



# NEC's TUNABLE CW InGaAsP MQW DFB LASER DIODE MODULE WITH WAVELENGTH MONITOR FOR DWDM APPLICATIONS (10 mW MIN)

## NX8571 SERIES

### FEATURES

- **WAVELENGTH MONITOR FUNCTION:**  
(Etalon Filter, Wavelength monitor PD)
- **OUTPUT POWER:**  
P<sub>f</sub> = 10 mW MIN
- **AVAILABLE FOR DWDM WAVELENGTHS  
BASED ON ITU-T RECOMMENDATIONS:**  
(50 GHz Grid)
- **NX8571SCXXXD - 4 X 50 GHz TUNABLE**
- **NX8571SCXXXQ - 8 X 50 GHz TUNABLE**
- **INTERNAL THERMOELECTRIC COOLER AND  
ISOLATOR**
- **HERMETICALLY SEALED 14-PIN BUTTERFLY PACKAGE**
- **POLARIZATION MAINTAIN FIBER PIGTAIL**

### DESCRIPTION

NEC's NX8571 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 (1530.334 to 1565.087 nm) and L-band (1565.496 to 1608.760 nm) ITU-T grid wavelengths. 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<sub>LD</sub> = 25°C, T<sub>C</sub> = -5 to +70°C, unless otherwise specified)

PART NUMBER			NX8571 SERIES		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
T <sub>SET</sub>	Laser Set Temperature	Fixed wavelength	°C	20	35
		4 channel tunable		10	45
		8 channel tunable		5	55
V <sub>F</sub>	Forward Voltage, P <sub>f</sub> = 10 mW	V	0.9	1.2	2.5
I <sub>TH</sub>	Threshold Current	mA		20	40
I <sub>OP</sub>	Operation Current, P <sub>f</sub> = 10 mW	mA		70	167
P <sub>f</sub>	Optical Output Power from Fiber, I <sub>F</sub> = 167 mA, T <sub>LD</sub> = T <sub>SET</sub>	mW	20		
P <sub>TH</sub>	Threshold Output Power from Fiber, I <sub>F</sub> = I <sub>TH</sub>	μW			100
λ <sub>p</sub>	Peak Emission Wavelength, P <sub>f</sub> = 10 mW, CW, T <sub>LD</sub> = T <sub>SET</sub>	nm	1530	ITU-T <sup>1</sup>	1609
	Wavelength Stability, T <sub>LD</sub> = T <sub>set</sub> ,				
	applicable to wavelength monitor, E.O.L.	pm	-20		+20
Δν	Spectral Line Width, P <sub>f</sub> = 10 mW, CW, 3 dB down	MHz		1	2
SMSR	Side mode Suppression Ratio, P <sub>f</sub> = 10 mW, CW	dB	35	45	
RIN	Relative Intensity Noise, P <sub>f</sub> = 10 mW, 20 MHz to 3 GHz	dB/Hz			-150
ISOL	Isolation	dB	30		
ext	Polarization Extinction Ratio <sup>2</sup> , P <sub>f</sub> = 10 mW, CW	dB	20		

Notes:

1. Wavelength selectable for ITU-T standards (50 GHz grid). Please refer to tables A, B, and C.
2. Polarization state of LD is aligned parallel to the slow axis.

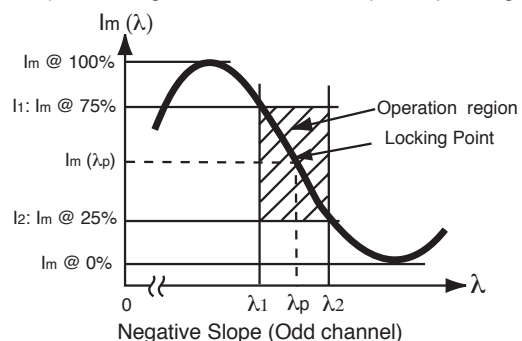
# NX8571 SERIES

## ELECTRO-OPTICAL CHARACTERISTICS (Applicable to Monitor PD: $T_{LD} = 25^{\circ}\text{C}$ , $T_C = -5$ to $+70^{\circ}\text{C}$ )

