

W503YDT YELLOW

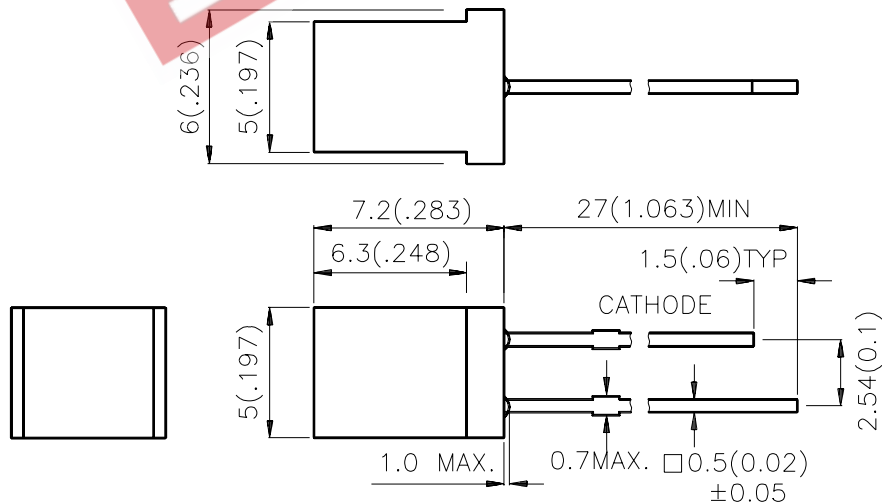
Features

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE.
- WIDE VIEWING ANGLE.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- IDEAL AS FLUSH MOUNTED PANEL INDICATORS.
- LONG LIFE - SOLID STATE RELIABILITY.

Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	2θ1/2
W503YDT	YELLOW(GaAsP/GaP)	YELLOW DIFFUSED	1	3	110°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

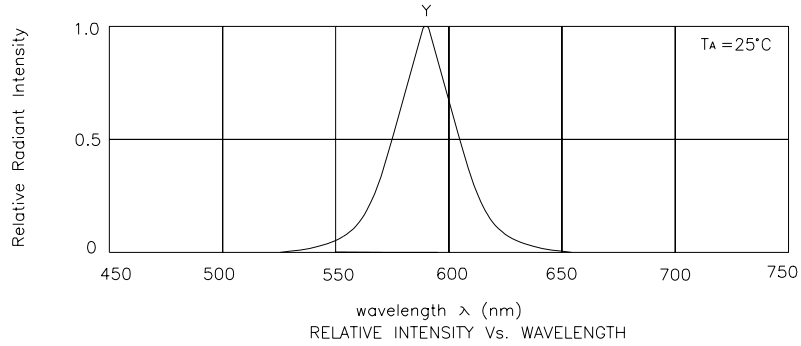
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Yellow	590		nm	I _F =20mA
λ _D	Dominate Wavelength	Yellow	588		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Yellow	35		nm	I _F =20mA
C	Capacitance	Yellow	20		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Yellow	2.1	2.5	V	I _F =20mA
I _R	Reverse Current	Yellow		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Yellow	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

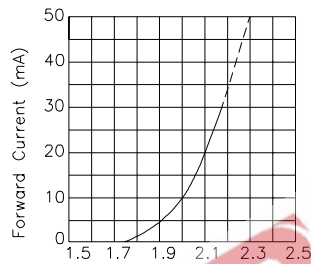
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.

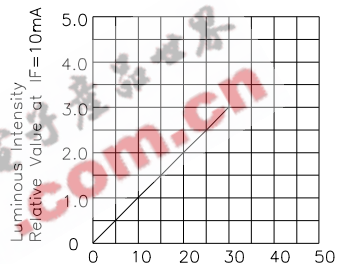


Yellow

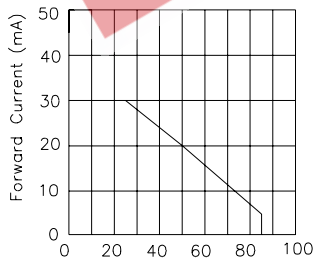
W503YDT



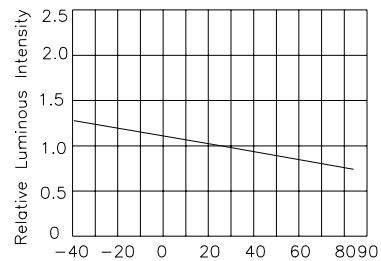
Forward Voltage(V)
FORWARD CURRENT vs.
FORWARD VOLTAGE



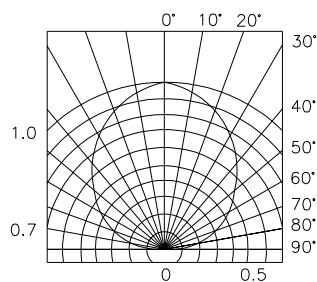
Forward Current (mA)
LUMINOUS INTENSITY vs.
FORWARD CURRENT



Ambient Temperature T_A ($^\circ\text{C}$)
FORWARD CURRENT
DERATING CURVE



Ambient Temperature T_A ($^\circ\text{C}$)
LUMINOUS INTENSITY vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION