

SUN-ON-400AC RFoG Mini Optical Node



Features

- Bi-directional optical node by one fiber (WDM) transmission.
- PON Expansion Port,
- With burst mode
- Combines the superior proven technologies of both the RF
- Amplifier and optical components
- Contains an Automatic Gain Control(AGC) circuit to maintain
- The output level over an input optical power of -6~+2dBm.
- Automatic Optical Control is designed to reduce the return noise effectively.

Specification

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
IFC	Drop Wavelength Band- Forward		1540		1560	nm
IRL	Add Wavelength Band- Return		1600		1620	nm
IFS	Pass Wavelength- Forward		1480		1500	nm
IRO	Pass Wavelength Band- Return		1280		1380	nm
ILP	Pass Band Insertion Loss				1	dB
XP-AD	Pass to Add-Drop Crosstalk	Both directions	35			dB
XFR	Forward to Return Crosstalk	Both directions	35			dB
Forward Receiver						
λ	Optical Wavelength		1540	1550	1560	nm
Vopt.in	Monitor Voltage	$\lambda=1550$		1		V/mW
Pin	Optical Input Power	Continuous	0.25	1	2	dBm
F	Frequency Range (optional)		54		1000	MHz
FL	Flatness of Frequency Response	f=54 to 1000MHz		± 0.75	± 1	dB
S22	Output Return Loss		14	16		dB
Lo	Reference Output Level			17		dBmV
	Slope			3		dB
	Optical Input Return Losses		45			dB
C/N	C/N	59 Pal-D channel loading, (-1dBmW Optical Input)	50			dB
CTB	CTB				-65	dB
CSO	CSO				-60	
f	Equivalent Noise Input	f=55MHz			7	pA/Hz
Return Transmitter						
λ	Optical Wavelength		1600	1610	1620	nm
Wout	Optical Output Power		0.5	1	2	mW
LRin	RF Input Level		10		40	dBmV
F	Frequency Range (optional)		5		42	MHz
FL	Flatness of Frequency Response	f=5 to 42MHz		± 0.75	± 1	dB
S11	Input Return Loss	f=5 to 42MHz	14	16		dB
	Optical Output Return Loss		45			dB
R-ON	Power at Which Optical Turn ON	(Note3)		10		dBmV
R-OFF	Power at Which Optical Turn OFF	(Note3)		0		dBmV
T-ON	Time to 90% Optical ON				1.3	ms
T-OFF	Time for Optical Falls to 10%				1.6	ms
General Paramters						
Itot	Total Current Consumption (DC)	V+=12V		420		mA
Tmb	Operating Mounting Base Temperature		-20		+55	°C

Note1 : 54 to 1000MHz:different frequency is available (e.g.65 to 1000MHz).

Note2 : The power output is measured at 855.25MHz in 1GHz PAL-D system.

Note3 : Burst mode parameter can be adjustable according to customer's request.

Ordering Information

SUN Mini Optical Node Series		Forward Output Level		Return Input Level		Laser Type		Tx. Optical		Optical Connector		Transmitter wavelength		Sub Split		Power Adaptor	
SUN-ON-X00XX		XX		XX		X		X		XX		XXX		XX		XX	
SUN-ON-100	Receiver only	77	77dB μ V	80	80dB μ V	F	FP	1	1mW	SA	SC/APC	1310	1310nm	34	30/47	00	None
		85	85dB μ V	85	85dB μ V	D	DFB	2	2mW	SU	SC/UPC	1470	1470nm	45	42/54	01	North America
SUN-ON-200	Dual fiber I/O	95	95dB μ V	88	88dB μ V			3	3mW	FA	FC/APC	1490	1490nm	57	55/70	02	Europe
										FU	FC/UPC	1510	1510nm	68	65/85	03	China
SUN-ON-300	Single fiber I/O											1530	1530nm	81	85/105		
												1550	1550nm				
SUN-ON-400	One fiber I/O, a 2nd fiber for PON option											1570	1570nm				
												1590	1590nm				
SUN-ON-200C	Dual fiber I/O, burst mode at the return path											1610	1610nm				
SUN-ON-300C	Single fiber I/O, burst at the return path																
SUN-ON-400C	One fiber I/O, a 2nd fiber for PON option, burst at the return path																
SUN-ON-200AC	Dual fiber I/O, burst mode at the return, AGC at the forward path																
SUN-ON-300AC	Single fiber I/O, burst at the return, AGC at the forward path																
SUN-ON-400AC	One fiber I/O, a 2nd fiber for PON option, burst at the return, AGC at the forward path																

Example:

Single fiber I/O, burst at the return, AGC at the forward path; forward output level: 77dB μ V, return input level:88dB μ V; DFB Laser 1mW; SC/APC connector; transmitter wavelength 1610nm, frequency division 5-42MHz,54-1000MHz; Power adaptor is North America.

The order model is: SUN-ON-300AC-7788-D-1-SA-1610-45-01