

**5mm**  
**LED CBI® Circuit Board Indicator**  
**Vertical, Various Heights**

**Dialight**

**561-xx0x-xxx**



**Features**

- Multiple CBIs form horizontal LED arrays on 7.24mm (0.285") center-lines.
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 29%(all sizes)

**Custom Devices**

- Contact factory for other LED types or alternate heights

**Tolerance note: As noted, otherwise:**

- LED Protrusion: ±0.04 mm [±0.016]
- CBI Housing: ±0.02mm[±0.008]

**PART NO.**

**INTEGRAL RESISTOR, 5 VOLTS**

561-0104-xxx

**COLOR**

Red

**LOW CURRENT**

561-1101-xxx

Red

561-1201-xxx

Yellow

561-1301-xxx

Green

**HIGH EFFICIENCY**

561-0901-xxx

Orange

561-2101-xxx

Red

561-2201-xxx

Green

561-2301-xxx

Yellow

**HIGH EFFICIENCY, TINTED, NON DIFFUSED**

561-2401-xxx

Red

561-2501-xxx

Green

561-2601-xxx

Yellow

**SUPER BRIGHT, DIFFUSED**

561-5101-xxx

Red

561-5201-xxx

Green

561-5301-xxx

Yellow

**SUPER BRIGHT, WATER CLEAR (Non-Tinted, Non-Diffused)**

561-5501-xxx

Red

561-5601-xxx

Green

561-5701-xxx

Yellow

**BI-COLOR**

561-3001-xxx

Red/Green

561-3101-xxx

Yellow/Green

**6**

**NEW**  
**NEW**



# 561-xx0x-xxx

## Typical Operating Characteristics ( $T_A=25^{\circ}\text{C}$ )

See LED data sheet for additional information

### INTEGRAL RESISTOR, 5 VOLTS *See page 6-55 and 6-56 for Reference Only LED Drive Circuit Examples. See page 6-57 for Pin Out*

| Part Number  | Color | Peak Wavelength nm | $I_V$ mcd | Test Voltage | Forward Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|-------|--------------------|-----------|--------------|----------------------|------------------------------|----------------|--------|
| 561-0104-xxx | Red   | 635                | 8         | 5            | 10                   | 60°                          | 521-9183       | 6-41   |

### LOW CURRENT

| Part Number  | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-1101-xxx | Red    | 635                | 2         | 1.8         | 2                 | 50°                          | 521-9320       | 6-42   |
| 561-1201-xxx | Yellow | 583                | 1.8       | 1.9         | 2                 | 50°                          | 521-9321       | 6-42   |
| 561-1301-xxx | Green  | 565                | 1.8       | 1.8         | 2                 | 50°                          | 521-9327       | 6-42   |

### HIGH EFFICIENCY

| Part Number  | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-0901-xxx | Orange | 600                | 7         | 1.9         | 10                | 60°                          | 521-9704       | 6-43   |
| 561-2101-xxx | Red    | 635                | 7         | 2.2         | 10                | 60°                          | 521-9246       | 6-43   |
| 561-2201-xxx | Green  | 565                | 32        | 2*          | 10                | 50°                          | 5HD-9270-2     | 6-49   |
| 561-2301-xxx | Yellow | 590                | 10        | 2.4*        | 10                | 70°                          | 5HD-9271-2     | 6-49   |

\*  $I_F = 20\text{mA}$

### HIGH EFFICIENCY, TINTED, NON-DIFFUSED

| Part Number  | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-2401-xxx | Red    | 635                | 60        | 2.2         | 10                | 35°                          | 521-9247       | 6-44   |
| 561-2501-xxx | Green  | 565                | 70        | 2.3         | 10                | 24°                          | 521-9251       | 6-44   |
| 561-2601-xxx | Yellow | 583                | 50        | 2.2         | 10                | 35°                          | 521-9249       | 6-44   |

### SUPER BRIGHT, DIFFUSED

| Part Number  | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-5101-xxx | Red    | 650                | 34        | 2.1         | 20                | 50°                          | 5SD-9441       | 6-53   |
| 561-5201-xxx | Green  | 563                | 34        | 2.2         | 20                | 50°                          | 5SD-9456       | 6-53   |
| 561-5301-xxx | Yellow | 585                | 34        | 2.2         | 20                | 50°                          | 5SD-9455       | 6-53   |

