



TST-M85A426-2H-V2

1.25Gbps 850nm, >1mW at 8mA, VCSEL in ST Receptacle

Description

The Lasermate TST-M85A426-2H-V2 is an 850nm wavelength, >1mW at 8mA, Vertical Cavity Surface Emitting Laser (VCSEL) ST receptacle designed for use in 1.25Gbps data rate operation.



Features

- Industry standard connector of metallic ST*-type receptacle
- Pre-aligned for multi-mode fiber communication
- With monitoring PD
- Data rate operation from DC to 1.25Gbps
- >1mW at 8mA 850nm VCSEL

Applications

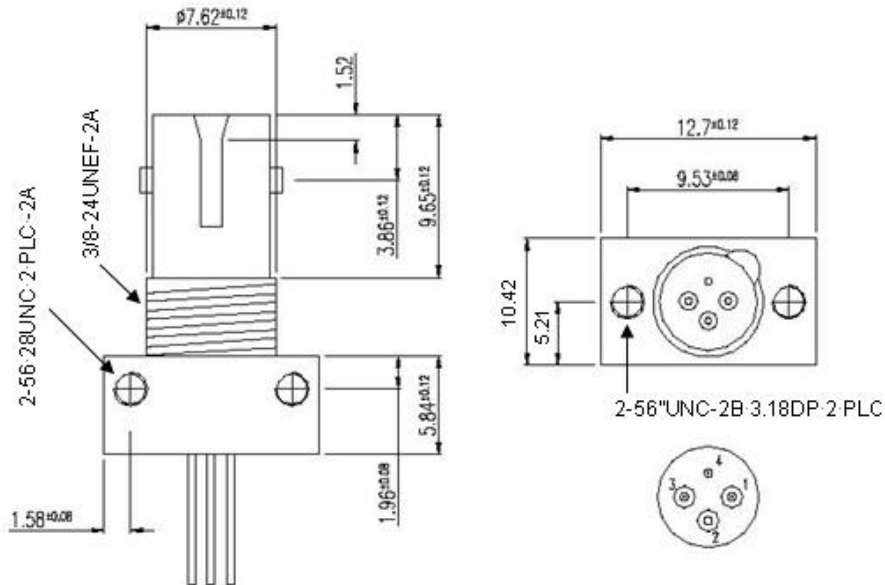
- 1.25Gbps data rate operation

Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	85	°C	
Operating Temperature	0	70	°C	
Lead Solder Temperature		260	°C	10 seconds
Continuous Forward Current		20	mA	
Continuous Reverse Voltage		5	V	

Electro-Optical Characteristics						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I_{th}		2	3.5	mA	
Wavelength	λ_p	830	850	860	nm	$I_F=8\text{ mA}$
Slope Efficiency	η	0.23			mW/mA	$I_F=8\text{ mA}$
Fiber Coupled Power	P_O	1			mW	$I_F=8\text{ mA}$
Forward Voltage	V_F	1.6	1.8	2.5	V	$I_F=8\text{ mA}$
Breakdown Voltage	V_{BD}	5	14		V	$I_R=10\text{ uA}$
Series Resistance	R_S	35	45	65	Ω	$I_F=6\text{ mA}$
Rise Time/Fall Time	T_r			0.15	ns	$I_b = I_{th}, 20\% \sim 80\%$
Spectral Width (RMS)	$\Delta\lambda$			0.85	nm	$I_F=6\text{ mA}$
Relative Intensity Noise	RIN			-122	dB/Hz	$I_F=6\text{ mA}, f=1\text{GHz}$
Monitor Current	I_M		50		uA	

Outline Dimensions (unit: mm)



Pin Configuration

Pin Number	Function
1	VCSEL Cathode
2	VCSEL Anode/PD Cathode
3	PD Anode
4	Case

Additional Notes

- The VCSEL is a class IIIb laser in the safety standard ANSI Z136.1 and should be treated as a potential eye hazard.
- Specifications are subject to change without notice.