

1310nm DFB LD Module for Analog application

Features

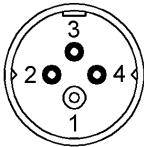
MQW 1310nm DFB LD
Built-in InGaAsP monitor PD
Built-in optical isolator
Excellent reliability
High Linearity
Low RIN Noise

Applications

Mobile communication systems
CATV transmission systems
Analog Transmission



PIN assignment



	F type	S type
1	LD(+)/case	case
2	LD(-)	LD(-)
3	PD(-)	PD(+)
4	PD(+)	LD(+)/PD(-)

Absolute maximum ratings

Parameter	Symbol	Min.	Max.	Unit	Test condition
Storage temperature	T _{st}	-40	+100	°C	-
Operating temperature	T _{op}	-40	+85	°C	-
Reverse voltage	V _R		2	V	CW
Solder temperature/time			260/10	°C /S	-

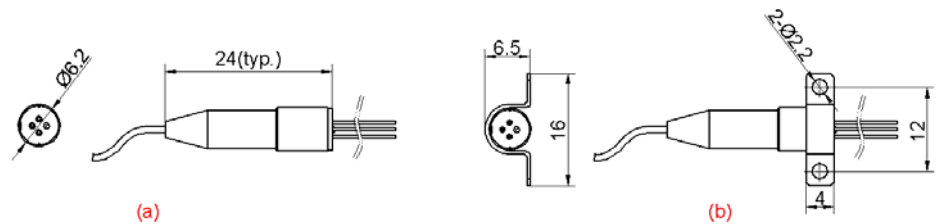
Optical & electrical characteristics(T=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Center wavelength	λ_c	1290	1310	1330	nm	-
Threshold current	I _{th}	-	10	15	mA	
Side mode suppression ratio	SMSR	30	40	-	dB	
Spectral width	$\Delta\lambda$	-	1	2	nm	I _{th} +20mA, -20dB
Output power	P	2	-	-	mW	CW, I _{th} +20mA
Operating voltage	V _{op}	-	1.1	1.5	V	CW, I _{th} +20mA
Rise/ Fall time	T _r /T _f	-	0.3	0.7	nS	10%~90%, I _b =I _{th}
Monitor current	I _m	0.1	0.7	-	mA	CW, I _{th} +20mA
Optical Isolation①	Iso	30	-	-	dB	Single stage
		50	-	-	dB	Dual stage
Relative Intensity Noise	RIN	-	-145	-	dBc	CW
Second-order distortion②	IMD2			-46	dBc	OMI=20%, 2mW
Third-Order Intermodulation	IMD3	-	-65	-60	dBc	OMI=20%, 2mW
RF Bandwidth	BW	2300	-	-	MHz	-3dB

Note: ① temperature range:-20~70°C

② CATV return path, 2tone (13MHz, 19MHz)

Dimensions Diagram



LASER RADIATION
AVOID EXPOSURE TO BEAM
Class 3 B laser product

CAUTION
STATIC SENSITIVE DEVICE
OBSERVE PRECAUTIONS

Order information

SLA2	X	X	X	X	X	X
	Isolator	wavelength	PIN out	Power	BW	Package
	0, no	3, 1310	F, F	M, >1mW	1, 1G	1, (a)
	1, Single	5, 1550	S, S	H, >2mW	2, 2.3G	2, (b)
	2, Double	C, CWDM.		U, >4mW		S, spec.

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