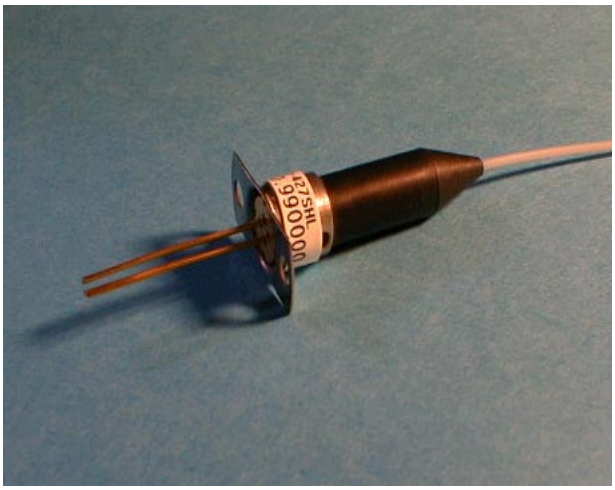
MITSUBISHI (OPTICAL DEVICES)

FU-427SHL-8M22

1.3 μm LD MODULE WITH SINGLEMODE FIBER PIGTAIL

DESCRIPTION

Module type FU-427SHL-8M22 has been developed for coupling a singlemode optical fiber and a 1.3 μm wavelength InGaAsP LD (Laser diode).
FU-427SHL-8M22 is suitable to light source for measurning instruments(especially, OTDR).



FEATURES

- High optical output power
- Emission wavelength is in 1.3μm band
- MQW* active layer
- FSBH** structure fabricated by all MOCVD process

*Multiple quantum well
**Facet selective-growth buried heterostructure

APPLICATION

OTDR

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter		Symbol	Conditions	Rating	Unit
Laser diode	Reverse voltage	Vrl	-	2	V
	Forword current	Ifl	Pulse(Note 1)	1	A
Operating case temperature		Tc	-	-20~+60	°C
Storage temperature		Tstg	-	-40~+70	°C

Note 1. Pulse condition : Pulse width ≤10μs, Duty ratio ≤1%

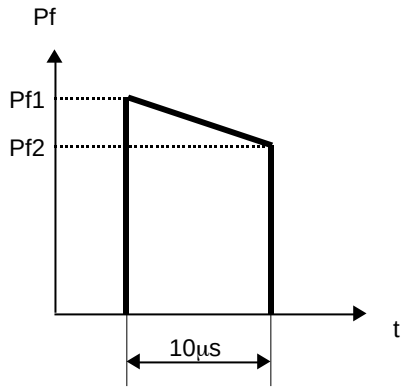
ELECTRICAL/OPTICAL CHARACTERISTICS (Tc=25°C, unless otherwise noted)

Parameter	Symbol	Test Conditions	Limits			Unit
			Min.	Typ.	Max.	
Threshold current	Ith	-	-	20	50	mA
Operating current	Iop	Pulse (Note 1)	400	450	800	mA
Operating Voltage	Vop	If=Iop, Pulse (Note 1)	-	-	5	V
Optical output power from fiber end	Pf	If=Iop, Pulse (Note 1) Tc=25°C	80	-	-	mW
		If=Iop, Pulse (Note 1) Tc=60°C	40			
Central wavelength	λc	If=Iop, Pulse (Note 1)	1290	1310	1330	nm
Spectral width(RMS)	Δλ	If=Iop, Pulse (Note 1)	-	-	10	nm
Puise droop (Note 3)	ΔPf	If=Iop, Pulse (Note 1)	-	-	20	%
Rise and fall times	tr, tf	Ib=Ith,10~90% (Note 2)	-	1	2	ns

Note 1. Pulse condition : Pulse width ≤10μs, Duty ratio ≤1%

2. Ib : Bias current (LD)

3.ΔPfp=(Pf1-Pf2)/Pf1×100

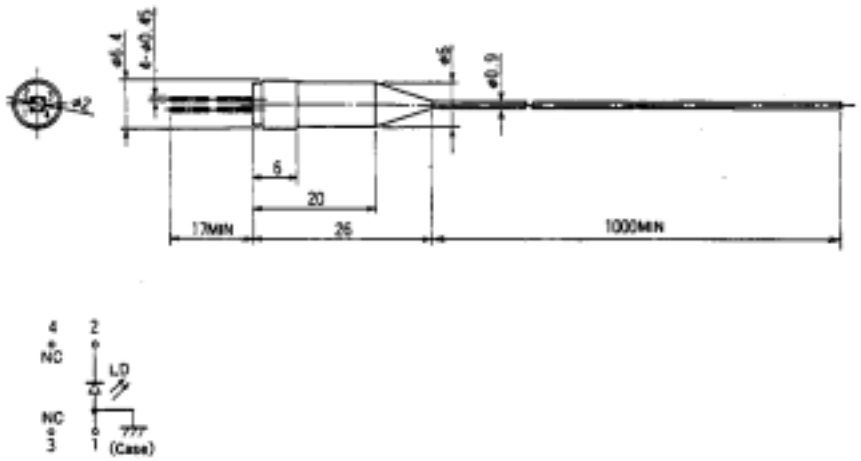


OPTICAL FIBER SPECIFICATION

Parameter	Limits	Unit
Type	SM	-
Mode filed dia.	9.5±1	μm
Cladding dia.	125±2	μm
Jacket dia.	0.9 typ.	mm

OUTLINE DIAGRAM

(Unit : mm)



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