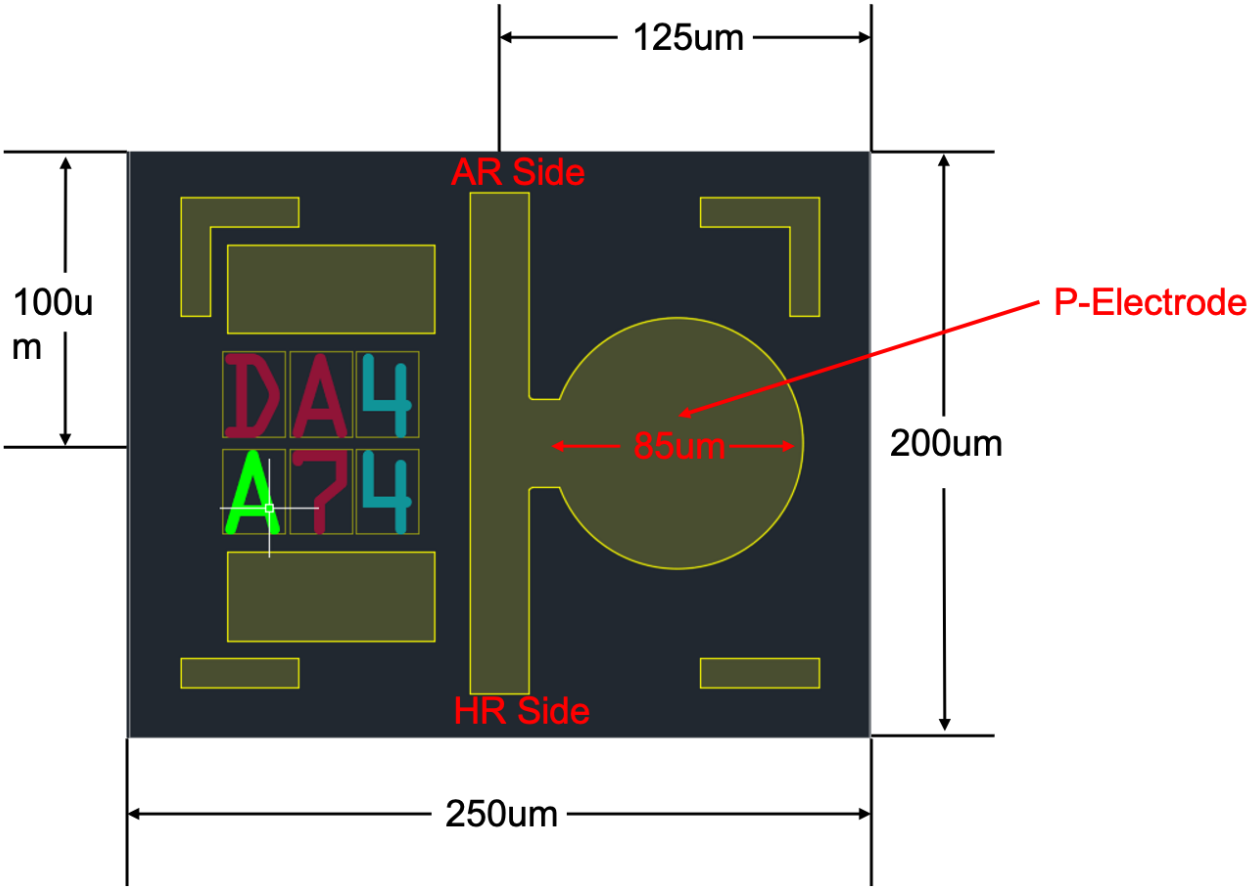
BXD-XXXX-F-25.0-6I

BANDWIDTH10, LTD.

Description:

The Bandwidth10 BXD-XXXX-F-25.0-6I series 25Gbps CWDM6 for I-Temp applications DFB laser diode is designed for high speed, high performance optical communication applications. It is suitable for uncooled applications over industrial temperature range at speeds up to 25 Gbps.

Dimensions



Chip configuration:

Chip configuration:
1. Top contact: anode; Bottom contact: cathode.
2. Dimension: 250 um (width) x 200 um (cavity length) x 100 um (thickness)

Tolerance: +/-10um (Thickness) +/-20um (Width, Length)

ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

CAUTION: Device is sensitive to electrostatic discharge.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Operation Temperature	T_C	-40	85	°C
Storage Temperature	T_{stg}	-40	100	°C
Die-Attach Temperature Maximum 30 seconds		--	330	°C
Maximum Power	Po	--	15	mW
Forward Current	I_F	--	100	mA
Reverse Voltage	V_r	--	2	V

Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Values			Unit
		Min	Typical	Max	
Threshold Current	I_{th}	--	7	10	mA
Threshold Current 85°C	I_{th85}		15	20	mA
Operating Voltage (P_o=5mW)	V_{op}	--	1.15	1.5	V
Slope Efficiency	η	0.27	--	--	mW/mA
Peak Wavelength Iop=40mA at 25°C, Tc= -40~85°C	λ_p	1264.5	1271	1277.5	nm
		1284.5	1291	1297.5	
		1304.5	1311	1317.5	
		1324.5	1331	1337.5	
		1344.5	1351	1357.5	
		1364.5	1371	1377.5	
Side Mode Suppression Ratio (Po=5 mW)	SMSR	35	--	--	dB
Wavelength / Temperature Coefficient	$\Delta\lambda/\Delta T$	--	0.09	--	nm/°C
Beam Divergence Angle (//)	$\theta_{//}$	--	26	--	Degree
Beam Divergence Angle ($_\perp$)	$\theta_\perp$	--	37	--	Degree
Rise Time 20%-80% I_b= $I_{th,}$, P_0=5 mW	τ_r	--	20	--	ps
Fall Time 80%-20% I_b= $I_{th,}$, P_0=5 mW	τ_f	--	25	--	ps

Relaxation Oscillation Frequency P_o=5 mW	fr		20		GHz

- The values are defined using Bandwidth 10 standard tester and subject to change when the measurement set is renewed.
- Specifications are subject to change without notice.
- Screening per customer-specified reject limits is available.

Order and Contact Information

Model Number	Contact Information
BXD-1271-F-25.0-6I (λC = 1271nm) BXD-1291-F-25.0-6I (λC = 1291nm) BXD-1311-F-25.0-6I (λC = 1311nm) BXD-1331-F-25.0-6I (λC = 1331nm) BXD-1351-F-25.0-6I (λC = 1351nm) BXD-1371-F-25.0-6I (λC = 1371nm)	Bandwidth 10 Ltd. 2080 Addison Street, Suite 2 Berkeley, CA 94704, USA info@bandwidth10.com