



DFB & DBR Laser Diodes

Distributed Feedback (DFB) and Distributed Bragg Reflector (DBR) laser diodes operate in transverse and longitudinal single mode. This is achieved by incorporation of a frequency selective structure within the diode. Tuning can be achieved by varying either current or temperature. Single frequency operation is maintained over several hundred GHz without modehops.

In the table, WL indicates the emission wavelength at 25°C. P is the maximum output power of the diode. WLmin and WLmax denote the wavelength range accessible via temperature tuning. Tuning within this range is for the most part accomplished without mode-hops. dL/dT states the tuning rate with respect to temperature. For further information e.g. regarding tuning by current, fast modulation, spectroscopic applications and locking to resonance lines, please inquire with our sales team.

For maximum frequency stability of your DFB/DBR laser diode, we recommend TOPTICA's patented ColdPack housing. The ColdPack can accommodate any standard 9 mm or 5.6 mm laser diode within a TO-3 style package with integrated thermistor and thermoelectric coolers. The laser temperature can thus be precisely stabilized, or the diode can be cooled / heated rapidly, just as requested for your application.

A remark "TO-3" indicates that the diode is already packaged in a TO-3 housing prepared for temperature control.

WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
640.0	9			0.04	#LD-0640-0008-VHG-1	*	inquire for details
660.0	35			0.04	#LD-0660-0035-VHG-1	*	inquire for details
660.2	35	660	660.4	0.04	#LD-0660-0035-VHG-1	2	
660.3	35	660.1	660.5	0.04	#LD-0660-0035-VHG-1	1	
685.0	45			0.04	#LD-0685-0040-VHG-1	*	inquire for details
685.0	45			0.04	#LD-0685-0040-VHG-2	*	inquire for details
687.1	45	686.9	687.3	0.04	#LD-0685-0040-VHG-2	1	
760.0	40			0.06	#LD-0760-0040-DFB-1	*	TO-3 inquire for details
760.0	40			0.06	#LD-0760-0040-DFB-2	*	inquire for details
760.1	40	759.1	760.6	0.06	#LD-0760-0040-DFB-2	*	
760.3	40	759.3	760.8	0.06	#LD-0760-0040-DFB-2	*	
760.6	40	759.6	761.1	0.06	#LD-0760-0040-DFB-2	*	
763.0	10			0.05	#LD-0763-0010-DFB-1	*	inquire for details
763.0	10			0.05	#LD-0763-0010-DFB-2	*	inquire for details
763.0	30			0.055	#LD-0763-0030-DFB-1	*	inquire for details
763.0	30			0.055	#LD-0763-0030-DFB-2	*	inquire for details
763.1	30	762.3	763.9	0.055	#LD-0763-0030-DFB-1	*	
763.3	30	762.5	764.1	0.055	#LD-0763-0030-DFB-1	*	
764.1	30	763.3	764.9	0.055	#LD-0763-0030-DFB-1	*	
766.8	15	765.9	767	0.05	#LD-0767-0015-DFB-1	1	
767.0	15			0.05	#LD-0767-0015-DFB-1	*	inquire for details
770.0	15			0.06	#LD-0770-0020-DFB-1	*	** inquire for details
773.0	75			0.06	#LD-0773-0075-DFB-1	*	inquire for details
777.0	15			0.06	#LD-0777-0015-DFB-1	*	inquire for details
777.2	15	776.8	777.6	0.06	#LD-0777-0015-DFB-1	1	
779.0	80			0.06	#LD-0779-0080-DFB-1	*	For THz applications, TO-3 inquire

