



NEC's TUNABLE CW InGaAsP MQW-DFB LASER DIODE MODULE WITH WAVELENGTH MONITOR FOR DWDM APPLICATIONS (20 mW MIN)

NX8570 SERIES

FEATURES

- **WAVELENGTH SELECTABLE FOR ITU-T STANDARDS:**
(50 GHz grid)
- **NX8570SCXXXD - 4x50 GHz TUNABLE**
- **NX8570SCXXXQ - 8x50 GHz TUNABLE**
- **WAVELENGTH MONITOR FUNCTION:**
(Etalon Filter, Wavelength monitor PD)
- **OUTPUT POWER:**
Pf = 20 mW MIN
- **INTERNAL THERMOELECTRIC COOLER AND ISOLATOR**
- **HERMETICALLY SEALED 14-PIN BUTTERFLY PACKAGE**
- **POLARIZATION MAINTAIN FIBER PIGTAIL**

DESCRIPTION

NEC's NX8570 series is a 1550 nm Multiple Quantum Well (MQW) structured Distributed Feed-Back laser diode with wavelength monitor function. This device is temperature tunable up to 8 x 50 GHz channels. Available at both C-band(1550.334 to 1565.087 nm) and L-band (1565.496 to 1508.760 nm) ITU-T grid wavelength. This device is designed as a CW light source and is ideal for transmission systems in which external modulators are used.

ELECTRO-OPTICAL CHARACTERISTICS (T_{LD} = 25°C, T_C = -5 to +70°C, unless otherwise specified)

PART NUMBER			NX8570 SERIES		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
T _{SET}	Laser Set Temperature	Fixed Wavelength	°C	20	35
		4 channel tuneable	°C	10	45
		8 channel tuneable	°C	5	55
V _F	Forward Voltage, P _f = 20 mW	V	0.9	1.2	2.5
I _{TH}	Threshold Current	mA		20	40
I _{OP}	Operation Current, P _f = 20 mW	mA		120	167
P _f	Optical Output Power from Fiber, I _F = 167 mA, T _{LD} = T _{SET}	mW	20		
P _{TH}	Threshold Output Power from Fiber, I _F = I _{TH}	μW			100
λ _p	Peak Emission Wavelength, P _f = 20 mW, CW, T _{LD} = T _{SET}	nm	1530	ITU-T ¹	1609
	Wavelength Stability, T _{LD} = T _{SET} , applicable to wavelength monitor, E.O.L.	pm	-20		+20
Δν	Spectral Line Width, P _f = 20 mW, CW, 3 dB down	MHz		1	5
SMSR	Side mode Suppression Ratio, P _f = 20 mW, CW	dB	35	45	
RIN	Relative Intensity Noise, P _f = 20 mW, 20 MHz to 3 GHz	dB/Hz			-150
ext	Polarization Extinction Ratio ² , P _f = 20 mW, CW	dB	20		
ISOL	Isolation	dB	30		

Notes:

1. Available for DWDM wavelengths based on ITU-T recommended grid. Please refer to "tables A, B, and C".
2. Polarization state of LD is aligned parallel to the slow axis.

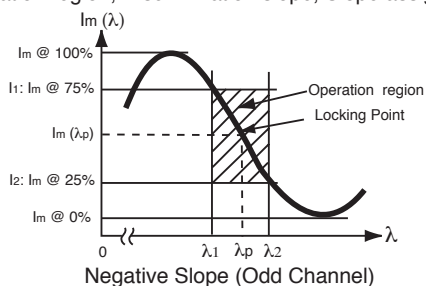
NX8570 SERIES

ELECTRO-OPTICAL CHARACTERISTICS (Applicable to Monitor PD: $T_{LD} = T_{set}$, $T_C = -5$ to $+70^\circ\text{C}$)

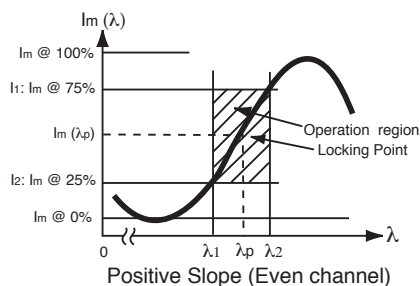
PART NUMBER			NX8570 Series		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
$I_m(P_f)$	Monitor Current (P_f Monitor), $P_f = 20$ mW, $V_R = 5$ V	μA	30		300
$I_m(\lambda_p)$	Monitor Current (λ_p Monitor), $P_f = 20$ mW, $V_R = 5$ V, Peak value	μA	15		150
$I_m(\lambda)$	Operation region ¹	%	25		75
$ \lambda_1 - \lambda_2 $		pm	90		
$\eta\lambda$	Discrimination slope ¹	$\mu\text{A/pm}$	0.05		
I_D	Dark Current, $V_R = 5$ V	nA		2	10
γ^2	Tracking Error, $I_m = \text{const.}$	dB			0.5

