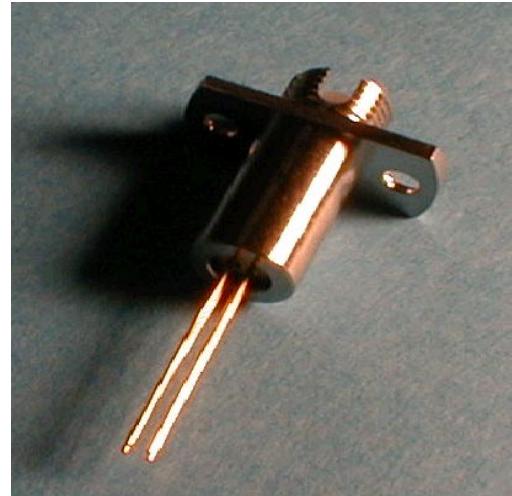


MITSUBISHI (OPTICAL DEVICES)
FU-17SLD-F3M1

FC-CONNECTORIZED MODULE

DESCRIPTION

FU-17SLD-F3M1 is FC-connectorized devices designed to be used with singlemode optical fiber. This module is the optimum light source for medium haul digital optical communication systems.



FEATURES

- FC connectorized package
- Low optical output
- Low threshold current
- Built-in photodiode for output monitoring
- Wide operating temperature range (-40°C to +85°C)
- MQW* active layer
- FSBH** structure fabricated by all MOCVD process

*Multiple quantum well

**Facet selective-growth buried heterostructure

APPLICATION

FitL, LAN

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Parameter		Symbol	Conditions	Rating	Unit
Laser diode	Optical output power from fiber end (Note1)	Pf	CW	0.5	mW
	Reverse voltage	Vrl	-	2	V
Photodiode for monitoring	Reverse voltage	Vrd	-	15	V
	Forward current	Ifd	-	2	mA
Operating case temperature		Tc	-	-40~+85	°C
Storage temperature		Tstg	-	-40~+85	°C

Note 1. Singlemode fiber master plug with mode field diameter 9.5μm

**MITSUBISHI (OPTICAL DEVICES)
FU-17SLD-F3M1**

FC-CONNECTORIZED MODULE

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

Parameter	Symbol	Test Conditions	Limits			Unit
			Min.	Typ.	Max.	
Threshold current	Ith	CW	3	7	15	mA
Operating current	Imod	CW	8	-	20	mA
Operating Voltage	Vop	CW, If=Ith+Imod (Note 2)	-	1.1	1.6	V
Optical output power from fiber end (Note 3)	Pf	CW, If=Ith+Imod	0.15	-	-	mW
Center wavelength	λc	CW, If=th+Imod	1285	1300	1330	nm
Rise and fall time(LD)	tr, tf	Ib=Ith, 10~90% (Note4)	-	0.3	0.5	ns
Tracking error (Note 5)	Er	Tc=-40~85°C, CW, APC	-	0.5	-	dB
Differential efficiency (Note 3)	η	-	-	0.018	-	mW/mA
Monitor current	Imon	CW, If=Ith+Imod, Vrd=5V	0.2	0.6	1.0	mA
Dark current (Photodiode)	Id	Vrd=5V	-	0.1	0.5	μA
Capacitance (Photodiode)	Ct	Vrd=5V, f=1MHz	-	-	20	pF

Note 2. If : Forward current (LD)

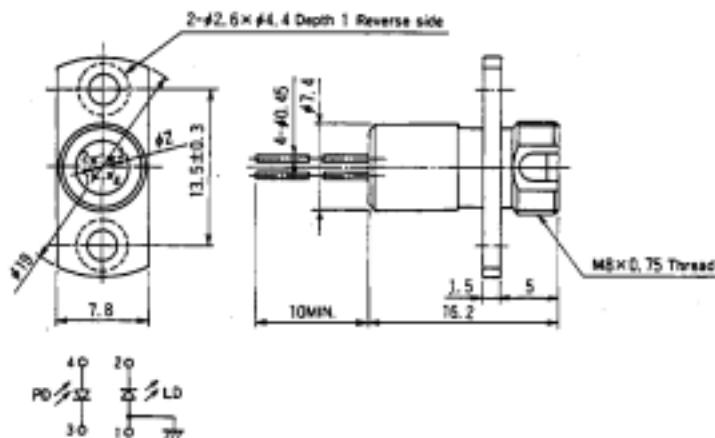
- 3. Singlemode fiber master plug with mode field diameter 9.5μm
- 4. Ib : Bias current (LD)
- 5. Er=MAX|10×log(Pf(Tc)/Pf(25°C))|

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FC-CONNECTORIZED MODULE

OUTLINE DIAGRAM

(Unit : mm)



FU-17SLD-F3M1