* : upon request

** : different specifications, ask for details



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WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
779.5	80	778.3	780.7	0.06	#LD-0779-0080-DFB-1	*	For THz applications, TO-3
779.5	80	778.3	780.4	0.06	#LD-0780-0080-DFB-2	1	TO-3
779.6	80	778.4	780.8	0.06	#LD-0779-0080-DFB-1	*	For THz applications, TO-3
779.6	80	778.4	780.5	0.06	#LD-0780-0080-DFB-2	2	TO-3
780.0	80			0.06	#LD-0780-0080-DFB-1	*	inquire for details
780.0	80			0.06	#LD-0780-0080-DFB-2	*	TO-3 inquire for details
780.2	80	779	781.1	0.06	#LD-0780-0080-DFB-2	*	TO-3
781.0	80			0.06	#LD-0781-0080-DFB-1	*	For THz applications, TO-3 inquire
781.8	80	780.6	783	0.06	#LD-0781-0080-DFB-1	*	For THz applications, TO-3
783.4	80	782.2	784.6	0.06	#LD-0781-0080-DFB-1	*	For THz applications, TO-3
783.5	80	782.3	784.7	0.06	#LD-0781-0080-DFB-1	*	For THz applications, TO-3
783.6	80	782.4	784.8	0.06	#LD-0781-0080-DFB-1	1	For THz applications, TO-3
784.2	120				#LD-0785-0150-VHG-2	1	
784.4	100	783.3	785.5	0.05	#LD-0785-0100-DFB-1	*	
784.4	120				#LD-0785-0150-VHG-2	1	
784.5	120				#LD-0785-0150-VHG-2	2	
784.6	120				#LD-0785-0150-VHG-2	1	
784.8	100	783.7	785.9	0.06	#LD-0785-0100-DFB-2	*	TO-3
785.0	100			0.05	#LD-0785-0100-DFB-1	*	inquire for details
785.0	100			0.06	#LD-0785-0100-DFB-2	*	TO-3 inquire for details
785.2	80	784	786.4	0.06	#LD-0785-0080-DFB-1	*	For THz applications, TO-3
785.3	80	784.1	786.5	0.06	#LD-0785-0080-DFB-1	1	For THz applications, TO-3
785.5	100	784.4	786.6	0.06	#LD-0785-0100-DFB-2	*	TO-3
793.0	15			0.05	#LD-0793-0020-DFB-1	*	inquire for details
794.7	80	793.9	796.1	0.06	#LD-0795-0100-DFB-1	1	TO-3
795.0	15			0.06	#LD-0795-0020-DFB-1	*	inquire for details
795.0	15			0.06	#LD-0795-0020-DFB-2	*	TO5: diode only (no DL DFB) inq
795.0	80			0.06	#LD-0795-0100-DFB-1	*	TO-3 inquire for details
795.0	80			0.06	#LD-0795-0100-DFB-2	*	inquire for details
811.0	15	810.7	812.4	0.06	#LD-0811-0020-DFB-1	3	
852.0	140			0.07	#LD-0852-0150-DFB-1	*	For Cs spectroscopy, TO-3 inquire
852.1	140	851.1	853.1	0.07	#LD-0852-0150-DFB-1	1	For Cs spectroscopy, TO-3
852.1	140	851.1	853.7	0.06	#LD-0855-0150-DFB-2	*	For THz applications, TO-3
852.6	80				#LD-0852-0080-DFB-1	*	
852.6	140	851.4	854.1	0.06	#LD-0853-0150-DFB-1	*	For THz applications, TO-3
852.7	140	851.5	854.2	0.06	#LD-0853-0150-DFB-1	1	For THz applications, TO-3
852.8	140	851.6	854.3	0.06	#LD-0853-0150-DFB-1	1	For THz applications, TO-3
853.0	140			0.06	#LD-0853-0150-DFB-1	*	For THz applications, TO-3 inquire
853.4	140	852.2	854.9	0.06	#LD-0853-0150-DFB-1	2	For THz applications, TO-3
853.5	140	852.3	855	0.06	#LD-0853-0150-DFB-1	*	For THz applications, TO-3
855.0	140			0.06	#LD-0855-0150-DFB-2	*	For THz applications, TO-3 inquire
855.3	140	854.3	856.9	0.06	#LD-0855-0150-DFB-2	3	For THz applications, TO-3
855.4	140	854.4	856.4	0.06	#LD-0855-0150-DFB-1	1	TO-3
855.4	140	854.4	857	0.06	#LD-0855-0150-DFB-2	1	For THz applications, TO-3
855.5	140	854.5	856.5	0.06	#LD-0855-0150-DFB-1	2	TO-3