Notes:

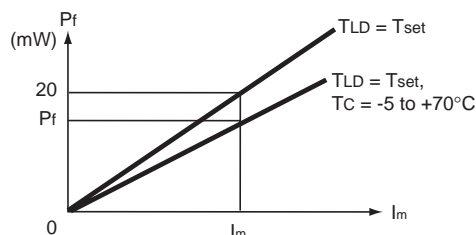
1. Operation region, Discrimination slope, Slope assignment.



$$\eta\lambda = \left| \frac{I_1 - I_2}{\lambda_1 - \lambda_2} \right| \quad [\mu\text{A/pm}]$$



2. Tracking error: γ



$$\gamma = \left| 10 \log \frac{P_f}{20 \text{ mW}} \right|$$

ELECTRO-OPTICAL CHARACTERISTICS (Applicable to Thermistor and TEC: $T_{LD} = T_{set}$, $T_C = -5$ to $+70^\circ\text{C}$)

PART NUMBER			NX8570 Series		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
R	Thermistor Resistance, $T_{LD} = 25^\circ\text{C}$	k Ω	9.5	10.0	10.5
B	B Constant, $T_{LD} = 25^\circ\text{C}$	K	3350	3450	3550
I_C	Cooler Current, $\Delta T = 70 - T_{SET}$, $P_f = 20$ mW	A			1.5
V_C	Cooler Voltage, $\Delta T = 70 - T_{SET}$, $P_f = 20$ mW	V			3.0

ABSOLUTE MAXIMUM RATINGS¹

($T_A = 25^\circ\text{C}$, unless otherwise specified)

SYMBOLS	PARAMETERS	UNITS	RATINGS
I_F	Forward Current of LD	mA	300
V_R	Reverse Voltage of LD	V	2.0
I_F	Forward Current of PD	mA	10
V_R	Reverse Voltage of PD	V	20
T_C	Operating Case Temperature	$^\circ\text{C}$	-20 to +70
T_{STG}	Storage Temperature	$^\circ\text{C}$	-40 to +85
T_{SLD}	Lead Soldering Temperature (10 s)	$^\circ\text{C}$	260

Note:

1. Operation in excess of any one of these parameters may result in permanent damage.

ORDERING INFORMATION

Part Number	Wavelength	Available Connector
NX8570SCxxx-BA	Fixed (Refer to table A)	With FC-PC Connector
NX8570SCxxx-CA *1		With SC-PC Connector
NX8570SCxxxD-BA	4 channel tunable (Refer to table B)	With FC-PC Connector
NX8570SCxxxD-CA *1		With SC-PC Connector
NX8570SCxxxQ-BA	8 channel tunable (Refer to table C)	With FC-PC Connector

Note:

1. SC Connector: option

Table A: Part number for fixed wavelength product

Part Number	Channel	ITU-T Wavelength	Frequency	Monitor Slope
With FC-PC Connector (Standard)		(nm)	(THz)	
NX8570SC303-BA	1	1530.334	195.90	Negative
NX8570SC307-BA	2	1530.725	195.85	Positive
NX8570SC311-BA	3	1531.116	195.80	Negative
NX8570SC315-BA	4	1531.507	195.75	Positive
NX8570SC318-BA	5	1531.898	195.70	Negative
NX8570SC322-BA	6	1532.290	195.65	Positive
NX8570SC326-BA	7	1532.681	195.60	Negative
NX8570SC330-BA	8	1533.073	195.55	Positive
NX8570SC334-BA	9	1533.465	195.50	Negative
NX8570SC338-BA	10	1533.858	195.45	Positive
NX8570SC342-BA	11	1534.250	195.40	Negative
NX8570SC346-BA	12	1534.643	195.35	Positive
NX8570SC350-BA	13	1535.036	195.30	Negative
NX8570SC354-BA	14	1535.429	195.25	Positive
NX8570SC358-BA	15	1535.822	195.20	Negative
NX8570SC362-BA	16	1536.216	195.15	Positive
NX8570SC366-BA	17	1536.609	195.10	Negative
NX8570SC370-BA	18	1537.003	195.05	Positive
NX8570SC373-BA	19	1537.397	195.00	Negative
NX8570SC377-BA	20	1537.792	194.95	Positive
NX8570SC381-BA	21	1538.186	194.90	Negative
NX8570SC385-BA	22	1538.581	194.85	Positive
NX8570SC389-BA	23	1538.976	194.80	Negative
NX8570SC393-BA	24	1539.371	194.75	Positive
NX8570SC397-BA	25	1539.766	194.70	Negative
NX8570SC401-BA	26	1540.162	194.65	Positive
NX8570SC405-BA	27	1540.557	194.60	Negative
NX8570SC409-BA	28	1540.953	194.55	Positive
NX8570SC413-BA	29	1541.349	194.50	Negative
NX8570SC417-BA	30	1541.746	194.45	Positive
NX8570SC421-BA	31	1542.142	194.40	Negative
NX8570SC425-BA	32	1542.539	194.35	Positive
NX8570SC429-BA	33	1542.936	194.30	Negative
NX8570SC433-BA	34	1543.333	194.25	Positive
NX8570SC437-BA	35	1543.730	194.20	Negative