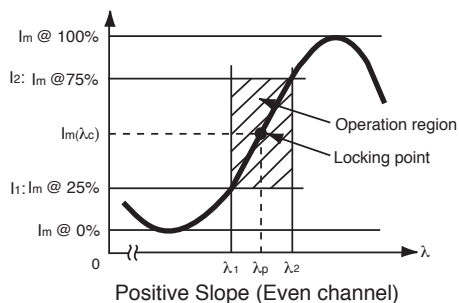
PART NUMBER			NX8571 SERIES		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
$I_m(P_f)$	Monitor Current ( $P_f$ Monitor), $P_f = 10$ mW, $V_R = 5$ V	$\mu\text{A}$	20		200
$I_m(\lambda_p)$	Monitor Current ( $\lambda_p$ Monitor), $P_f = 10$ mW, $V_R = 5$ V, Peak value	$\mu\text{A}$	10		100
$I_m(\lambda)$	Operation region <sup>1</sup>	%	25		75
$ \lambda_1 - \lambda_2 $		pm	90		
$\eta\lambda$	Discrimination Slope <sup>1</sup>	$\mu\text{A}/\text{pm}$	0.05		
$I_D$	Dark Current, $V_R = 5$ V	nA		2	10
$\gamma^2$	Tracking Error, $I_m = \text{const.}$	dB			0.5

Notes:

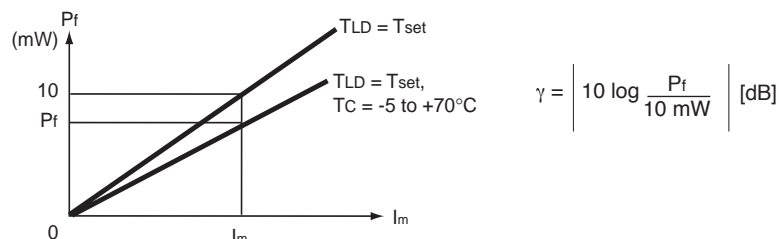
1. Operation region, Discrimination slope, Slope assignment



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



2. Tracking error:  $\gamma$



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

PART NUMBER			NX8571 SERIES		
SYMBOLS	PARAMETERS AND CONDITIONS	UNITS	MIN	TYP	MAX
R	Thermistor Resistance, $T_{LD} = 25^{\circ}\text{C}$	k $\Omega$	9.5	10.0	10.5
B	B Constant, $T_{LD} = 25^{\circ}\text{C}$	K	3350	3450	3550
$I_C$	Cooler Current, $\Delta T = 70 - T_{SET}$ , $P_f = 10$ mW	A			1.5
$V_C$	Cooler Voltage, $\Delta T = 70 - T_{SET}$ , $P_f = 10$ mW	V			3.0

## ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

( $T_A = 25^{\circ}\text{C}$ , 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	PIN CONFIGURATION	WAVELENGTH	CONNECTOR
NX8571SCXXX-BA	Anode floating	Fixed (See Table A)	FC-PC
NX8571SCXXX-CA	Anode floating	Fixed (See Table A)	SC-PC <sup>1</sup>
NX8571SCXXXD-BA	Anode floating	4 channel tunable (see table B)	FC-PC
NX8571SCXXXD-CA	Anode floating	4 channel tunable (see table B)	SC-PC <sup>1</sup>
NX8571SCXXXQ-BA	Anode floating	8 channel tunable (see table C)	FC-PC

Note:

