



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
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
687.0	45	686.8	687.2	0.04	#LD-0685-0040-VHG-1	1	
687.1	45	686.9	687.3	0.04	#LD-0685-0040-VHG-2	> 3	
687.2	45	687	687.4	0.04	#LD-0685-0040-VHG-2	1	
759.8	40	758.8	760.3	0.06	#LD-0760-0040-DFB-1	2	TO-3
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
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	1	
767.0	15			0.05	#LD-0767-0015-DFB-1	*	inquire for details
770.0	15	768.8	770.6	0.06	#LD-0770-0020-DFB-1	1	**
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
779.3	80	778.1	780.5	0.06	#LD-0779-0080-DFB-1	1	For THz applications, TO-3
779.5	80	778.3	780.4	0.06	#LD-0780-0080-DFB-2	1	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

* : upon request

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WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
780.5	80	779.3	781.4	0.06	#LD-0780-0080-DFB-2	1	TO-3
781.0	80			0.06	#LD-0781-0080-DFB-1	*	For THz applications, TO-3 inquire
784.4	100	783.3	785.5	0.05	#LD-0785-0100-DFB-1	*	
784.8	100	783.7	785.9	0.06	#LD-0785-0100-DFB-2	*	TO-3
785.0	80			0.05	#LD-0785-0080-VHG-1	*	inquire for details
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
793.0	15			0.05	#LD-0793-0020-DFB-1	*	inquire for details
793.2	15	792.4	793.9	0.05	#LD-0793-0020-DFB-1	1	
794.7	80	793.9	796.1	0.06	#LD-0795-0100-DFB-1	2	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
795.2	80	794.4	796.6	0.06	#LD-0795-0100-DFB-1	1	TO-3
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
852.4	140	851.4	853.4	0.07	#LD-0852-0150-DFB-1	1	For Cs spectroscopy, TO-3
852.5	140	851.5	853.5	0.07	#LD-0852-0150-DFB-1	1	For Cs spectroscopy, TO-3
852.6	80				#LD-0852-0080-DFB-1	1	
853.0	140			0.06	#LD-0853-0150-DFB-1	*	For THz applications, TO-3 inquire
853.2	140	852	854.7	0.06	#LD-0853-0150-DFB-1	2	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	2	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
859.9	140	859.2	860.9	0.06	#LD-0860-0150-DFB-1	1	
894.4	40	893.4	896.4	0.08	#LD-0895-0040-DFB-2	1	TO5: diode only (no DL DFB)
894.6	40	893.6	896.6	0.08	#LD-0895-0040-DFB-1	2	
895.0	40			0.08	#LD-0895-0040-DFB-1	*	inquire for details
895.0	40			0.08	#LD-0895-0040-DFB-2	*	TO5: diode only (no DL DFB) inq
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	2	
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
935.2	30	935.1	936.5	0.08	#LD-0935-0030-DFB-1	1	
937.0	95			0.06	#LD-0937-0100-DFB-1	*	inquire for details
976.0	140			0.06	#LD-0976-0150-DFB-1	*	inquire for details
976.0	140			0.06	#LD-0976-0150-DFB-2	*	TO-3 inquire for details
1030.0	40			0.08	#LD-1030-0040-DFB-1	*	inquire for details
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

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1064.0	30			0.1	#LD-1064-0030-DFB-1	*	Butterfly + pigtail inquire for detail
1073.0	40	1071.8	1075.1	0.08	#LD-1073-0040-DFB-1	2	
1082.5	70	1081.2	1084.2	0.08	#LD-1083-0070-DFB-1	1	TO-3
1083.0	70			0.08	#LD-1083-0070-DFB-1	*	TO-3 inquire for details
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			0.08	#LD-1092-0040-DFB-1	*	inquire for details
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
1178.0	30	1177.5	1179.5	0.09	#LD-1178-0030-DFB-2	2	**
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
1393.0	10			0.1	#LD-1393-0010-DFB-1	*	inquire for details
1470.0	10			0.12	#LD-1470-0010-DFB-1	*	Butterfly + pigtail inquire for detail
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
1533.1	40	1531.17	1535.27	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1537.4	40	1535.49	1539.59	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1540.6	40	1538.66	1542.76	0.1	#LD-1550-0040-DFB-1	1	Butterfly + pigtail
1542.1	50	1539.96	1544.16	0.1	#LD-1550-0050-DFB-1	1	Butterfly + pigtail
1543.6	50	1541.54	1545.74	0.1	#LD-1550-0050-DFB-1	1	Butterfly + pigtail
1545.3	80	1543.12	1547.52	0.11	#LD-1550-0080-DFB-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
1550.0	40			0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail inquire for detail
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 detail
1553.0	40	1551.1	1555.2	0.1	#LD-1550-0040-DFB-1	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	1	Butterfly + pigtail
1557.4	80	1555.16	1559.56	0.11	#LD-1550-0080-DFB-1	1	Butterfly + pigtail
1557.8	40	1555.87	1559.97	0.1	#LD-1550-0040-DFB-1	*	Butterfly + pigtail

* : upon request

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WL nm	P mW	WLmin nm	WLmax nm	dL/dT nm/K	Article Number	Stock	Remark
1560.6	60	1558.5	1562.7	0.1	#LD-1550-0060-DFB-1	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
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
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
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	*	

* : upon request

** : different specifications, ask for details