



## TST-M85A426-2H

1.25Gbps 850nm, >1mW at 6mA, VCSEL in ST Metal Receptacle

### Description

The Lasermate TST-M85A426-2H is an 850nm wavelength, >1mW at 6mA, 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 6mA 850nm VCSEL

### Applications

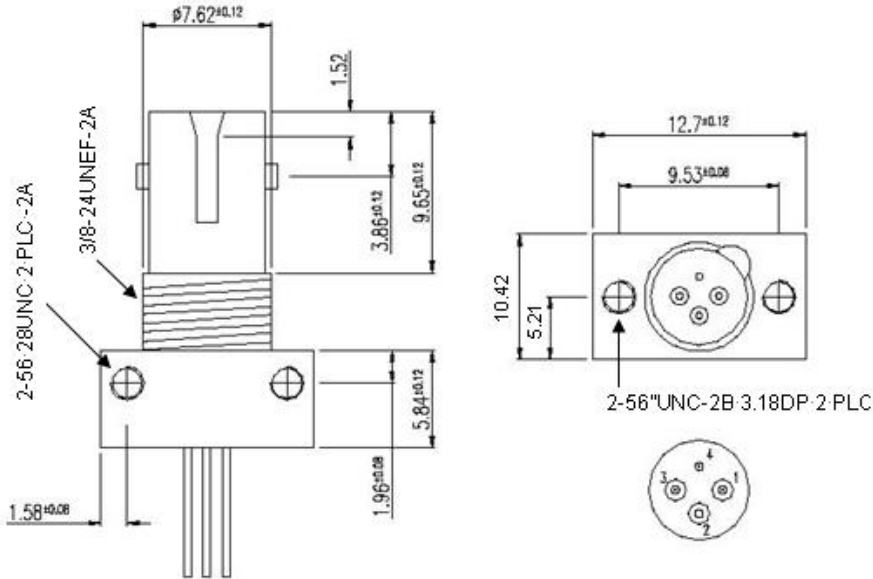
- 1.25Gbps data rate operation

### 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	$\lambda_p$	830	850	860	nm	$I_F=6\text{ mA}$
Fiber Coupled Power	$P_O$	1	1.5		mW	$I_F=6\text{ mA}$
Forward Voltage	$V_F$	1.6	1.8	2.5	V	$I_F=6\text{ mA}$
Breakdown Voltage	$V_{BD}$	5	14		V	$I_R=10\text{ uA}$
Series Resistance	$R_S$	35	45	65	$\Omega$	$I_F=6\text{ mA}$
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.