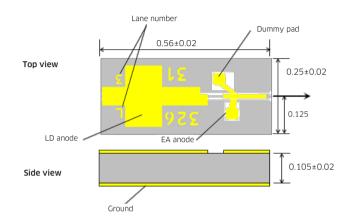


28 Gbaud EML for 100GE LWDM

OL3503M-2Ln

www.lumentum.com Data Sheet

OL3503M-22Ln (Ln: L0, L1,L2 and L3), 1.3µm-band electro-absorption (EA) modulated DFB laser (EML) chip, is designed for 100GE (4ch x 25/28 Gbps) applications.



Features:

- Up to 28 Gbps SMF 10 km transmission
- Wavelength meets 100GBASE lane assignments
- High temperature operation (55 °C. (typ.))
- Low amplitude operation (1.3 Vpp (typ.))

Applications:

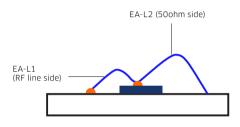
• 100GE (4ch x 25/28Gbps) data communication

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Assembly information

Parameter	Reccomended condition		
DB temperature	310 °C, <15 s		
EA wire length (L1)	0.3 mm		
EA wire length (L2)	0.7 mm		

EA wire



Burn in information

(6-1) Test conditions : Temp 100 $^{\circ}$ C, ILD 240 mA, 6 hrs

(6-2) Criteria:

Changing in Threshold current : -15% to +10% Changing in Output power : -10% to +10%

Characteristics

Parameter	Test Conditions	Minimum	Typical	Maximum	Unit
Output power	If=90mA, CW	4	-	-	mW
Peak wavelength	If=90mA, CW	LWDM (Class A / Class B) *1)		nm	
Averaged power *2)	28Gbps, NRZ	0	-	-	dBm
Extinction ratio *2)		6	-	-	dB
Mask margin*2)		15	-	-	%

^{*1)} Wavelength class

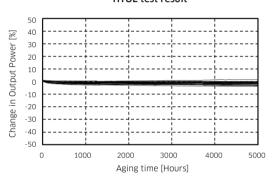


 $[\]ensuremath{^{\star}}\xspace$ 2) Expected characteristics with Lumentum RF submount, not guaranteed.

Reliability (Based on Guideline of Telcordia GR-468)

Test item	Results
HTOL (5000 hrs)	Pass
Die shear	Pass
Wire pull strength	Pass
Mechanical shock	Pass
Vibration	Pass
Temperature cycling	Pass

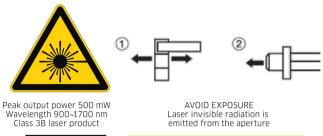
HTOL test result



RoHS status: Compliant

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Safety Information







Complies with CFR1040.10 and IEC60825-1

Warning	A laser beam is emitted from this laser diode during operation.
	The invisible or visible laser beam, directly or indirectly, may cause injury to the eye or loss of eyesight.
Laser Beam	Do not look directly into the laser beam.
	Avoid exposure to the laser beam, any reflected or collimated beam.
Caution	The product contains gallium arsenide, GaAs.
	GaAs vapor and powder are hazardous to human health if inhaled, ingested or swallowed.
GaAs Product	Do not destory or burn the product. Do not crush or chemically dissolve the product. Do not put the product in the mouth.
	Observe related laws and company regulations when discarding this product.
	The product should be excluded from general industrial waste or household garbage.



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Outside North America Toll Free: 800 000 LITE (5483)

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