

555-2xxx

Typical Operating Characteristics ($T_A = 25^\circ\text{C}$)*See LED data sheet for additional information***GENERAL PURPOSE***See Page 3-17 and 3-18 for Reference Only LED Drive Circuit Examples**See Page 3-19 for Pin Out*

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2 $\theta_{1/2}$	LED Data sheet	Page #
555-2001	Red	650	1.2	1.6	20	40°	2ND-9412	3-14
555-2301	Green	565	1	2.4	20	40°	2ND-9414	3-14
555-2401	Yellow	583	2	2.2	20	40°	2ND-9416	3-14

INTEGRAL RESISTOR, VARIOUS VOLTAGES

Part Number	Color	Peak Wavelength nm	I _v mcd	I _F mA	Test Voltage	Viewing Angle 2 $\theta_{1/2}$	LED Data sheet	Page #
555-2003	Red	650	1.9	6	5	40°	2RD-9614	3-15
555-2007	Red	650	.9	3	5	40°	2RD-9613	3-15
555-2008	Red	650	.9	3	24	40°	2RD-9623	3-16
555-2009	Red	650	.6	1	5	40°	2RD-9618	3-15
555-2303	Green	565	2.5	4.7	5	40°	2RD-9615	3-15
555-2403	Yellow	583	2.1	4.7	5	40°	2RD-9616	3-15

2mm
General Purpose
Diffused

Dialight

2ND-XXXX

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

TYPE

2ND-9412*
2ND-9414*
2ND-9416*

COLOR

Red
Green
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°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
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TYPE

2RD-9613*
2RD-9614*
2RD-9615*
2RD-9616*
2RD-9618*

COLOR

Red
Red
Green
Yellow
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

2mm

Integral Resistor, Various Voltages

Diffused

Dialight

2RD-9619 thru 2RD-9623

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<u>TYPE</u>	<u>COLOR</u>
2RD-9619*	Red, 14V
2RD-9620*	Red, 3.6V
2RD-9621*	Red, 10V
2RD-9622*	Red, 15V
2RD-9623*	Red, 24V

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)	Red 14V -9619	Red 3.6V -9620	Red 10V -9621	Red 15V -9622	Red 24V -9623
Forward Voltage (V)	14	3.6	10	15	24
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 14V -9619	Red 3.6V -9620	Red 10V -9621	Red 15V -9622	Red 24V -9623
Luminous Intensity (mcd)	Min.	1.3	2.6	1.8	.3	.4
V_F =Forward Voltage	Typical	3.1	6.2	4.2	.9	.9
Peak Wavelength (nm)	Typical	650	650	650	650	650
λ_{Peak}						
Viewing Angle ($2\theta_{1/2}$)	Typical	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$
Forward Current (mA)	Typical	10	20	14	3	3
V_F =Forward Voltage	Max.	15	25	18	3.8	3.8
Reverse Voltage (V), $I_R=100\mu\text{A}$	Typical	15	4.6	11	16	25