# SY405D/T AMBER GaAsP(N) HIGH INTENSITY LEDs

*NEPOC SERIES*

## Description

The SY405D and SY405T are GaAsP & Gallium Arsenide Phosphide) light emitting diodes which are mounted on lead frames and molded in diffused amber and clear amber plastic, respectively. They are ideally suited for front panel indicator applications.

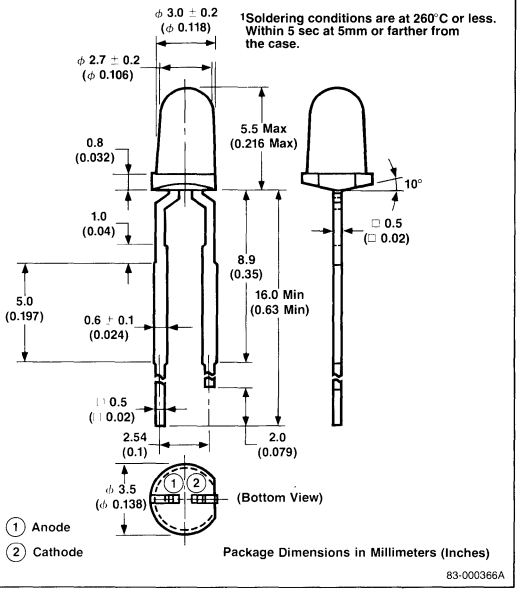
## Features

- ☐ Good sensitivity—590nm
- ☐ Long life—solid state reliability
- ☐ Low cost
- ☐ High intensity with low current
- ☐ Versatile mounting on PC board or panel
- ☐ Compatible with integrated circuits
- ☐ Fast switching time

## Applications

- ☐ Visual displays
- ☐ Guard systems
- ☐ Radio and stereo equipment indicators
- ☐ Measuring instruments, terminals

## Package Dimensions




## Absolute Maximum Ratings

$T_A = +25°C$

| | |
|---|---|
| Power Dissipation, $P_D$ | 100mW |
| Forward Current, $I_F$ | 40mA |
| Reverse Voltage, $V_R$ | 5V |
| Junction Temperature, $T_J$ | 80°C |
| Storage Temperature, $T_{STG}$ | −30°C to +80°C |

## Electro-Optical Characteristics

$T_A = +25°C$

| Parameters | Symbol | Limits Min | Typ | Max | Unit | Test Conditions |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | | 2.2 | 2.5 | V | $I_F$ = 10mA |
| Reverse Current | $I_R$ | | 0.01 | 50 | μA | $V_R$ = 4.5 |
| Capacitance | $C_T$ | | 60 | | pF | V = 0, f = 1.0MHz |
| Peak Emission Wavelength | $\lambda_{PEAK}$ | | 590 | | nm | $I_F$ = 10mA |
| Spectral Line Half Width | $\Delta\lambda$ | | 35 | | nm | $I_F$ = 10mA |
| Luminous Intensity | $I_{V1}/I_{V2}$1 | 1/3 | 3/5 | | mcd | $I_F$ = 10mA |

**Note:** 1. $I_{V1}/I_{V2}$: Luminous intensity of SY 405D/luminous intensity of SY405T.

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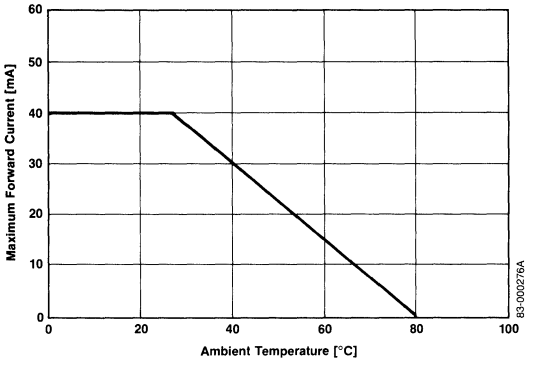
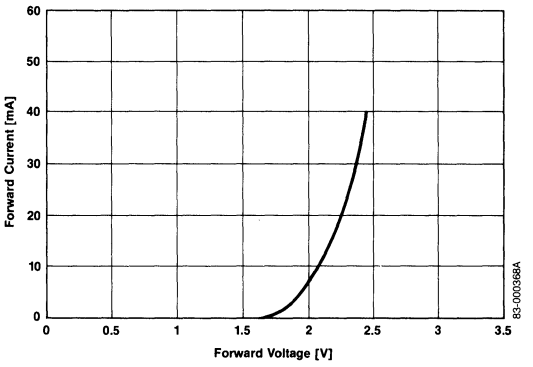
## Typical Characteristics

$T_A$ = +25°C

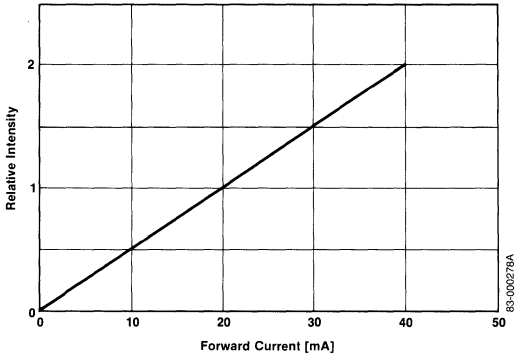
Maximum Forward Current vs Ambient Temperature



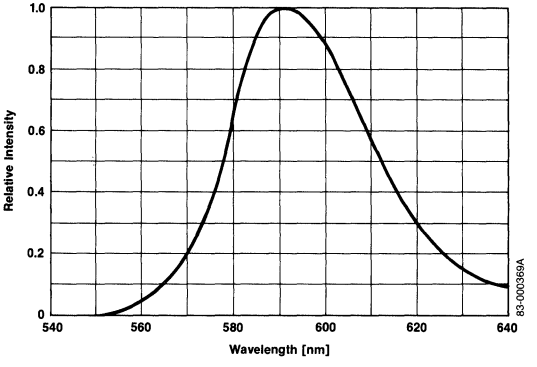

Forward Current vs Forward Voltage




Relative Intensity vs Forward Current




Spectral Distribution




Spatial Distribution