

CHEMLED Emitters Data Sheet

NIR Components

Parameter, 22°C	Units	Part Number								
		1.00 LED	1.07 LED	1.22 LED	1.25 LED	1.38 LED	1.43 LED	1.50 LED	1.56 LED	1.67 LED
Peak Wavelength (If = 100 mA)	nm	1000	1070	1220	1250	1380	1430	1500	1560	1670
Total Optical Power (If = 100 mA)	mW	1.2	0.9	1.8	1.6	1.7	2	1.4	1	0.6
Spectral Bandwidth (If = 100 mA)	nm	60	80	70	70	80	90	120	120	120
Maximum Continuous Operating Forward Current	mA	100	100	100	100	100	100	100	100	100
Maximum Reverse Voltage, VR	V	1	1	1	1	1	1	1	1	1
Forward Current (Vf = 1 VDC), If	mA	12	3	18	20	18	18	34	47	na
Reverse Current (Vr = 1 VDC), Ir	uA	4.4	2.6	na	4	na	4	4	6	3

Mid IR Components

Parameter, 22°C	Units	Part Number						
		1.8 LED	1.9 LED	2.2 LED	2.9 LED	3.3 LED	4.3 LED	4.6 LED
Peak Wavelength (If = 50 mA)	nm	1800	1940	2200	2900	3300	4300	4600
Total Optical Power (If = 50 mA)	mW	0.6	0.3	0.3	0.04	0.04	0.02	0.01
Pulsed Power (100 ns, 10 KHz)	mW	5@2A	5@2A	3@2A	2@5A	2@5A	1@5A	0.5@5A
Spectral Bandwidth (If = 50 mA)	nm	150	150	200	400	450	500	600
Maximum Continuous Operating Forward Current	mA	30	30	30	50	50	50	50
Maximum Forward Current	mA	50	50	50	100	100	100	100
Maximum Pulsed Current (100 ns, 10 KHz)	mA	2000	2000	2000	5000	5000	5000	5000
Switching Time	ns	20	15	10	50	50	70	80
Quantum Yield	%	1	1.5	1	0.3	0.3	0.15	0.1
Temperature Dependence of Quantum Yield	%/K	6	5.5	4	7	5	4	4
Temperature Dependence of Peak Wavelength	nm/K	1	1	1.5	3	3	3	3

829 Flynn Road, Camarillo, CA 93012 • Phone: (805) 445-4500 • Fax: (805) 445-4502

Email: customerservice@telcomdevices.com • Website: www.telcomdevices.com



Telcom Devices Corp.