### SUPER BRIGHT, WATER CLEAR (NON-TINTED, NON-DIFFUSED)

| Part Number  | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-5501-xxx | Red    | 635                | 125       | 2.2         | 20                | 24°                          | 521-9464       | 6-47   |
| 561-5601-xxx | Green  | 565                | 120       | 2.3         | 20                | 24°                          | 521-9465       | 6-47   |
| 561-5701-xxx | Yellow | 583                | 140       | 2.2         | 20                | 24°                          | 521-9466       | 6-47   |

### BI-COLOR

| Part Number  | Color        | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\Theta_{\%}$ | LED Data sheet | Page # |
|--------------|--------------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 561-3001-xxx | Red/Green    | 660/565            | 90/40     | 1.8/2.1     | 20                | 60°                          | 521-9651       | 6-46   |
| 561-3101-xxx | Yellow/Green | 585/565            | 8.7/8.7   | 2.1/2.1     | 20                | 50°                          | 521-9724       | 6-46   |



# 5mm Discrete LED Integral Resistor, 5 Volts Diffused

# Dialight

## 521-9183, -9284



| <u>PART NO.</u> | <u>LED COLOR</u> |
|-----------------|------------------|
| 521-9183        | Red              |
| 521-9284        | Yellow           |

**MOUNTING CLIP:** 515-0004  
located on page 6-48

| <b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ ) | Red<br><b>-9183</b>                | Yellow<br><b>-9284</b> |
|--|------------------------------------|------------------------|
| Forward Voltage (V)  | 7.5                                | 7.5                    |
| Derating (V/°C) From 50°C                                  | .071                               | .071                   |
| Operating Temperature (°C)                                 | -40/+85                            | -40/+85                |
| Storage Temperature (°C)                                   | -55/+100                           | -55/+100               |
| Soldering Temperature                                      | 260°C, 5 seconds, 1.6 mm from case |                        |

Solder Adherence per MIL-STD-202E, Method 208C

| <b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ ) |         | Red<br><b>-9183</b> | Yellow<br><b>-9284</b> |
|---|---------|---------------------|------------------------|
| Luminous Intensity (mcd)                                    | Min.    | 2                   | 2                      |
|   | Typical | 8                   | 8                      |
| Peak Wavelength (nm)  | Typical | 635                 | 583                    |
| Viewing Angle ( $2\theta^{1/2}$ )                           | Typical | 60°                 | 60°                    |
| Forward Current (I)   | Typical | 10                  | 10                     |
|   | Max     | 15                  | 15                     |
| Reverse Voltage (V), $I_R=100\mu\text{A}$                   | Min.    | 5                   | 5                      |

$\theta^{1/2}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

# 6

**5mm Discrete LED**  
**Low Current, 2mA**  
**Diffused**

**Dialight**

**521-9320, -9321, -9327**



| PART NO. | COLOR  |
|----------|--------|
| 521-9320 | Red    |
| 521-9321 | Yellow |
| 521-9327 | Green  |

**MOUNTING CLIP:** 515-0004  
 located on page 6-48

**ABSOLUTE MAXIMUM RATINGS** (TA=25°C)

|  | Red<br>-9320                       | Yellow<br>-9321 | Green<br>-9327 |
|--|------------------------------------|-----------------|----------------|
| Power Dissipation (mW)                   | 27                                 | 36              | 24             |
| Derating (mA/°C) From 92°C               | 1                                  | 1               | 1              |
| Forward Current (mA)                     | 7                                  | 7               | 7              |
| Peak Current (mA)<br>Pulse width = 10 μs | 500                                | 500             | 500            |
| Operating Temperature (°C)               | -55/+100                           | -55/+100        | -55/+100       |
| Storage Temperature (°C)                 | -55/+100                           | -55/+100        | -55/+100       |
| Soldering Temperature                    | 260°C, 5 seconds, 1.6 mm from case |                 |                |