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WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
859.9	140	859.2	860.9	0.06	#LD-0860-0150-DFB-1	1	
894.0	40	893.2	894.8	0.07	#LD-0895-0050-DFB-1	1	TO-3
894.2	40	893.4	895	0.07	#LD-0895-0050-DFB-1	1	TO-3
895.0	40			0.08	#LD-0895-0040-DFB-1	*	inquire for details
895.0	40			0.08	#LD-0895-0040-DFB-2	*	TO5 package, TEC + thermistor i
910.0	25			0.08	#LD-0910-0025-DFB-1	*	inquire for details
911.3	25	910.3	912.3	0.08	#LD-0910-0025-DFB-1	1	
911.6	25	910.6	912.6	0.08	#LD-0910-0025-DFB-1	2	
935.0	30			0.08	#LD-0935-0030-DFB-1	*	inquire for details
935.6	30	934.6	937.2	0.08	#LD-0935-0030-DFB-2	*	
935.9	30	934.9	937.5	0.08	#LD-0935-0030-DFB-2	*	
937.0	95			0.06	#LD-0937-0100-DFB-1	*	inquire for details
937.4	95	936.1	938.5	0.06	#LD-0937-0100-DFB-1	*	
976.0	140			0.06	#LD-0976-0150-DFB-1	*	inquire for details
976.0	140	974.8	977.3	0.06	#LD-0976-0150-DFB-2	1	TO-3
976.2	140	975	977.5	0.06	#LD-0976-0150-DFB-2	1	TO-3
1030.0	40			0.08	#LD-1030-0040-DFB-1	*	inquire for details
1030.0	40	1028	1032	0.08	#LD-1030-0040-DFB-2	*	**
1033.0	40	1031	1035	0.08	#LD-1030-0040-DFB-1	1	
1055.0	40			0.08	#LD-1055-0040-DFB-1	*	inquire for details
1056.0	40	1055	1057.3	0.08	#LD-1055-0040-DFB-1	1	
1060.0	135			0.07	#LD-1060-0150-DFB-1	*	inquire for details
1064.0	30			0.1	#LD-1064-0030-DFB-1	*	Butterfly + pigtail inquire for detai
1064.3	30	1062.4	1066.5	0.1	#LD-1064-0030-DFB-1	*	Butterfly + pigtail
1073.0	40	1071.8	1075.1	0.08	#LD-1073-0040-DFB-1	1	
1082.6	70	1081.3	1084.3	0.08	#LD-1083-0070-DFB-1	*	TO-3
1082.7	70	1081.4	1084.4	0.08	#LD-1083-0070-DFB-1	*	TO-3
1083.0	70	1081.7	1084.7	0.08	#LD-1083-0070-DFB-1	*	TO-3
1086.0	30			0.08	#LD-1086-0030-DFB-1	*	inquire for details
1086.6	30	1084.7	1087.4	0.08	#LD-1086-0030-DFB-1	1	
1092.0	35	1090.9	1094.2	0.08	#LD-1092-0040-DFB-1	*	
1155.0	10			0.1	#LD-1155-0010-DFB-1	*	inquire for details
1156.0	10	1154.7	1158	0.1	#LD-1155-0010-DFB-1	2	
1178.0	30			0.09	#LD-1178-0030-DFB-1	*	** inquire for details
1228.0	25	1226	1229	0.1	#LD-1230-0030-DFB-1	1	
1230.0	25			0.1	#LD-1230-0030-DFB-1	*	inquire for details
1280.0	10			0.1	#LD-1280-0010-DFB-1	*	inquire for details
1281.8	10	1277.8	1281.9	0.1	#LD-1280-0010-DFB-1	1	
1350.0	10			0.1	#LD-1350-0010-DFB-1	*	inquire for details
1364.7	10	1362.3	1367.1	0.12	#LD-1360-0020-DFB-1	*	Butterfly + pigtail
1365.0	10			0.1	#LD-1365-0010-DFB-1	*	inquire for details
1368.6	10	1367	1370.8	0.1	#LD-1365-0010-DFB-1	2	
1375.0				0.1	#LD-1375-0015-DFB-1	*	inquire for details
1377.2		1374	1378	0.1	#LD-1375-0015-DFB-1	1	
1393.0	5			0.1	#LD-1393-0005-DFB-1	*	inquire for details