1. SC Connector: option.

**Table A: Part number for fixed wavelength product**

Part Number With FC-PC Connector (Standard)	Channel	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8571SC303-BA	1	1530.334	195.90	Negative
NX8571SC307-BA	2	1530.725	195.85	Positive
NX8571SC311-BA	3	1531.116	195.80	Negative
NX8571SC315-BA	4	1531.507	195.75	Positive
NX8571SC318-BA	5	1531.898	195.70	Negative
NX8571SC322-BA	6	1532.290	195.65	Positive
NX8571SC326-BA	7	1532.681	195.60	Negative
NX8571SC330-BA	8	1533.073	195.55	Positive
NX8571SC334-BA	9	1533.465	195.50	Negative
NX8571SC338-BA	10	1533.858	195.45	Positive
NX8571SC342-BA	11	1534.250	195.40	Negative
NX8571SC346-BA	12	1534.643	195.35	Positive
NX8571SC350-BA	13	1535.036	195.30	Negative
NX8571SC354-BA	14	1535.429	195.25	Positive
NX8571SC358-BA	15	1535.822	195.20	Negative
NX8571SC362-BA	16	1536.216	195.15	Positive
NX8571SC366-BA	17	1536.609	195.10	Negative
NX8571SC370-BA	18	1537.003	195.05	Positive
NX8571SC373-BA	19	1537.397	195.00	Negative
NX8571SC377-BA	20	1537.792	194.95	Positive
NX8571SC381-BA	21	1538.186	194.90	Negative
NX8571SC385-BA	22	1538.581	194.85	Positive
NX8571SC389-BA	23	1538.976	194.80	Negative
NX8571SC393-BA	24	1539.371	194.75	Positive
NX8571SC397-BA	25	1539.766	194.70	Negative
NX8571SC401-BA	26	1540.162	194.65	Positive
NX8571SC405-BA	27	1540.557	194.60	Negative
NX8571SC409-BA	28	1540.953	194.55	Positive
NX8571SC413-BA	29	1541.349	194.50	Negative
NX8571SC417-BA	30	1541.746	194.45	Positive
NX8571SC421-BA	31	1542.142	194.40	Negative
NX8571SC425-BA	32	1542.539	194.35	Positive
NX8571SC429-BA	33	1542.936	194.30	Negative
NX8571SC433-BA	34	1543.333	194.25	Positive
NX8571SC437-BA	35	1543.730	194.20	Negative
NX8571SC441-BA	36	1544.128	194.15	Positive

**NX8571 SERIES****Table A: Part number for fixed wavelength product (con't)**

<b>Part Number With FC-PC Connector (Standard)</b>	<b>Channel</b>	<b>ITU-T Wavelength (nm)</b>	<b>Frequency (THz)</b>	<b>Monitor Slope</b>
NX8571SC445-BA	37	1544.526	194.10	Negative
NX8571SC449-BA	38	1544.924	194.05	Positive
NX8571SC453-BA	39	1545.322	194.00	Negative
NX8571SC457-BA	40	1545.720	193.95	Positive
NX8571SC461-BA	41	1546.119	193.90	Negative
NX8571SC465-BA	42	1546.518	193.85	Positive
NX8571SC469-BA	43	1546.917	193.80	Negative
NX8571SC473-BA	44	1547.316	193.75	Positive
NX8571SC477-BA	45	1547.715	193.70	Negative
NX8571SC481-BA	46	1548.115	193.65	Positive
NX8571SC485-BA	47	1548.515	193.60	Negative
NX8571SC489-BA	48	1548.915	193.55	Positive
NX8571SC493-BA	49	1549.315	193.50	Negative
NX8571SC497-BA	50	1549.715	193.45	Positive
NX8571SC501-BA	51	1550.116	193.40	Negative
NX8571SC505-BA	52	1550.517	193.35	Positive
NX8571SC509-BA	53	1550.918	193.30	Negative
NX8571SC513-BA	54	1551.319	193.25	Positive
NX8571SC517-BA	55	1551.721	193.20	Negative
NX8571SC521-BA	56	1552.122	193.15	Positive
NX8571SC525-BA	57	1552.524	193.10	Negative
NX8571SC529-BA	58	1552.926	193.05	Positive
NX8571SC533-BA	59	1553.329	193.00	Negative
NX8571SC537-BA	60	1553.731	192.95	Positive
NX8571SC541-BA	61	1554.134	192.90	Negative
NX8571SC545-BA	62	1554.537	192.85	Positive
NX8571SC549-BA	63	1554.940	192.80	Negative
NX8571SC553-BA	64	1555.343	192.75	Positive
NX8571SC557-BA	65	1555.747	192.70	Negative
NX8571SC561-BA	66	1556.151	192.65	Positive
NX8571SC565-BA	67	1556.555	192.60	Negative
NX8571SC569-BA	68	1556.959	192.55	Positive
NX8571SC573-BA	69	1557.363	192.50	Negative
NX8571SC577-BA	70	1557.768	192.45	Positive
NX8571SC581-BA	71	1558.173	192.40	Negative
NX8571SC585-BA	72	1558.578	192.35	Positive
NX8571SC589-BA	73	1558.983	192.30	Negative
NX8571SC593-BA	74	1559.389	192.25	Positive
NX8571SC597-BA	75	1559.794	192.20	Negative
NX8571SC602-BA	76	1560.200	192.15	Positive
NX8571SC606-BA	77	1560.606	192.10	Negative
NX8571SC610-BA	78	1561.013	192.05	Positive
NX8571SC614-BA	79	1561.419	192.00	Negative
NX8571SC618-BA	80	1561.826	191.95	Positive
NX8571SC622-BA	81	1562.233	191.90	Negative
NX8571SC626-BA	82	1562.640	191.85	Positive
NX8571SC630-BA	83	1563.047	191.80	Negative
NX8571SC634-BA	84	1563.455	191.75	Positive
NX8571SC638-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
NX8571SC642-BA	86	1564.271	191.65	Positive
NX8571SC646-BA	87	1564.679	191.60	Negative
NX8571SC650-BA	88	1565.087	191.55	Positive