NX8570 SERIES**Table A: Part number for fixed wavelength product (con't)**

Part Number	Channel	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
With FC-PC Connector (Standard)				
NX8570SC445-BA	37	1544.526	194.10	Negative
NX8570SC449-BA	38	1544.924	194.05	Positive
NX8570SC453-BA	39	1545.322	194.00	Negative
NX8570SC457-BA	40	1545.720	193.95	Positive
NX8570SC461-BA	41	1546.119	193.90	Negative
NX8570SC465-BA	42	1546.518	193.85	Positive
NX8570SC469-BA	43	1546.917	193.80	Negative
NX8570SC473-BA	44	1547.316	193.75	Positive
NX8570SC477-BA	45	1547.715	193.70	Negative
NX8570SC481-BA	46	1548.115	193.65	Positive
NX8570SC485-BA	47	1548.515	193.60	Negative
NX8570SC489-BA	48	1548.915	193.55	Positive
NX8570SC493-BA	49	1549.315	193.50	Negative
NX8570SC497-BA	50	1549.715	193.45	Positive
NX8570SC501-BA	51	1550.116	193.40	Negative
NX8570SC505-BA	52	1550.517	193.35	Positive
NX8570SC509-BA	53	1550.918	193.30	Negative
NX8570SC513-BA	54	1551.319	193.25	Positive
NX8570SC517-BA	55	1551.721	193.20	Negative
NX8570SC521-BA	56	1552.122	193.15	Positive
NX8570SC525-BA	57	1552.524	193.10	Negative
NX8570SC529-BA	58	1552.926	193.05	Positive
NX8570SC533-BA	59	1553.329	193.00	Negative
NX8570SC537-BA	60	1553.731	192.95	Positive
NX8570SC541-BA	61	1554.134	192.90	Negative
NX8570SC545-BA	62	1554.537	192.85	Positive
NX8570SC549-BA	63	1554.940	192.80	Negative
NX8570SC553-BA	64	1555.343	192.75	Positive
NX8570SC557-BA	65	1555.747	192.70	Negative
NX8570SC561-BA	66	1556.151	192.65	Positive
NX8570SC565-BA	67	1556.555	192.60	Negative
NX8570SC569-BA	68	1556.959	192.55	Positive
NX8570SC573-BA	69	1557.363	192.50	Negative
NX8570SC577-BA	70	1557.768	192.45	Positive
NX8570SC581-BA	71	1558.173	192.40	Negative
NX8570SC585-BA	72	1558.578	192.35	Positive
NX8570SC589-BA	73	1558.983	192.30	Negative
NX8570SC593-BA	74	1559.389	192.25	Positive
NX8570SC597-BA	75	1559.794	192.20	Negative
NX8570SC602-BA	76	1560.200	192.15	Positive
NX8570SC606-BA	77	1560.606	192.10	Negative
NX8570SC610-BA	78	1561.013	192.05	Positive
NX8570SC614-BA	79	1561.419	192.00	Negative
NX8570SC618-BA	80	1561.826	191.95	Positive
NX8570SC622-BA	81	1562.233	191.90	Negative
NX8570SC626-BA	82	1562.640	191.85	Positive
NX8570SC630-BA	83	1563.047	191.80	Negative
NX8570SC634-BA	84	1563.455	191.75	Positive
NX8570SC638-BA	85	1563.863	191.70	Negative

Table A: Part number for fixed wavelength product (con't)

Part Number With FC-PC Connector (Standard)	Channel	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8570SC642-BA	86	1564.271	191.65	Positive
NX8570SC646-BA	87	1564.679	191.60	Negative
NX8570SC650-BA	88	1565.087	191.55	Positive