Solder Adherence per MIL-STD-202E, Method 208C

**OPERATING CHARACTERISTICS** (TA=25°C)

|   |         | Red<br>-9320 | Yellow<br>-9321 | Green<br>-9327 |
|---|---------|--------------|-----------------|----------------|
| Luminous Intensity (mcd)                  | Min.    | 1.2          | 1.2             | 1.2            |
|   | Typical | 2            | 1.8             | 1.8            |
| Peak Wavelength (nm)<br>λ Peak            | Typical | 635          | 583             | 565            |
| Viewing Angle (2θ ½)                      | Typical | 50°          | 50°             | 50°            |
| Forward Voltage (V)                       | Typical | 1.8          | 1.9             | 1.8            |
|   | Max.    | 2.2          | 2.7             | 2.2            |
| Reverse Voltage (V), I <sub>R</sub> =50μA | Min.    | 5            | 5               | 5              |

θ ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity

**5mm Discrete LED**  
**High Efficiency**  
**Diffused**

**Dialight**

**521-9246, -9248, -9250, -9704**



| PART NO. | COLOR  |
|----------|--------|
| 521-9246 | Red    |
| 521-9248 | Yellow |
| 521-9250 | Green  |
| 521-9704 | Orange |

**MOUNTING CLIP: 515-0004**  
 located on page 6-48

| <b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )  | Red<br><b>-9246</b>                                | Yellow<br><b>-9248</b> | Green<br><b>-9250</b> | Orange<br><b>-9704</b> |
|---|--|------------------------|-----------------------|------------------------|
| Power Dissipation (mW)  | 135  | 85                     | 135                   | 135                    |
| Derating (mW/ $^\circ\text{C}$ ) From 25 $^\circ\text{C}$ 1. (mA/ $^\circ\text{C}$ ) From 50 $^\circ\text{C}$ | 1.8  | 1.6                    | 1.8                   | .5'                    |
| Forward Current (mA)  | 25   | 20                     | 25                    | 30                     |
| Peak Current (mA)<br>Pulse width = 10 $\mu\text{s}$   | 500  | 500                    | 500                   | 500                    |
| Operating Temperature ( $^\circ\text{C}$ )  | -55/+100   | -55/+100               | -20/+100              | -55/+100               |
| Storage Temperature ( $^\circ\text{C}$ )  | -55/+100   | -55/+100               | -55/+100              | -55/+100               |
| Soldering Temperature   | 260 $^\circ\text{C}$ , 5 seconds, 1.6 mm from case |                        |                       |                        |

Solder Adherence per MIL-STD-202E, Method 208C

| <b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ ) |         | Red<br><b>-9246</b> | Yellow<br><b>-9248</b> | Green<br><b>-9250</b> | Orange<br><b>-9704</b> |
|---|---------|---------------------|------------------------|-----------------------|------------------------|
| Luminous Intensity (mcd)                                    | Min.    | 4                   | 4                      | 4.2                   | 4                      |
|   | Typical | 7                   | 8                      | 5.2                   | 7                      |
| Peak Wavelength (nm)<br>$\lambda$ Peak                      | Typical | 635                 | 583                    | 565                   | 600                    |
| Viewing Angle ( $2\theta$ °)                                | Typical | 60°                 | 60°                    | 60°                   | 60°                    |
| Forward Voltage (V)   | Typical | 2.2                 | 2.2                    | 2.3                   | 1.9                    |
|   | Max.    | 3                   | 3                      | 3                     | 2.4                    |
| Reverse Voltage (V), $I_R=100\mu\text{A}$                   | Min.    | 5                   | 5                      | 5                     | 5                      |

$\theta$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

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**5mm Discrete LED  
Bi-Color  
Non-Tinted, Diffused**

**Dialight**

**521-9651, -9724**



| PART NO. | LED COLOR    |
|----------|--------------|
| 521-9651 | Red/Green    |
| 521-9724 | Yellow/Green |

