

Tunable Laser Electro-Optical Specification (Draft)

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum
Operating case temperature range	T_{op}	-5°C	+70°C
Storage case temperature range	T_{stg}	-40°C	+85°C
Humidity (non condensing)	RH		85%
TEC supply voltage	V_{TEC}	-6V	+0.3V
Power supply voltage	V_{CC}	-0.3V	+3.6V

Table 2. Electrical Specifications

Parameter	Symbol	Minimum	Typical	Maximum
TEC supply voltage	V_{TEC}		-5.2V	
TEC supply current	I_{TEC}		30mA	
Power supply voltage	V_{CC}	3.1V	3.3V	3.5V
Power supply current	I_{CC}		300mA	550mA
Power dissipation	P_{DIS}		1.0W	3.5W

Table 3. Channel Switching Specifications

Parameter	Symbol	Minimum	Typical	Maximum
Output power during switching	P_{BLANK}			-35dBm
Frequency accuracy				± 2.5 GHz
Wavelength switching time	T_{switch}			30ms

Table 4. Optical Specifications

Parameter	Symbol	Minimum	Typical	Maximum
Number of channels			100	
Channel spacing			50GHz	
Tuning Range	λ_C	1529.944nm		1569.594nm
Output power	P	12dBm	13dBm	
Power variation	ΔP			± 0.5 dB
Side mode suppression ratio	SMSR	45dB	50dB	
Frequency accuracy				± 2.5 GHz
Linewidth	LW			200 kHz
Relative intensity noise(1Mhz-40Ghz)	RIN		-140dB/Hz	-135dB/Hz
Polarization Extinction Ratio	PER	20	25	

Note: L-Band TL available, tuning range from 1570nm to 1612nm