Table B: Part number for 4 channel tunable product

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor slope
NX8570SC315D-BA	1530.334	195.90	Negative
	1530.725	195.85	Positive
	1531.116	195.80	Negative
	1531.507	195.75	Positive
NX8570SC330D-BA	1531.898	195.70	Negative
	1532.290	195.65	Positive
	1532.681	195.60	Negative
	1533.073	195.55	Positive
NX8570SC346D-BA	1533.465	195.50	Negative
	1533.858	195.45	Positive
	1534.250	195.40	Negative
	1534.643	195.35	Positive
NX8570SC362D-BA	1535.036	195.30	Negative
	1535.429	195.25	Positive
	1535.822	195.20	Negative
	1536.216	195.15	Positive
NX8570SC377D-BA	1536.609	195.10	Negative
	1537.003	195.05	Positive
	1537.397	195.00	Negative
	1537.792	194.95	Positive
NX8570SC393D-BA	1538.186	194.90	Negative
	1538.581	194.85	Positive
	1538.976	194.80	Negative
	1539.371	194.75	Positive
NX8570SC409D-BA	1539.766	194.70	Negative
	1540.162	194.65	Positive
	1540.557	194.60	Negative
	1540.953	194.55	Positive
NX8570SC425D-BA	1541.349	194.50	Negative
	1541.746	194.45	Positive
	1542.142	194.40	Negative
	1542.539	194.35	Positive
NX8570SC441D-BA	1542.936	194.30	Negative
	1543.333	194.25	Positive
	1543.730	194.20	Negative
	1544.128	194.15	Positive
NX8570SC457D-BA	1544.526	194.10	Negative
	1544.924	194.05	Positive
	1545.322	194.00	Negative
	1545.720	193.95	Positive

NX8570 SERIES

Table B: Part number for 4 channel tunable product (con't)

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor slope
NX8570SC473D-BA	1546.119	193.90	Negative
	1546.518	193.85	Positive
	1546.917	193.80	Negative
	1547.316	195.75	Positive
NX8570SC489D-BA	1547.715	193.70	Negative
	1548.115	193.65	Positive
	1548.515	193.60	Negative
	1548.915	193.55	Positive
NX8570SC505D-BA	1549.315	193.50	Negative
	1549.715	193.45	Positive
	1550.116	193.40	Negative
	1550.517	193.35	Positive
NX8570SC521D-BA	1550.918	193.30	Negative
	1551.319	193.25	Positive
	1551.721	193.20	Negative
	1552.122	193.15	Positive
NX8570SC537D-BA	1552.524	193.10	Negative
	1552.926	193.05	Positive
	1553.329	193.00	Negative
	1553.731	192.95	Positive
NX8570SC553D-BA	1554.134	192.90	Negative
	1554.537	192.85	Positive
	1554.940	192.80	Negative
	1555.343	192.75	Positive
NX8570SC569D-BA	1555.747	192.70	Negative
	1556.151	192.65	Positive
	1556.555	192.60	Negative
	1556.959	192.55	Positive
NX8570SC585D-BA	1557.363	192.50	Negative
	1557.768	192.45	Positive
	1558.173	192.40	Negative
	1558.578	192.35	Positive
NX8570SC602D-BA	1558.983	192.30	Negative
	1559.389	192.25	Positive
	1559.794	192.20	Negative
	1560.200	192.15	Positive
NX8570SC618D-BA	1560.606	192.10	Negative
	1561.013	192.05	Positive
	1561.419	192.00	Negative
	1561.826	191.95	Positive
NX8570SC634D-BA	1562.233	191.90	Negative
	1562.640	191.85	Positive
	1563.047	191.80	Negative
	1563.455	191.75	Positive
NX8570SC650D-BA	1563.863	191.70	Negative
	1564.271	191.65	Positive
	1564.679	191.60	Negative

NX8570 SERIES

Table B: Part number for 4 channel tunable product (con't)

Part Number	ITU-T Wavelength ^{*1} (nm)	Frequency (THz)	Monitor Slope
NX8570SC667D-BA	1565.49	191.50	Negative
	1565.90	191.45	Positive
	1566.31	191.40	Negative
	1566.72	191.35	Positive
NX8570SC683D-BA	1567.13	191.30	Negative
	1567.54	191.25	Positive
	1567.95	191.20	Negative
	1568.36	191.15	Positive
NX8570SC700D-BA	1568.77	191.10	Negative
	1569.18	191.05	Positive
	1569.59	191.00	Negative
	1570.00	190.95	Positive
NX8570SC716D-BA	1570.41	190.90	Negative
	1570.82	190.85	Positive
	1571.23	190.80	Negative
	1571.65	190.75	Positive
NX8570SC733D-BA	1572.06	190.70	Negative
	1572.47	190.65	Positive
	1572.88	190.60	Negative
	1573.30	190.55	Positive
NX8570SC749D-BA	1573.71	190.50	Negative
	1574.12	190.45	Positive
	1574.54	190.40	Negative
	1574.95	190.35	Positive
NX8570SC766D-BA	1575.36	190.30	Negative
	1575.78	190.25	Positive
	1576.19	190.20	Negative
	1576.61	190.15	Positive
NX8570SC782D-BA	1577.02	190.10	Negative
	1577.44	190.05	Positive
	1577.85	190.00	Negative
	1578.27	189.95	Positive
NX8570SC799D-BA	1578.68	189.90	Negative
	1579.10	189.85	Positive
	1579.51	189.80	Negative
	1579.93	189.75	Positive
NX8570SC816D-BA	1580.35	189.70	Negative
	1580.76	189.65	Positive
	1581.18	189.60	Negative
	1581.60	189.55	Positive
NX8570SC832D-BA	1582.01	189.50	Negative
	1582.43	189.45	Positive
	1582.85	189.40	Negative
	1583.27	189.35	Positive
NX8570SC849D-BA	1583.69	189.30	Negative
	1584.10	189.25	Positive
	1584.52	189.20	Negative
	1584.94	189.15	Positive
NX8570SC866D-BA	1585.36	189.10	Negative
	1585.78	189.05	Positive
	1586.20	189.00	Negative
	1586.62	188.95	Positive
NX8570SC883D-BA	1587.04	188.90	Negative
	1587.46	188.85	Positive
	1587.88	188.80	Negative
	1588.30	188.75	Positive

