





# AND176RAG

# Dual Color High Brightness LED T-1 3/4 Package (5 mm)

#### **Features**

- Dual color: Red (GaAlAs), Green (GaP)
- Common Cathode
- All plastic mold type, clear colorless lens
- Low drive current:

Recommended forward current:

Red: 3 to 5 mA (DC) Green: 15 to 20 mA (DC)

• Fast response time, capable of pulse operation

#### Maximum Ratings (T = 25°C)

Characteristics	Symbol	Rating	Unit
Forward Current	I <sub>F</sub>	40	mA
Reverse Voltage	V <sub>R</sub>	4	V
Power Dissipation	P <sub>D</sub>	120	mW
Operating Temperature Range	T <sub>Opr</sub>	-30 to 85	°C
Storage Temperature Range	T <sub>Stg</sub>	-40 to 100	°C

## **Electro-Optical Characteristics (T = 25°C)**

Characteristics	Color	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	Red	- V <sub>F</sub>	I <sub>F</sub> = 20 mA	-	1.85	2.2	V
	Green			_	2.15	2.8	
Reverse Current	Red	- I <sub>R</sub>	V <sub>R</sub> = 4 V	_	_	100	μΑ
	Green			_	_	5	
Luminous Intensity	Red	I <sub>V</sub>	I <sub>F</sub> = 20 mA	180	500	_	mcd
	Green			100	150	_	
Peak Emission Wavelength	Red	- I <sub>P</sub>	I <sub>F</sub> = 20 mA	_	660	_	nm
	Green			_	567	_	
Spectral Line Half Width	Red	Δλ	I <sub>F</sub> = 20 mA	_	30	_	nm
	Green			_	25	_	
Dominant Wavelength	Red	λd	I <sub>F</sub> = 20 mA	_	640	_	nm
	Green			-	563	_	
Full Viewing Angle	Red	θ	I <sub>F</sub> = 20 mA	-	30	_	degree
	Green			-	30	_	

#### Precaution

Please be careful of the following:

- 1. Soldering temperature: 260°C max
  - Soldering time: 3 sec. max
  - Soldering portion of lead: up to 2 mm from the body of the device
- 2. The lead can be formed up to 5 mm from the body of the device without forming stress. Soldering should be performed after the lead forming.

### **Dual Color High Brightness LED**