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

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor slope
NX8571SC315D-BA	1530.334	195.90	Negative
	1530.725	195.85	Positive
	1531.116	195.80	Negative
	1531.507	195.75	Positive
NX8571SC330D-BA	1531.898	195.70	Negative
	1532.290	195.65	Positive
	1532.681	195.60	Negative
	1533.073	195.55	Positive
NX8571SC346D-BA	1533.465	195.50	Negative
	1533.858	195.45	Positive
	1534.250	195.40	Negative
	1534.643	195.35	Positive
NX8571SC362D-BA	1535.036	195.30	Negative
	1535.429	195.25	Positive
	1535.822	195.20	Negative
	1536.216	195.15	Positive
NX8571SC377D-BA	1536.609	195.10	Negative
	1537.003	195.05	Positive
	1537.397	195.00	Negative
	1537.792	194.95	Positive
NX8571SC393D-BA	1538.186	194.90	Negative
	1538.581	194.85	Positive
	1538.976	194.80	Negative
	1539.371	194.75	Positive
NX8571SC409D-BA	1539.766	194.70	Negative
	1540.162	194.65	Positive
	1540.557	194.60	Negative
	1540.953	194.55	Positive
NX8571SC425D-BA	1541.349	194.50	Negative
	1541.746	194.45	Positive
	1542.142	194.40	Negative
	1542.539	194.35	Positive
NX8571SC441D-BA	1542.936	194.30	Negative
	1543.333	194.25	Positive
	1543.730	194.20	Negative
	1544.128	194.15	Positive
NX8571SC457D-BA	1544.526	194.10	Negative
	1544.924	194.05	Positive
	1545.322	194.00	Negative
	1545.720	193.95	Positive

**NX8571 SERIES****Table B: Part number for 4 channel tunable product (con't)**

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor slope
NX8571SC473D-BA	1546.119	193.90	Negative
	1546.518	193.85	Positive
	1546.917	193.80	Negative
	1547.316	195.75	Positive
NX8571SC489D-BA	1547.715	193.70	Negative
	1548.115	193.65	Positive
	1548.515	193.60	Negative
	1548.915	193.55	Positive
NX8571SC505D-BA	1549.315	193.50	Negative
	1549.715	193.45	Positive
	1550.116	193.40	Negative
	1550.517	193.35	Positive
NX8571SC521D-BA	1550.918	193.30	Negative
	1551.319	193.25	Positive
	1551.721	193.20	Negative
	1552.122	193.15	Positive
NX8571SC537D-BA	1552.524	193.10	Negative
	1552.926	193.05	Positive
	1553.329	193.00	Negative
	1553.731	192.95	Positive
NX8571SC553D-BA	1554.134	192.90	Negative
	1554.537	192.85	Positive
	1554.940	192.80	Negative
	1555.343	192.75	Positive
NX8571SC569D-BA	1555.747	192.70	Negative
	1556.151	192.65	Positive
	1556.555	192.60	Negative
	1556.959	192.55	Positive
NX8571SC585D-BA	1557.363	192.50	Negative
	1557.768	192.45	Positive
	1558.173	192.40	Negative
	1558.578	192.35	Positive
NX8571SC602D-BA	1558.983	192.30	Negative
	1559.389	192.25	Positive
	1559.794	192.20	Negative
	1560.200	192.15	Positive
NX8571SC618D-BA	1560.606	192.10	Negative
	1561.013	192.05	Positive
	1561.419	192.00	Negative
	1561.826	191.95	Positive
NX8571SC634D-BA	1562.233	191.90	Negative
	1562.640	191.85	Positive
	1563.047	191.80	Negative
	1563.455	191.75	Positive
NX8571SC650D-BA	1563.863	191.70	Negative
	1564.271	191.65	Positive
	1564.679	191.60	Negative
	1565.087	191.55	Positive