NX8570 SERIES

Table B: Part number for 4 channel tunable product (con't)

Part Number	ITU-T Wavelength **1 (nm)	Frequency (THz)	Monitor Slope
NX8570SC899D-BA	1588.72	188.70	Negative
	1589.14	188.65	Positive
	1589.56	188.60	Negative
	1589.98	188.55	Positive
NX8570SC916D-BA	1590.41	188.50	Negative
	1590.83	188.45	Positive
	1591.25	188.40	Negative
	1591.67	188.35	Positive
NX8570SC933D-BA	1592.10	188.30	Negative
	1592.52	188.25	Positive
	1592.94	188.20	Negative
	1593.36	188.15	Positive
NX8570SC950D-BA	1593.79	188.10	Negative
	1594.21	188.05	Positive
	1594.64	188.00	Negative
	1595.06	187.95	Positive
NX8570SC967D-BA	1595.48	187.90	Negative
	1595.91	187.85	Positive
	1596.33	187.80	Negative
	1596.76	187.75	Positive
NX8570SC984D-BA	1597.18	187.70	Negative
	1597.61	187.65	Positive
	1598.04	187.60	Negative
	1598.46	187.55	Positive
NX8570SC6001D-BA	1598.89	187.50	Negative
	1599.32	187.45	Positive
	1599.74	187.40	Negative
	1600.17	187.35	Positive
NX8570SC6018D-BA	1600.60	187.30	Negative
	1601.02	187.25	Positive
	1601.45	187.20	Negative
	1601.88	187.15	Positive
NX8570SC6035D-BA	1602.31	187.10	Negative
	1602.74	187.05	Positive
	1603.16	187.00	Negative
	1603.59	186.95	Positive
NX8570SC6053D-BA	1604.02	186.90	Negative
	1604.45	186.85	Positive
	1604.88	186.80	Negative
	1605.31	186.75	Positive
NX8570SC6070D-BA	1605.74	186.70	Negative
	1606.17	186.65	Positive
	1606.60	186.60	Negative
	1607.03	186.55	Positive
NX8570SC6087D-BA	1607.46	186.50	Negative
	1607.89	186.45	Positive
	1608.32	186.40	Negative
	1608.76	186.35	Positive

Table C: Part number for 8 channel tunable product (TLD = Tset)

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8570SC330Q-BA	1530.33	195.90	Negative
	1530.72	195.85	Positive
	1531.11	195.80	Negative
	1531.50	195.75	Negative
	1531.89	195.70	Negative
	1532.29	195.65	Positive
	1532.68	195.60	Negative
	1533.07	195.55	Positive
NX8570SC362Q -BA	1533.46	195.50	Negative
	1533.85	195.45	Positive
	1534.25	195.40	Negative
	1534.64	195.35	Positive
	1535.03	195.30	Negative
	1535.42	195.25	Positive
	1535.82	195.20	Negative
	1536.21	195.15	Positive
NX8570SC393Q-BA	1536.60	195.05	Negative
	1537.00	195.00	Positive
	1537.39	195.00	Negative
	1537.79	194.95	Positive
	1538.18	194.90	Negative
	1538.58	194.85	Positive
	1538.97	194.80	Negative
	1539.37	194.75	Positive
NX8570425Q-BA	1539.76	194.70	Negative
	1540.16	194.65	Positive
	1540.55	194.60	Negative
	1540.95	194.55	Positive
	1541.34	194.50	Negative
	1541.74	194.45	Positive
	1542.14	194.40	Negative
	1542.53	194.35	Positive
NX8570457Q-BA	1542.93	194.30	Negative
	1543.33	194.25	Positive
	1543.73	194.20	Negative
	1544.12	194.15	Positive
	1544.52	194.10	Negative
	1544.92	194.05	Positive
	1544.32	194.00	Negative
	1545.72	193.95	Positive
NX8570489Q-BA	1546.11	193.90	Negative
	1546.51	193.85	Positive
	1546.91	193.80	Negative
	1547.31	193.75	Positive
	1547.71	193.70	Negative
	1548.11	193.65	Positive
	1548.51	193.60	Negative
	1548.91	193.55	Positive
NX8570521Q-BA	1549.31	193.50	Negative
	1549.71	193.45	Positive
	1550.11	193.40	Negative
	1550.51	193.35	Positive
	1550.91	193.30	Negative
	1551.31	193.25	Positive
	1551.72	193.20	Negative
	1552.12	193.15	Positive