**MOUNTING CLIP: 515-0005**  
located on page 6-48

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

|  | Red/Green<br><b>-9651</b>          | Yellow/Green<br><b>-9724</b> |
|--|------------------------------------|------------------------------|
| Power Dissipation (mW)                           | 100/100                            | 60/100                       |
| Forward Current (mA)                             | 40/30                              | 20/30                        |
| Derating (mA/°C) From 50°C                       | .5/.4                              | .25/.40                      |
| Peak Current (mA)<br><i>Pulse width = 100 μs</i> | 200/120                            | 80/120                       |
| Operating Temperature (°C)                       | -55/+100                           | -55/+100                     |
| Storage Temperature (°C)                         | -55/+100                           | -55/+100                     |
| Soldering Temperature                            | 260°C, 5 seconds, 1.6 mm from case |                              |

Solder Adherence per MIL-STD-202E, Method 208C

**OPERATING CHARACTERISTICS** ( $T_A=25^\circ\text{C}$ )

|   |         | Red/Green<br><b>-9651</b> | Yellow/Green<br><b>-9724</b> |
|---|---------|---------------------------|------------------------------|
| Luminous Intensity (mcd)                        | Min.    | 29/12.6                   | 2.5/2.5                      |
|   | Typical | 90/40                     | 8.7/8.7                      |
| Peak Wavelength (nm)<br>$\lambda_{\text{Peak}}$ | Typical | 660/565                   | 585/565                      |
| Viewing Angle ( $2\theta^{\circ}$ )             | Typical | 60°                       | 50°                          |
| Forward Voltage (V)                             | Typical | 1.8/2.1                   | 2.1/2.1                      |
|   | Max.    | 2.4/2.8                   | 2.8/2.8                      |

$\theta^{\circ}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

**5mm Discrete LED**  
**High Brightness**  
**Non-Diffused**

**Dialight**

**521-9247, -9249, -9251**



| PART NO. | COLOR  |
|----------|--------|
| 521-9247 | Red    |
| 521-9249 | Yellow |
| 521-9251 | Green  |

**MOUNTING CLIP: 515-0004**  
 located on page 6-48

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

|  | Red<br>-9247                       | Yellow<br>-9249  | Green<br>-9251 |
|--|------------------------------------|------------------|----------------|
| Power Dissipation (mW)                         | 135                                | 85               | 135            |
| Derating (mW/°C) <i>From 25°C 1. From 50°C</i> | 1.8                                | 1.6 <sup>1</sup> | 1.8            |
| Forward Current (mA)                           | 30                                 | 20               | 30             |
| Peak Current (mA)<br><i>Pulse width = 10μs</i> | 500                                | 500              | 500            |
| Operating Temperature (°C)                     | -55/+100                           | -55/+100         | -20/+100       |
| Storage Temperature (°C)                       | -55/+100                           | -55/+100         | -55/+100       |
| Soldering Temperature                          | 260°C, 5 seconds, 1.6 mm from case |                  |                |

*Solder Adherence per MIL-STD-202E, Method 208C*

**OPERATING CHARACTERISTICS** ( $T_A=25^\circ\text{C}$ )

|   |         | Red<br>-9247 | Yellow<br>-9249 | Green<br>-9251 |
|---|---------|--------------|-----------------|----------------|
| Luminous Intensity (mcd)<br>$I_F=10\text{mA}$   | Min.    | 25           | 25              | 25             |
|   | Typical | 60           | 50              | 70             |
| Peak Wavelength (nm)<br>$\lambda_{\text{Peak}}$ | Typical | 635          | 583             | 565            |
| Viewing Angle ( $2\theta^{\circ}$ )             | Typical | 35°          | 35°             | 24°            |
| Forward Voltage (V)<br>$I_F=10\text{mA}$        | Typical | 2.2          | 2.2             | 2.3            |
|   | Max.    | 3            | 3               | 3              |
| Reverse Voltage (V), $I_R=100\mu\text{A}$       | Min.    | 5            | 5               | 5              |

$\theta^{\circ}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

**5mm Discrete LED**  
**Super Bright, Water Clear**  
**Non-Tinted, Non-Diffused**

**Dialight**

**521-9464,-9465,-9466**



**PART NO. COLOR**

|          |        |
|----------|--------|
| 521-9464 | Red    |
| 521-9465 | Green  |
| 521-9466 | Yellow |