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

Part Number	ITU-T Wavelength *1 (nm)	Frequency (THz)	Monitor Slope
NX8571SC667D-BA	1565.49	191.50	Negative
	1565.90	191.45	Positive
	1566.31	191.40	Negative
	1566.72	191.35	Positive
NX8571SC683D-BA	1567.13	191.30	Negative
	1567.54	191.25	Positive
	1567.95	191.20	Negative
	1568.36	191.15	Positive
NX8571SC700D-BA	1568.77	191.10	Negative
	1569.18	191.05	Positive
	1569.59	191.00	Negative
	1570.00	190.95	Positive
NX8571SC716D-BA	1570.41	190.90	Negative
	1570.82	190.85	Positive
	1571.23	190.80	Negative
	1571.65	190.75	Positive
NX8571SC733D-BA	1572.06	190.70	Negative
	1572.47	190.65	Positive
	1572.88	190.60	Negative
	1573.30	190.55	Positive
NX8571SC749D-BA	1573.71	190.50	Negative
	1574.12	190.45	Positive
	1574.54	190.40	Negative
	1574.95	190.35	Positive
NX8571SC766D-BA	1575.36	190.30	Negative
	1575.78	190.25	Positive
	1576.19	190.20	Negative
	1576.61	190.15	Positive
NX8571SC782D-BA	1577.02	190.10	Negative
	1577.44	190.05	Positive
	1577.85	190.00	Negative
	1578.27	189.95	Positive
NX8571SC799D-BA	1578.68	189.90	Negative
	1579.10	189.85	Positive
	1579.51	189.80	Negative
	1579.93	189.75	Positive
NX8571SC816D-BA	1580.35	189.70	Negative
	1580.76	189.65	Positive
	1581.18	189.60	Negative
	1581.60	189.55	Positive
NX8571SC832D-BA	1582.01	189.50	Negative
	1582.43	189.45	Positive
	1582.85	189.40	Negative
	1583.27	189.35	Positive
NX8571SC849D-BA	1583.69	189.30	Negative
	1584.10	189.25	Positive
	1584.52	189.20	Negative
	1584.94	189.15	Positive
NX8571SC866D-BA	1585.36	189.10	Negative
	1585.78	189.05	Positive
	1586.20	189.00	Negative
	1586.62	188.95	Positive
NX8571SC883D-BA	1587.04	188.90	Negative
	1587.46	188.85	Positive
	1587.88	188.80	Negative
	1588.30	188.75	Positive

# NX8571 SERIES

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

Part Number	ITU-T Wavelength *1 (nm)	Frequency (THz)	Monitor Slope
NX8571SC899D-BA	1588.72	188.70	Negative
	1589.14	188.65	Positive
	1589.56	188.60	Negative
	1589.98	188.55	Positive
NX8571SC916D-BA	1590.41	188.50	Negative
	1590.83	188.45	Positive
	1591.25	188.40	Negative
	1591.67	188.35	Positive
NX8571SC933D-BA	1592.10	188.30	Negative
	1592.52	188.25	Positive
	1592.94	188.20	Negative
	1593.36	188.15	Positive
NX8571SC950D-BA	1593.79	188.10	Negative
	1594.21	188.05	Positive
	1594.64	188.00	Negative
	1595.06	187.95	Positive
NX8571SC967D-BA	1595.48	187.90	Negative
	1595.91	187.85	Positive
	1596.33	187.80	Negative
	1596.76	187.75	Positive
NX8571SC984D-BA	1597.18	187.70	Negative
	1597.61	187.65	Positive
	1598.04	187.60	Negative
	1598.46	187.55	Positive
NX8571SC6001D-BA	1598.89	187.50	Negative
	1599.32	187.45	Positive
	1599.74	187.40	Negative
	1600.17	187.35	Positive
NX8571SC6018D-BA	1600.60	187.30	Negative
	1601.02	187.25	Positive
	1601.45	187.20	Negative
	1601.88	187.15	Positive
NX8571SC6035D-BA	1602.31	187.10	Negative
	1602.74	187.05	Positive
	1603.16	187.00	Negative
	1603.59	186.95	Positive
NX8571SC6053D-BA	1604.02	186.90	Negative
	1604.45	186.85	Positive
	1604.88	186.80	Negative
	1605.31	186.75	Positive
NX8571SC6070D-BA	1605.74	186.70	Negative
	1606.17	186.65	Positive
	1606.60	186.60	Negative
	1607.03	186.55	Positive
NX8571SC6087D-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
NX8571SC330Q-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
NX8571SC362Q-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
NX8571SC393Q-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
NX8571SC425Q-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
NX8571SC457Q-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
NX8571SC489Q-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
NX8571SC521Q-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

