

EP1550-DM-T Series

1550nm Discrete Mode Lasers - TO Can



FEATURES

- Single wavelength emission in 1550nm band
- High Immunity to Optical Feedback compared with DFB-type lasers
- Wide Operating Temperature Range
- InAlGaAs composition for reliable uncooled operation
- High Bandwidth - up to 2.5Gbps

APPLICATIONS

- High Speed Access Optical Links
- High Speed Datacoms
- FTTX
- PON
- Digital Transport Links (SDH/SONET)

ELECTRO-OPTICAL CHARACTERISTICS (T = 25°C unless stated otherwise):

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		14	19	mA	CW, T=25°C
Operating Current	I_{op}		38	48	mA	CW, $P_O = 5mW$
Peak Wavelength	λ	1540	1550	1560	nm	CW, $P_O = 5mW$, $T_{min} < T < T_{max}$
Wavelength Temperature coefficient			0.10		nm / °C	CW, $T_{min} < T < T_{max}$
Side Mode Suppression Ratio	SMSR	30	40		dB	CW, $T_{min} < T < T_{max}$
Quantum Efficiency	η	0.17	0.21		mW/mA	CW, $P_O = 1$ to 5mW
Forward Voltage	V_f		1.4	1.6	Volts	$I = I_{op}$, T=25°C
Output Power at Threshold				200	μW	T=25°C
Beam divergence (perpendicular)	(θ_{\perp})		30		degrees	CW, $P_O = 5mW$
Beam divergence (parallel)	(θ_{\parallel})		25		degrees	CW, $P_O = 5mW$
Rise time/fall time						
155 Mbps version				700	ps	$I = I_{op}$
1.25 Gbps version				250	ps	$I = I_{op}$
2.50 Gbps version				120	ps	$I = I_{op}$
Monitor output current	I_{mon}	75			μA	
Monitor PD terminal capacitance				20	pF	

Note: Unless otherwise stated measurements performed with a flat form window.

ABSOLUTE MAXIMUM RATINGS:

PARAMETER	CONDITION	MIN	MAX	UNIT
Forward Current (PD)			2	mA
Forward Current Transient (LD)	1 μs max		150	mA
Reverse Voltage (LD)			2	Volts
Reverse Voltage (PD)			15	Volts
Case Temperature (T)		T_{min}	T_{max}	
Grade B		0	70	°C
Grade F		0	85	°C
Grade Q		-40	85	°C
Storage Temperature		-40	85	°C



PACKAGE:

The EP1550-DM-T product series is offered in a TO 56 package format - see package outline drawings below (Fig 1). The package pinout may be specified according to the options shown in Fig 2.

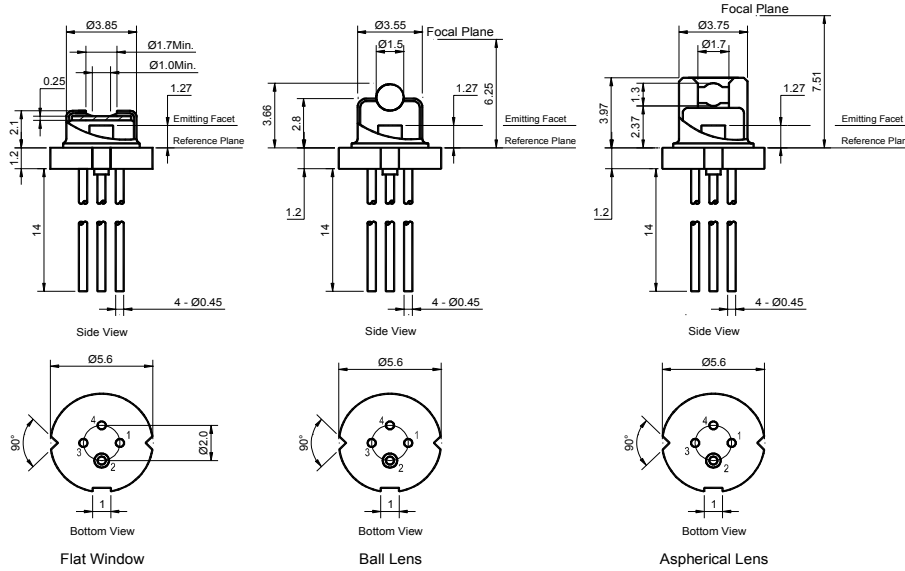


Fig. 1 - Package Outlines

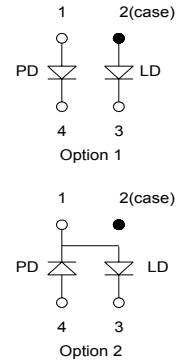
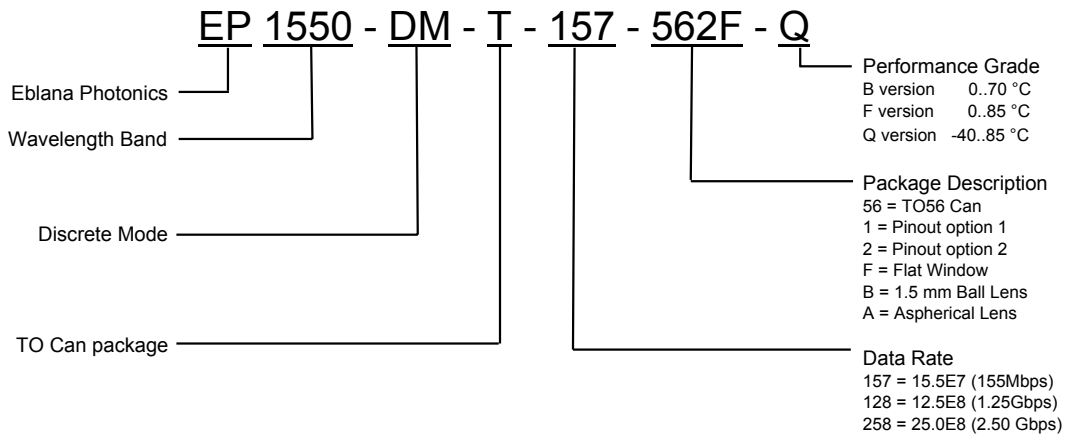


Fig. 2 - Pinout Options

HOW TO ORDER (example):

Please use the following example as a guide to building the appropriate part number for the device you require:



SALES OFFICES:

Europe
 Eblana Photonics
 Phone: + 353-1-675-3220
 Website: www.eblanaphotonics.com
 Email: info@eblanaphotonics.com

US
 Eblana Photonics
 Phone: + 1-770-232-2850
 Cell: + 1-770-331-6081
 Email: daniel.tine@eblanaphotonics.com

Asia-Pacific
 Broadband Connections
 Phone: + 81-45-222-8841
 Cell: + 81-90-1844-8689
 Email: nkeegan@broadband-connections.com

