



Laser Tube Assembly

P/N: M13A(C)FIX-LM-001 (for Claymore)

Features

- Highly stable
- Excellent beam quality
- Excellent temperature stability
- Fully RoHS compliant(For LD)



Optical Characteristics

	Min	Typ	Max	Units
Wavelength of peak radiant intensity λ	895	905	915	nm
Wavelength temperature coefficient		0.27		nm/°C





Optical / Electric Characteristics

Parameter	Limiting values
Operating Temperature Range	-45°C to +85°C
Storage Temperature Range	-55°C to +140°C
Forward voltage at I_{max}	3.5V
Max Current I_{FM} at 100ns	14A
Power at I_{FM} (typ.)	12W
I_{th} typ.	200mA
Peak reverse voltage	6V
Pulse Duration	1 μ s

Performance Characteristics

Parameter	Limiting values
Range with Drive Power at 300ns	above 10M
Beam Divergence angle(long range)	20mrad (Vertical axis)
	20mrad (Horizontal axis)
Beam Divergence angle(middle range)	40mrad (Vertical axis)
	20mrad (Horizontal axis)
MTTF(Mean Time To Failure)	



PD Characteristics(absolute maximum ratings)

Parameter	Limiting values
Reverse voltage	60V
Power dissipation	215mW
Junction temperature	100°C
Thermal resistance junction/ambient	270K/W

PD Characteristics(basic)

Parameter	Min	Typ	Max	Unit
Forward voltage		1		V
Breakdown voltage	60			V
Diode capacitance		4		pF
Angle of half sensitivity		±60		Deg.
Wavelength of peak sensitivity		950		nm
Range of spectral bandwidth	750		1050	nm
Rise time($V_R=10V, R_L=1\text{ k}\Omega, \lambda=820\text{nm}$)		100		ns
Fall time($V_R=10V, R_L=1\text{ k}\Omega, \lambda=820\text{nm}$)		100		ns