**MOUNTING CLIP: 515-0004**  
 located on page 6-48

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

|   | Red<br><b>-9464</b>                 | Green<br><b>-9465</b> | Yellow<br><b>-9466</b> |
|---|-------------------------------------|-----------------------|------------------------|
| Power Dissipation (mW)                          | 135                                 | 135                   | 85                     |
| Derating (mW/°C) <i>From 25°C 1. From 50 °C</i> | 1.8                                 | 1.8                   | 1.6 <sup>1</sup>       |
| Forward Current (mA)                            | 30                                  | 30                    | 20                     |
| Peak Current (mA)<br><i>Pulse width = 10 μs</i> | 500                                 | 500                   | 500                    |
| Operating Temperature (°C)                      | -55/+100                            | -20/+100              | -55/+100               |
| Storage Temperature (°C)                        | -55/+100                            | -55/+100              | -55/+100               |
| Soldering Temperature                           | 260 °C, 5 seconds, 1.6 mm from case |                       |                        |

*Solder Adherence per MIL-STD-202E, Method 208C*

**OPERATING CHARACTERISTICS** ( $T_A=25^\circ\text{C}$ )

|   |         | Red<br><b>-9464</b> | Green<br><b>-9465</b> | Yellow<br><b>-9466</b> |
|---|---------|---------------------|-----------------------|------------------------|
| Luminous Intensity (mcd)                  | Min.    | 80                  | 80                    | 80                     |
|   | Typical | 125                 | 120                   | 140                    |
| Peak Wavelength (nm)                      | Typical | 635                 | 565                   | 583                    |
| Viewing Angle ( $2\theta$ °)              | Typical | 24°                 | 24°                   | 24°                    |
| Forward Voltage (V)                       | Typical | 2.2                 | 2.3                   | 2.2                    |
|   | Max.    | 3                   | 3                     | 3                      |
| Reverse Voltage (V), $I_R=100\mu\text{A}$ | Min.    | 5                   | 5                     | 5                      |

<sup>1</sup>  $\theta$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

**6**



5mm  
High Efficiency  
Diffused

**Dialight**

5HD-xxxx

**\* NOT A VALID PART  
NUMBER. THIS SHEET IS FOR  
REFERENCE ONLY.**

| TYPE        | COLOR  |
|-------------|--------|
| *5HD-9269   | Red    |
| *5HD-9270-2 | Green  |
| *5HD-9270-5 | Green  |
| *5HD-9271-2 | Yellow |
| *5HD-9271-5 | Yellow |

**ABSOLUTE MAXIMUM RATINGS**

| (T <sub>A</sub> =25°C)  | Red<br>-9269                       | Green<br>-9270-2 | Green<br>-9270-5       | Yellow<br>-9271-2 | Yellow<br>-9271-5      |
|---|------------------------------------|------------------|------------------------|-------------------|------------------------|
| Power Dissipation (mW)<br>Derating (mW/°C) From 50°C 1. From 40°C | 60<br>.66 <sup>1</sup>             | 140              | 75<br>.66 <sup>1</sup> | 200               | 60<br>.66 <sup>1</sup> |
| Forward Current (mA)<br>Derating (mA/°C) From 25°C                | 20                                 | 40<br>.6         | 25                     | 60<br>.8          | 20                     |
| Peak Current (mA)<br>Pulse width = 1μs                            | 60                                 | 500              | 60                     | 1000              | 60                     |
| Operating Temperature (°C)  | -25/+85                            | -55/+100         | -25/+85                | -55/+100          | -25/+85                |
| Storage Temperature (°C)  | -30/+100                           | -55/+100         | -30/+100               | -55/+100          | -30/+100               |
| Soldering Temperature   | 260°C, 5 seconds, 1.6 mm from case |                  |                        |                   |                        |