* : upon request

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WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
1393.0	10			0.1	#LD-1393-0010-DFB-1	*	inquire for details
1463.2	10	1460.8	1465.6	0.12	#LD-1470-0010-DFB-1	*	Butterfly + pigtail
1470.0	10			0.12	#LD-1470-0010-DFB-1	*	Butterfly + pigtail inquire for detai
1470.1	20	1467.7	1472.5	0.12	#LD-1470-0020-DFB-1	*	Butterfly + pigtail
1527.0	10	1524.6	1529.4	0.12	#LD-1470-0010-DFB-1	*	Butterfly + pigtail
1531.5	40	1529.6	1533.7	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1531.5	40	1529.61	1533.71	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1531.8	40	1529.85	1533.95	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1531.9	40	1530	1534.1	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1533.0	40	1531.1	1535.2	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1533.1	40	1531.17	1535.27	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1533.1	40	1531.2	1535.3	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1537.3	40	1535.4	1539.5	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1537.4	40	1535.49	1539.59	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1537.4	40	1535.5	1539.6	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1540.6	40	1538.66	1542.76	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1543.6	50	1541.54	1545.74	0.1	#LD-1550-0050-DFB-1	1	Butterfly + pigtail
1543.7	80	1541.53	1545.93	0.11	#LD-1550-0080-DFB-1	*	Butterfly + pigtail
1544.9	40	1543	1547.1	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1545.3	80	1543.12	1547.52	0.11	#LD-1550-0080-DFB-1	1	Butterfly + pigtail
1547.3	40	1545.4	1549.5	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1547.7	80	1545.52	1549.92	0.11	#LD-1550-0080-DFB-1	*	Butterfly + pigtail
1548.1	80	1545.9	1550.3	0.11	#LD-1550-0080-DFB-1	*	Butterfly + pigtail
1549.3	80	1547.1	1551.5	0.11	#LD-1550-0080-DFB-1	1	Butterfly + pigtail
1550.0	40			0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail inquire for detai
1550.0	40			0.1	#LD-1550-0040-DFB-3	*	Butterfly, pigtail, no isolat. inquire
1550.0	80			0.11	#LD-1550-0080-DFB-1	*	Butterfly + pigtail inquire for detai
1553.3	40	1551.4	1555.5	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1553.3	40	1551.41	1555.51	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1555.3	40	1553.44	1557.54	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1557.4	80	1555.16	1559.56	0.11	#LD-1550-0080-DFB-1	1	Butterfly + pigtail
1557.7	40	1555.8	1559.9	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1557.8	40	1555.87	1559.97	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1559.8	80	1557.6	1562	0.11	#LD-1550-0080-DFB-1	*	Butterfly + pigtail
1559.8	100				#LD-1550-0100-DFB-1	*	Butterfly + pigtail
1560.6	60	1558.5	1562.7	0.1	#LD-1550-0060-DFB-1	1	Butterfly + pigtail
1564.7	60	1562.6	1566.8	0.1	#LD-1550-0060-DFB-1	*	Butterfly + pigtail
1571.2	40	1569.34	1573.44	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1572.5	40	1570.6	1574.7	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1600.0	20			0.11	#LD-1600-0020-DFB-1	*	Butterfly + pigtail inquire for detai
1602.3	40	1600.4	1604.5	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail
1645.4	10	1643.4	1648.4	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1645.7	10	1643.7	1648.7	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1649.5	10	1647.5	1652.5	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1650.0	10	1648	1653	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail

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1650.5	10	1648.5	1653.5	0.13	#LD-1665-0010-DFB-1	1	Butterfly + pigtail
1650.9	10	1648.9	1653.9	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1651.9	10	1649.9	1654.9	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1652.0	10	1650	1655	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1653.0	10	1651	1656	0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail
1665.0	10			0.13	#LD-1665-0010-DFB-1	*	Butterfly + pigtail inquire for detai
1900.0	3			0.17	#LD-1900-0005-DFB-1	*	inquire for details
2000.0	3			0.2	#LD-2000-0005-DFB-1	*	inquire for details
2055.0	15			0.25	#LD-2055-0015-DFB-1	*	inquire for details
2065.0	15			0.25	#LD-2065-0020-DFB-1	*	inquire for details
2293.0	20	2290.5	2296	0.22	#LD-2330-0020-DFB-1	*	
2330.0	2			0.23	#LD-2330-0005-DFB-1	*	inquire for details
2330.0	20			0.22	#LD-2330-0020-DFB-1	*	inquire for details
2410.0	2			0.24	#LD-2410-0004-DFB-1	*	inquire for details
2500.0	2			0.25	#LD-2500-0005-DFB-1	*	inquire for details
2670.0	2			0.2	#LD-2670-0002-DFB-1	*	inquire for details
2716.3	2	2711.5	2718.5	0.23	#LD-2740-0003-DFB-1	*	
2740.0	2			0.23	#LD-2740-0003-DFB-1	*	inquire for details
2753.0	2	2748.2	2755.2	0.23	#LD-2740-0003-DFB-1	*	
2810.0	2	2805.2	2812.2	0.23	#LD-2740-0003-DFB-1	*	

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