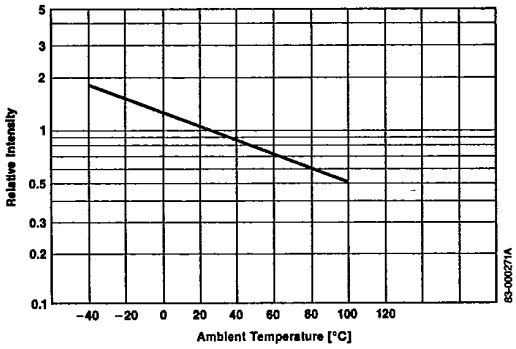
Maximum Forward Current vs Ambient Temperature



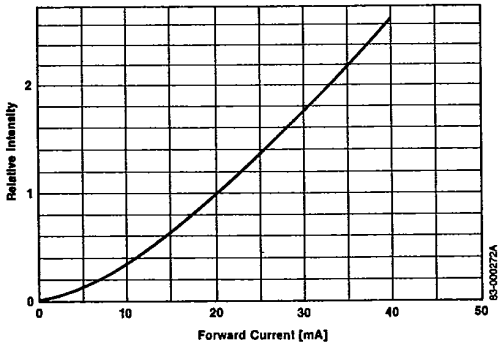
Forward Current vs Forward Voltage



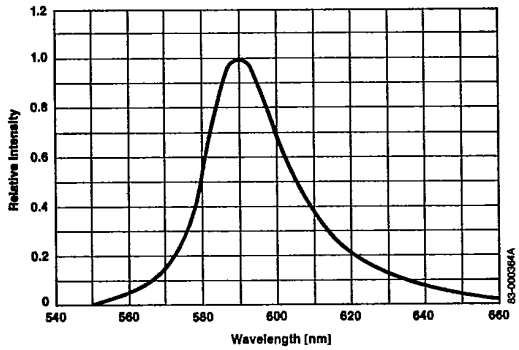
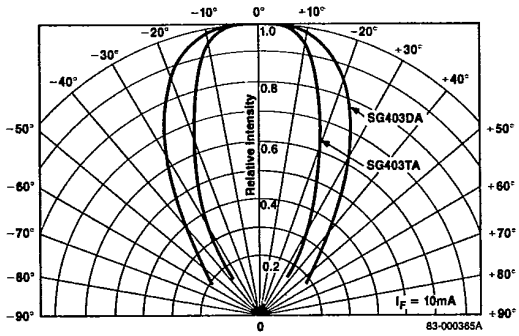
Relative Intensity vs Ambient Temperature



Relative Intensity vs Forward Current



Spectral Distribution



Spatial Distribution