Solder Adherence per MIL-STD-202E, Method 208C

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**OPERATING CHARACTERISTICS**

| (T <sub>A</sub> =25°C)   |   | Red<br>-9269 | Green<br>-9270-2 | Green<br>-9270-5 | Yellow<br>-9271-2 | Yellow<br>-9271-5 |
|--------------------------|---|--------------|------------------|------------------|-------------------|-------------------|
| Luminous Intensity (mcd) | Min.  | 2.2          | 4                | 3.6              | 4                 | 2.2               |
|                          | Typical                                     | 7            | 32               | 10               | 10                | 6.3               |
| Peak Wavelength (nm)     | Typical                                     | 650          | 565              | 563              | 590               | 585               |
|                          | λ Peak                                      |              |                  |                  |                   |                   |
| Viewing Angle (2Θ °)     | Typical                                     | 50°          | 50°              | 65°              | 70°               | 50°               |
| Forward Voltage (V)      | Typical                                     | 2.2          | 2*               | 2.1              | 2.4*              | 2.1               |
|                          | Max.  | 2.5          | 2.6*             | 3                | 3*                | 3                 |
| Reverse Voltage (V),     | Min.  | 5            | 5*               | 3*               | 5*                | 3                 |
|                          | I <sub>R</sub> =100μA *I <sub>R</sub> =10μA |              |                  |                  |                   |                   |

Θ<sup>1</sup> is the off axis angle at which the luminous intensity is half the axial luminous intensity

5mm  
General Purpose  
Diffused

**Dialight**

5ND-xxxx

**\* NOT A VALID PART  
NUMBER. THIS SHEET IS FOR  
REFERENCE ONLY.**

TYPE

COLOR

\*5ND-9672

Red

\*5ND-9673

Yellow

\*5ND-9674

Green

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

|   | Red<br><b>-9672</b>                | Yellow<br><b>-9673</b> | Green<br><b>-9674</b> |
|---|------------------------------------|------------------------|-----------------------|
| Power Dissipation (mW)                          | 80                                 | 60                     | 100                   |
| Forward Current (mA)                            | 40                                 | 20                     | 30                    |
| Derating (mA/°C) <i>From 25°C</i>               | .5                                 | .25                    | .4                    |
| Peak Current (mA)<br><i>Pulse width = 10 μs</i> | 200                                | 80                     | 120                   |
| Operating Temperature (°C)                      | -55/+100                           | -55/+100               | -55/+100              |
| Storage Temperature (°C)                        | -55/+100                           | -55/+100               | -55/+100              |
| Soldering Temperature                           | 260°C, 5 seconds, 1.6 mm from case |                        |                       |

*Solder Adherence per MIL-STD-202E, Method 208C*

**OPERATING CHARACTERISTICS** ( $T_A=25^\circ\text{C}$ )

|   |         | Red<br><b>-9672</b> | Yellow<br><b>-9673</b> | Green<br><b>-9674</b> |
|---|---------|---------------------|------------------------|-----------------------|
| Luminous Intensity (mcd)<br>$I_F=20\text{mA}$   | Min.    | 3.5                 | 3.5                    | 3.5                   |
|   | Typical | 12.3                | 12.3                   | 12.3                  |
| Peak Wavelength (nm)<br>$\lambda_{\text{Peak}}$ | Typical | 635                 | 585                    | 565                   |
| Viewing Angle ( $2\theta^{\circ}$ )             | Typical | 60°                 | 60°                    | 60°                   |
| Forward Voltage (V)<br>$I_F=20\text{mA}$        | Typical | 2                   | 2.1                    | 2.1                   |
|   | Max.    | 2.8                 | 2.8                    | 2.8                   |
| Reverse Voltage (V), $I_R=100\mu\text{A}$       | Min.    | 5                   | 5                      | 5                     |

$\theta^{\circ}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

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5mm  
Integral Resistor  
Diffused

**Dialight**  
5RD-xxxx

**\* NOT A VALID PART  
NUMBER. THIS SHEET IS FOR  
REFERENCE ONLY.**

| TYPE      | COLOR  | VOLTS |
|-----------|--------|-------|
| *5RD-9378 | Green  | 12    |
| *5RD-9379 | Yellow | 12    |
| *5RD-9422 | Red    | 5     |
| *5RD-9423 | Green  | 5     |