NX8570 SERIES

Table C: Part number for 8 channel tunable product (TLD = Tset) (cont.)

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8570SC553Q-BA	1552.52	193.10	Negative
	1552.92	193.05	Positive
	1553.32	193.00	Negative
	1553.73	192.95	Positive
	1554.13	192.90	Negative
	1554.53	192.85	Positive
	1554.94	192.80	Negative
	1555.34	195.75	Positive
NX8570SC585Q-BA	1555.74	192.70	Negative
	1556.15	192.65	Positive
	1556.55	192.60	Negative
	1556.95	192.55	Positive
	1557.36	192.50	Negative
	1557.76	192.45	Positive
	1558.17	192.40	Negative
	1558.57	192.35	Positive
NX8570SC618Q-BA	1558.98	192.30	Negative
	1559.38	192.25	Positive
	1559.79	192.20	Negative
	1560.20	192.15	Positive
	1560.60	192.10	Negative
	1561.01	192.05	Positive
	1561.41	192.00	Negative
	1561.82	191.95	Positive
NX8570SC650Q-BA	1562.23	191.90	Negative
	1562.64	191.85	Positive
	1563.04	191.80	Negative
	1563.45	191.75	Positive
	1563.86	191.70	Negative
	1564.27	191.65	Positive
	1564.67	191.60	Negative
	1565.08	191.55	Positive
NX8570SC683Q-BA	1565.49	191.50	Negative
	1565.90	191.45	Positive
	1566.31	191.40	Negative
	1566.72	191.35	Positive
	1567.13	191.30	Negative
	1567.54	191.25	Positive
	1567.95	191.20	Negative
	1568.36	191.15	Positive
NX8570SC716Q-BA	1568.77	191.10	Negative
	1569.18	191.05	Positive
	1569.59	191.00	Negative
	1570.00	190.95	Positive
	1570.41	190.90	Negative
	1570.82	190.85	Positive
	1571.23	190.80	Negative
	1571.65	190.75	Positive
NX8570SC749Q-BA	1572.06	190.70	Negative
	1572.47	190.65	Positive
	1572.88	190.60	Negative
	1573.30	190.55	Positive
	1573.71	190.50	Negative
	1574.12	190.45	Positive
	1574.54	190.40	Negative
	1574.95	190.35	Positive