**NX8571 SERIES**

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

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8571SC553Q-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
NX8571SC585Q-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
NX8571SC618Q-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
NX8571SC650Q-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
NX8571SC683Q-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
NX8571SC716Q-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
NX8571SC749Q-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

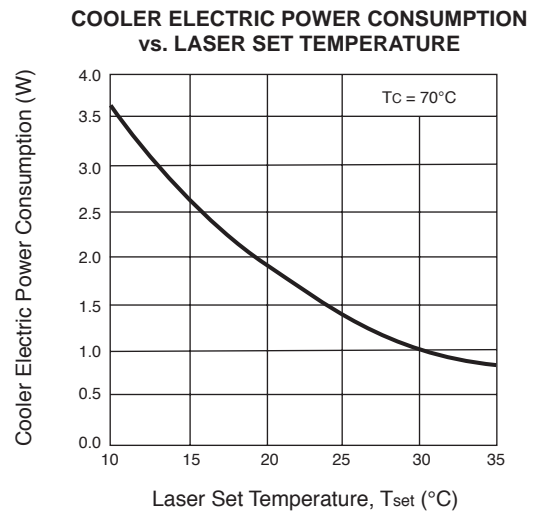
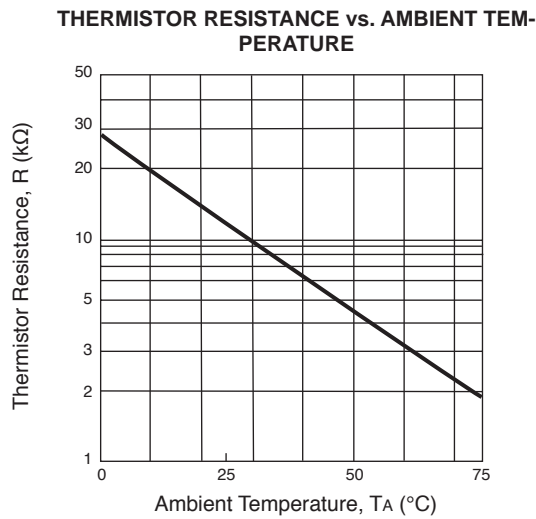
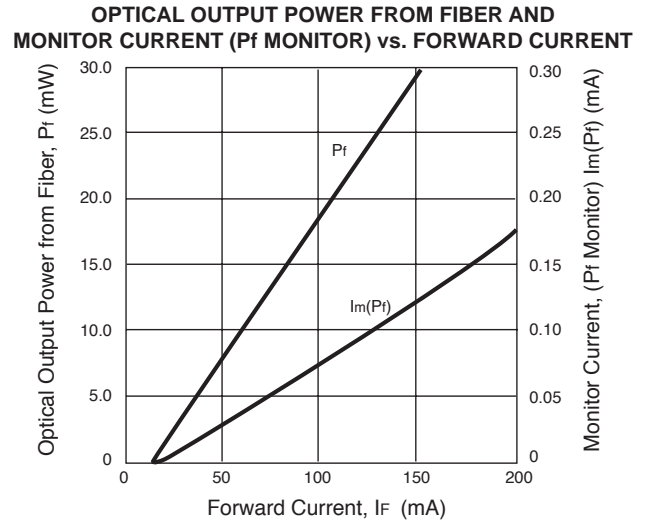
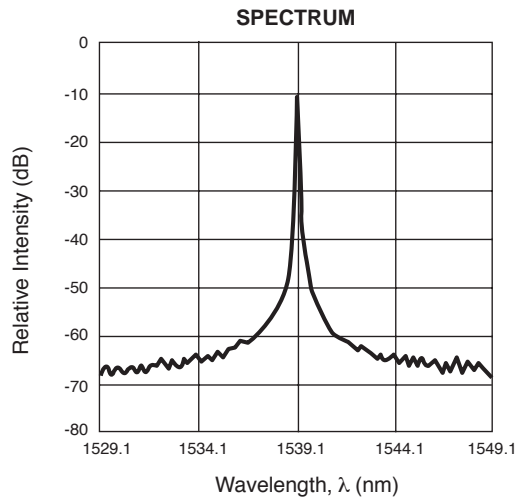
**Table C: Part number for 8 channel tunable product (TLD = Tset) (cont.)**