**ABSOLUTE MAXIMUM RATINGS**

| (T <sub>A</sub> =25°C)                         | Green 12V<br>-9378                 | Yellow 12V<br>-9379 | Red 5V<br>-9422 | Green 5V<br>-9423 |
|--|------------------------------------|---------------------|-----------------|-------------------|
| Forward Voltage (V)<br>*(T <sub>A</sub> =70°C) | 15 *                               | 15                  | 7.5             | 7.5               |
| Operating Temperature (°C)                     | -20/+85                            | -40/+85             | -40/+85         | -20/+85           |
| Storage Temperature (°C)                       | -55/+100                           | -55/+100            | -55/+100        | -55/+100          |
| Soldering Temperature                          | 260°C, 5 seconds, 1.6 mm from case |                     |                 |                   |

Solder Adherence per MIL-STD-202E, Method 208C

**OPERATING CHARACTERISTICS**

| (T <sub>A</sub> =25°C)                     |         | Green 12V<br>-9378 | Yellow 12V<br>-9379 | Red 5V<br>-9422 | Green 5V<br>-9423 |
|--|---------|--------------------|---------------------|-----------------|-------------------|
| Luminous Intensity (mcd)                   | Min.    | 1.5*               | 1.5*                | 1               | 2                 |
|  | Typical | 4*                 | 4*                  | 2               | 8                 |
| V <sub>F</sub> =5V, *V <sub>F</sub> =12V   |         |                    |                     |                 |                   |
| Peak Wavelength (nm)                       | Typical | 565                | 583                 | 655             | 565               |
| λ Peak                                     |         |                    |                     |                 |                   |
| Viewing Angle (2θ *)                       | Typical | 60°                | 60°                 | 60°             | 60°               |
| Forward Current (mA), V <sub>F</sub> =5V   | Typical | 13*                | 13*                 | 13              | 12                |
| *V <sub>F</sub> =12V                       | Max.    | 20*                | 20*                 | 20              | 15                |
| Reverse Voltage (V), I <sub>R</sub> =100μA | Typical | 5                  | 5                   | 5               | 5                 |

θ<sup>1</sup> is the off axis angle at which the luminous intensity is half the axial luminous intensity

5mm  
Super Bright LED  
Diffused

**Dialight**

5SD-xxxx

**\* NOT A VALID PART  
NUMBER. THIS SHEET IS FOR  
REFERENCE ONLY.**

| TYPE      | COLOR  |
|-----------|--------|
| *5SD-9441 | Red    |
| *5SD-9455 | Yellow |
| *5SD-9456 | Green  |

| <b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )   | Red<br>-9441                       | Yellow<br>-9455 | Green<br>-9456 |
|--|------------------------------------|-----------------|----------------|
| Power Dissipation (mW)                                       | 75                                 | 75              | 75             |
| Forward Current (mA)   | 25                                 | 25              | 25             |
| Derating (mA/°C) <i>From 50°C</i> * (mW/°C) <i>From 40°C</i> | .66*                               | .5              | .5             |
| Peak Current (mA)<br><i>Pulse width = 1 ms</i>               | 60                                 | 60              | 60             |
| Operating Temperature (°C)                                   | -55/+100                           | -55/+100        | -55/+100       |
| Storage Temperature (°C)                                     | -55/+100                           | -55/+100        | -55/+100       |
| Soldering Temperature  | 260°C, 5 seconds, 1.6 mm from case |                 |                |

*Solder Adherence per MIL-STD-202E, Method 208C*

| <b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ ) |         | Red<br>-9441 | Yellow<br>-9455 | Green<br>-9456 |
|---|---------|--------------|-----------------|----------------|
| Luminous Intensity (mcd)                                    | Min.    | 17           | 17              | 17             |
|   | Typical | 34           | 34              | 34             |
| Peak Wavelength (nm)  | Typical | 650          | 585             | 563            |
| Viewing Angle ( $2\theta_{\frac{1}{2}}$ )                   | Typical | 50°          | 50°             | 50°            |
| Forward Voltage (V)   | Typical | 2.1          | 2.2             | 2.2            |
|   | Max.    | 2.55         | 3               | 3              |
| Reverse Voltage (V), $I_R=10\mu\text{A}$                    | Min.    | 3            | 3               | 3              |

$\theta_{\frac{1}{2}}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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