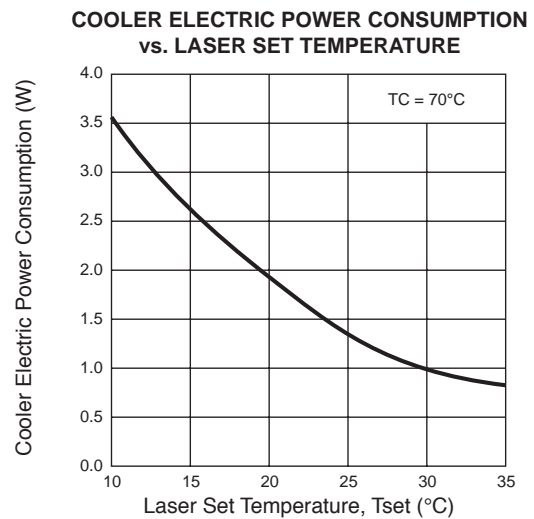
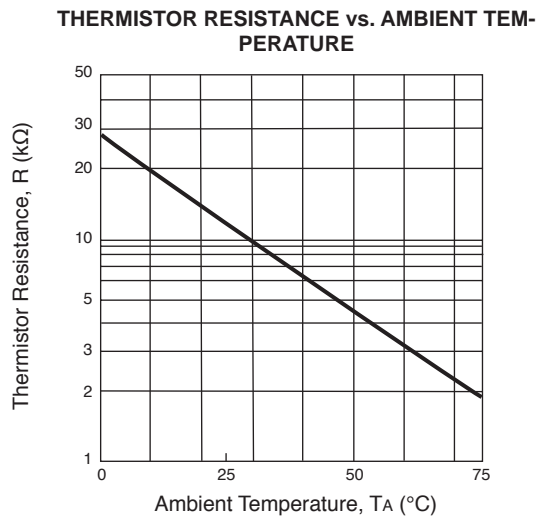
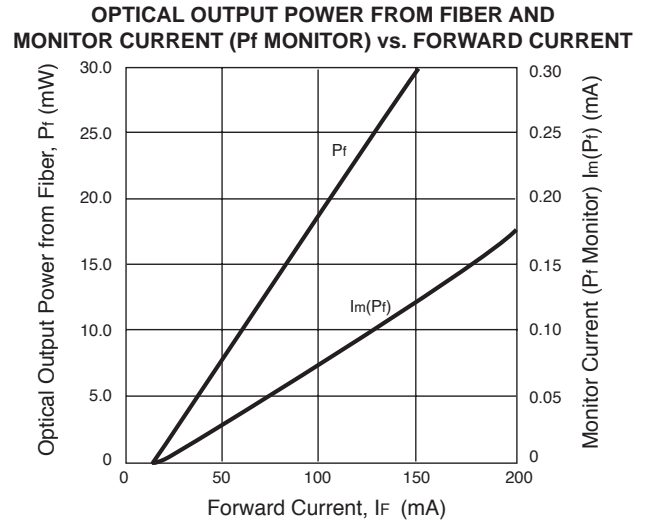
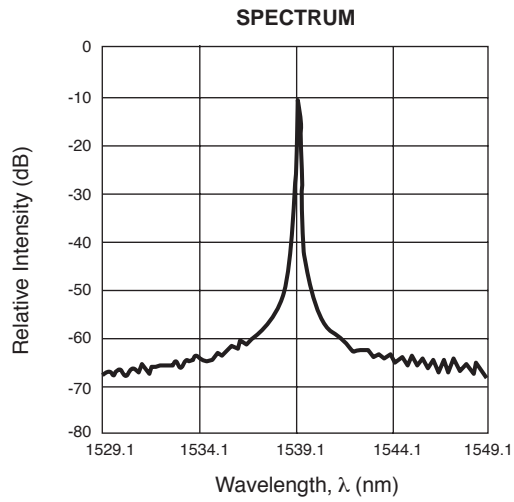
Table C: Part number for 8 channel tunable product (TLD = Tset) (cont.)

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8570SC782Q-BA	1575.36	190.30	Negative
	1575.78	190.25	Positive
	1576.19	190.20	Negative
	1576.61	190.15	Positive
	1577.02	190.10	Negative
	1577.44	190.05	Positive
	1577.85	190.00	Negative
NX8570SC816Q-BA	1578.27	189.95	Positive
	1578.68	189.90	Negative
	1579.10	189.85	Positive
	1579.51	189.80	Negative
	1579.93	189.75	Positive
	1580.35	189.70	Negative
	1580.76	189.65	Positive
NX8570SC849Q-BA	1581.18	189.60	Negative
	1581.60	189.55	Positive
	1582.01	189.50	Negative
	1582.43	189.45	Positive
	1582.85	189.40	Negative
	1583.27	189.35	Positive
	1583.69	189.30	Negative
NX8570SC883Q-BA	1584.10	189.25	Positive
	1584.52	189.20	Negative
	1584.94	189.15	Positive
	1585.36	189.10	Negative
	1585.78	189.05	Positive
	1586.20	189.00	Negative
	1586.62	188.95	Positive
NX8570SC916Q-BA	1587.04	188.90	Negative
	1587.46	188.85	Positive
	1587.88	188.80	Negative
	1588.30	188.75	Positive
	1588.72	188.70	Negative
	1589.14	188.65	Positive
	1589.56	188.60	Negative
NX8570SC950Q-BA	1589.98	188.55	Positive
	1590.41	188.50	Negative
	1590.83	188.45	Positive
	1591.25	188.40	Negative
	1591.67	188.35	Positive
	1592.10	188.30	Negative
	1592.52	188.25	Positive
NX8570SC984Q-BA	1592.94	188.20	Negative
	1593.36	188.15	Positive
	1593.79	188.10	Negative
	1594.21	188.05	Positive
	1594.64	188.00	Negative
	1595.06	187.95	Positive
	1595.48	187.90	Negative
NX8570SC984Q-BA	1595.91	187.85	Positive
	1596.33	187.80	Negative
	1596.76	187.75	Positive
	1597.18	187.70	Negative
	1597.61	187.65	Positive
	1598.04	187.60	Negative
	1598.46	187.55	Positive

NX8570 SERIES**Table C: Part number for 8 channel tunable product (TLD = Tset) (cont.)**