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8571SC782Q-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
	1578.27	189.95	Positive
NX8571SC816Q-BA	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
	1581.18	189.60	Negative
NX8571SC849Q-BA	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
	1584.10	189.25	Positive
NX8571SC883Q-BA	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
	1587.04	188.90	Negative
NX8571SC916Q-BA	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
	1589.98	188.55	Positive
NX8571SC950Q-BA	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
	1592.94	188.20	Negative
NX8571SC984Q-BA	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
	1595.91	187.85	Positive
NX8571SC984Q-BA	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

**NX8571 SERIES****Table C: Part number for 8 channel tunable product (TLD = Tset) (cont.)**

Part Number	ITU-T Wavelength (nm)	Frequency (THz)	Monitor Slope
NX8571SC6018Q-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
NX8571SC6053Q-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
NX8571SC6087Q-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
	1607.89	186.45	Positive
	1608.32	186.40	Negative
	1608.76	186.35	Positive

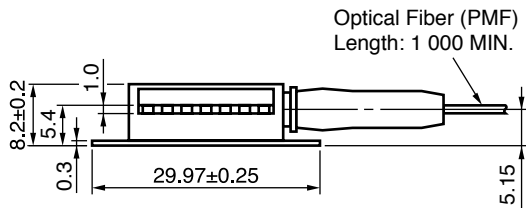
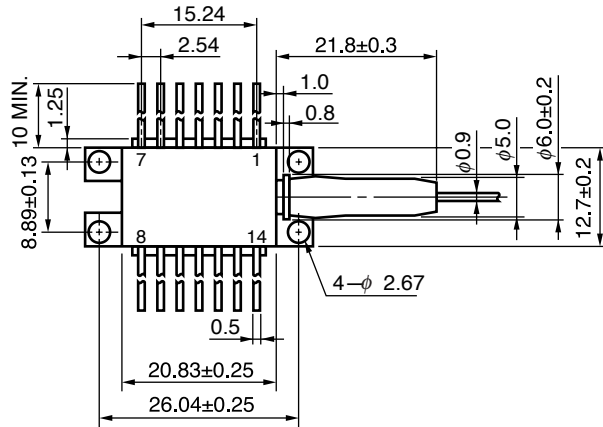
**TYPICAL PERFORMANCE CURVES** ( $T_{LD} = 25^{\circ}\text{C}$ , unless otherwise specified)



Remark: The graphs indicate nominal characteristics.

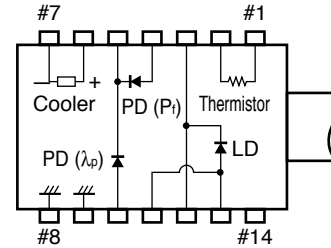
# NX8571 SERIES

## OUTLINE DIMENSIONS (Units in mm)



### NX8571SC

#### TOP VIEW

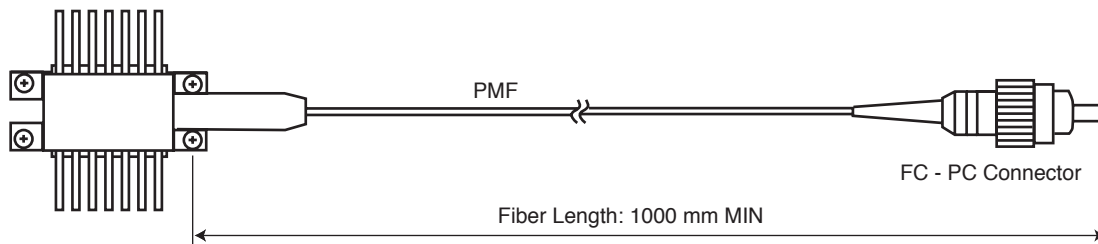


#### PIN CONNECTIONS

Pin No.	Function	Pin No.	Function
1	Thermistor	8	GND
2	Thermistor	9	GND
3	LD Cathode	10	PD (λ <sub>p</sub> ) Anode
4	PD (P <sub>i</sub> ) 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.

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08/26/2003

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