



Laser Tube Assembly

P/N: M13A(C)FIX-C-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 | 7A |
| Power at I_{FM} (typ.) | 6W |
| 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 | 100mrad (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 |