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8570SC6018Q-BA	1598.89	187.50	Negative
	1599.32	187.45	Positive
	1599.74	187.40	Negative
	1600.17	187.35	Positive
	1600.60	187.30	Negative
	1601.02	187.25	Positive
	1601.45	187.20	Negative
NX8570SC6053Q-BA	1601.88	187.15	Positive
	1602.31	187.10	Negative
	1602.74	187.05	Positive
	1603.16	187.00	Negative
	1603.59	186.95	Positive
	1604.02	186.90	Negative
	1604.45	186.85	Positive
NX8570SC6087Q-BA	1604.88	186.80	Negative
	1605.31	186.75	Positive
	1605.74	186.70	Negative
	1606.17	186.65	Positive
	1606.60	186.60	Negative
	1607.03	186.55	Positive
	1607.46	186.50	Negative
NX8570SC6087Q-BA	1607.89	186.45	Positive
	1608.32	186.40	Negative
	1608.76	186.35	Positive

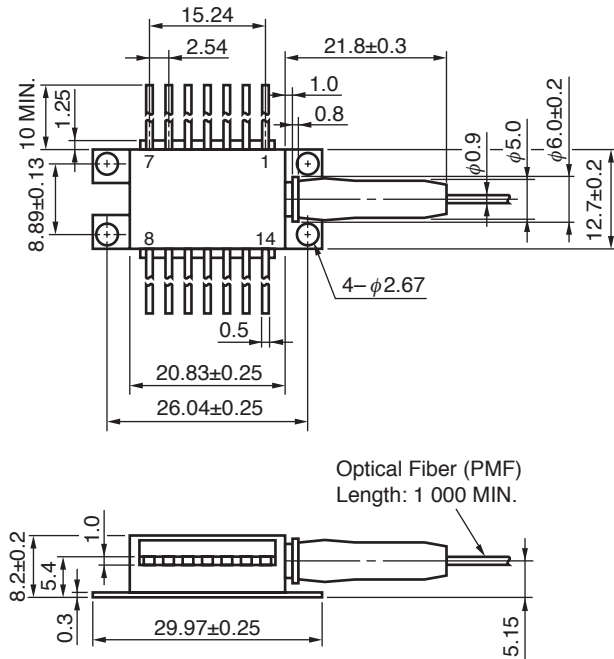
TYPICAL PERFORMANCE CURVES ($T_{LD} = 25^{\circ}\text{C}$, unless otherwise specified)



Remark: The graphs indicate nominal characteristics.

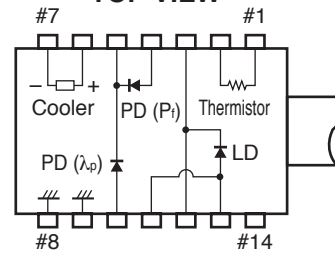
NX8570 SERIES

OUTLINE DIMENSIONS (Units in mm)



NX8570SC

TOP VIEW



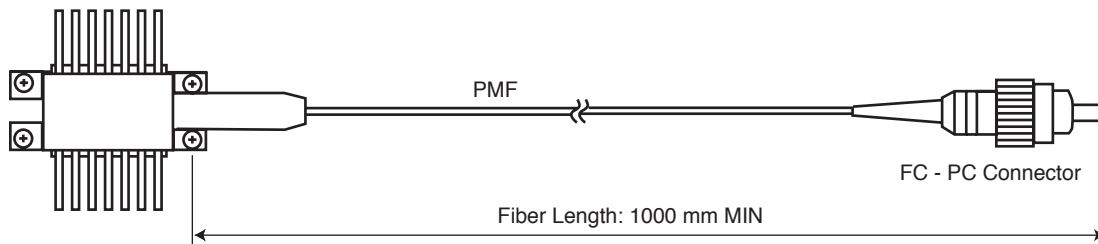
PIN CONNECTIONS

Pin No.	Function	Pin No.	Function
1	Thermistor	8	GND
2	Thermistor	9	GND
3	LD Cathode	10	PD (λ_p) Anode
4	PD (P_i) Anode	11	LD Anode
5	PD Cathode	12	LD Cathode
6	Cooler Anode	13	LD Anode
7	Cooler Cathode	14	NC

OPTICAL FIBER CHARACTERISTICS

(Units in mm)

PARAMETERS	SPECIFICATIONS
Outer Diameter	0.9±0.1
Minimum Fiber Bending Radius	25
Fiber Length	1000 MIN



Life Support Applications

These NEC products are not intended for use in life support devices, appliances, or systems where the malfunction of these products can reasonably be expected to result in personal injury. The customers of CEL using or selling these products for use in such applications do so at their own risk and agree to fully indemnify CEL for all damages resulting from such improper use or sale.

CEL California Eastern Laboratories, Your source for NEC RF, Microwave, Optoelectronic, and Fiber Optic Semiconductor Devices.

4590 Patrick Henry Drive • Santa Clara, CA 95054-1817 • (408) 988-3500 • FAX (408) 988-0279 • www.cel.com

DATA SUBJECT TO CHANGE WITHOUT NOTICE

08/25/2003

NEC