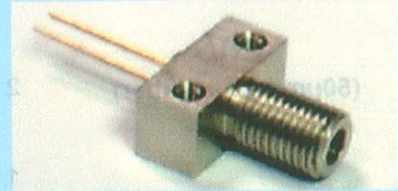
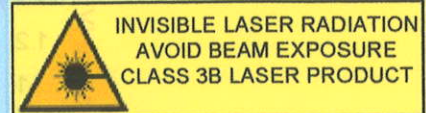


1mW VCSEL SMA Receptacle



- ◆ Vertical Cavity Surface-Emitting Laser
- ◆ 2.5 Gbps speed



ELECTRO-OPTICAL CHARACTERISTICS FSMA Receptacle

PARAMETER	SYMBOL	UNITS	MIN	TYP	MAX	TEST CONDITIONS
Emission wavelength	λ_R	nm	840	850	860	T=20°C
Fiber-coupled mean power	mW		0.5		1	Fiber 50 μ m, I _{OP} =6mA
Threshold current	I _{TH}	mA		1		T=20°C
Variation of I _{TH} over Temp.	$\Delta I_{TH}(T)$	mA		0.8		T=0 .. 70°C
Threshold voltage	U _{TH}	V	1.5	1.8	2.0	
Laser voltage	U _{OP}	V	1.6	2.0	2.3	P _{opt} =0.5 mW
Slope Efficiency	η_S	W/A		0.1		T= 20°C
Differential series resistance	R _S	Ω		60		
3dB modulation bandwidth	V _{3dB}	GHz	3			P _{opt} =0.5 mW
Rise and fall time	t _R /t _F	ps		90	150	20%..80%; P _{off/on} =0.1/1mW
Relative intensity noise	RIN	dB/Hz		-130	-120	P _{opt} = 0.5 mW @ 1 GHz
Wavelength tuning over temp.		nm/K		0.07		
Thermal resistance	R _{thermal}	K/mW			2	junction temperature
Spectral bandwidth	$\Delta\lambda$	nm			1	rms

All values for coupling with 50 μ m optical Fiber

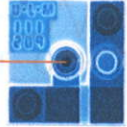
ABSOLUTE MAXIMUM RATINGS

Storage temperature	-40 ... 125°C
Operating temperature	-0 ... 85°C
Electrical power dissipation	30 mW
Continous forward current	12 mA
Reverse voltage	8V
Soldering temperature	330°C

NOTICE: Stresses greater than those listed under „Absolute Maximum Ratings“ may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other condition beyond those indicated for extended periods of time may effect device reliability.

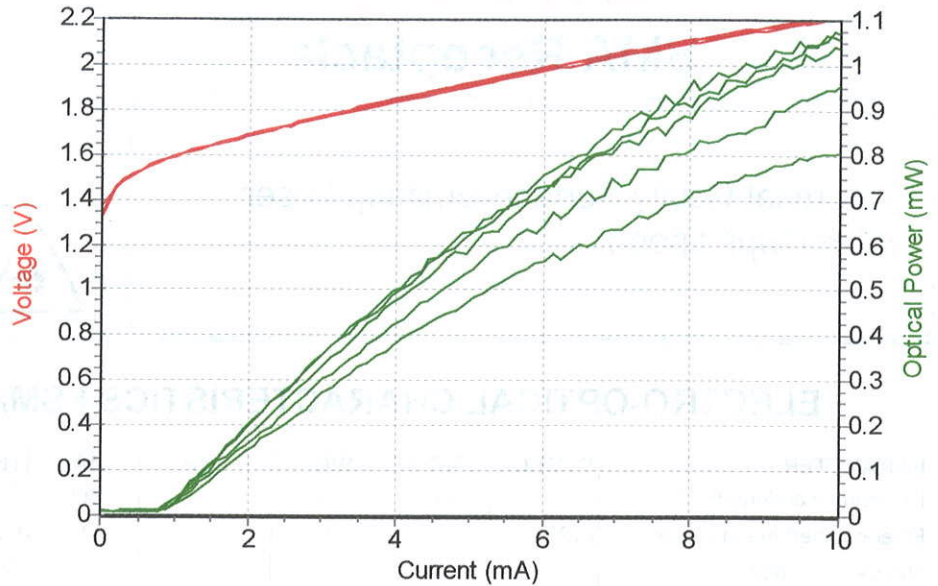


ATTENTION: Electrostatic Sensitive Devices
Observe Precautions for Handling



LIV
(50µm optical fiber)

ULM850-05-TN-USMBOP ID# 00000 144B



Type	ULM850-05-TN-USMBOP
Description	0.5mW VCSEL SMA Receptacle
Pin/Pad 1	VCSEL anode
Pin/Pad 2	VCSEL cathode
Pin 3	case

