

2mm
General Purpose
Diffused

Dialight

2ND-xxxx

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

| <u>TYPE</u> | <u>COLOR</u> |
|-------------|--------------|
| 2ND-9412* | Red |
| 2ND-9414* | Green |
| 2ND-9416* | Yellow |

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

| | Red -9412 | Green -9414 | Yellow -9416 |
|--|--|-----------------------|------------------------|
| Power Dissipation (mW) | 80 | 80 | 80 |
| Derating (mW/ $^\circ\text{C}$) From 25 $^\circ\text{C}$ | 1.1 | 1.1 | 1.1 |
| Forward Current (mA) | 40 | 25 | 25 |
| Peak Current (mA) <i>Pulse width = 1 μs</i> | 250 | 250 | 250 |
| Operating Temperature ($^\circ\text{C}$) | -55/+100 | -55/+100 | -55/+100 |
| Storage Temperature ($^\circ\text{C}$) | -55/+100 | -55/+100 | -55/+100 |
| Soldering Temperature | 260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case | | |

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

| | | Red -9412 | Green -9414 | Yellow -9416 |
|---|---------|---------------------|-----------------------|------------------------|
| Luminous Intensity (mcd) $I_F=20\text{mA}$ | Min. | 1 | .5 | .6 |
| | Typical | 1.2 | 1 | 2 |
| Peak Wavelength (nm) λ_{Peak} | Typical | 650 | 565 | 583 |
| Viewing Angle ($2\theta_{1/2}$) | Typical | 40 $^\circ$ | 40 $^\circ$ | 40 $^\circ$ |
| Forward Voltage (V) $I_F=20\text{mA}$ | Typical | 1.6 | 2.4 | 2.2 |
| | Max. | 2 | 3 | 3 |
| Reverse Voltage (V), $I_R=10\mu\text{A}$ | Min. | 3 | 3 | 3 |

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

2mm
Integral Resistor, 5 Volts
Diffused

Dialight

2RD-9613 thru 2RD-9618

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

| TYPE | COLOR |
|-----------|--------|
| 2RD-9613* | Red |
| 2RD-9614* | Red |
| 2RD-9615* | Green |
| 2RD-9616* | Yellow |
| 2RD-9618* | Red |

3

| ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$) | Red -9613 | Red -9614 | Green -9615 | Yellow -9616 | Red -9618 |
|--|--|---------------------|-----------------------|------------------------|---------------------|
| Forward Voltage (V) | 6 | 6 | 6 | 6 | 6 |
| Operating Temperature ($^\circ\text{C}$) | -55/+100 | -55/+100 | -55/+100 | -55/+100 | -55/+100 |
| Storage Temperature ($^\circ\text{C}$) | -55/+100 | -55/+100 | -55/+100 | -55/+100 | -55/+100 |
| Soldering Temperature | 260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case | | | | |

| OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$) | - | Red 9613 | Red -9614 | Green -9615 | Yellow -9616 | Red -9618 |
|---|---------|--------------------|---------------------|-----------------------|------------------------|---------------------|
| Luminous Intensity (mcd) | Min. | .4 | .8 | .8 | 1.3 | .3 |
| | Typical | .9 | 1.9 | 2.5 | 2.1 | .6 |
| Peak Wavelength (nm) | Typical | 650 | 650 | 565 | 583 | 650 |
| λ Peak | | | | | | |
| Viewing Angle ($2\theta_{1/2}$) | Typical | 40 $^\circ$ | 40 $^\circ$ | 40 $^\circ$ | 40 $^\circ$ | 40 $^\circ$ |
| Forward Current (mA) | Typical | 3 | 6 | 4.7 | 4.7 | 1 |
| | Max. | 4 | 8 | 6.7 | 6.7 | 2.6 |
| Reverse Voltage (V), $I_R=100\mu\text{A}$ | Min. | 6 | 6 | 6 | 6 | 6 |