

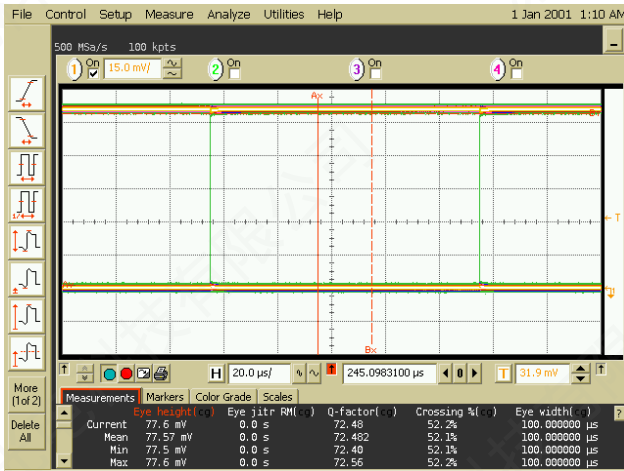
MX-LN-0.1-PD-P-P-FA-FA

All specifications given at 25°C, 1550 nm, unless differently specified. From SP-0216-PR-01.

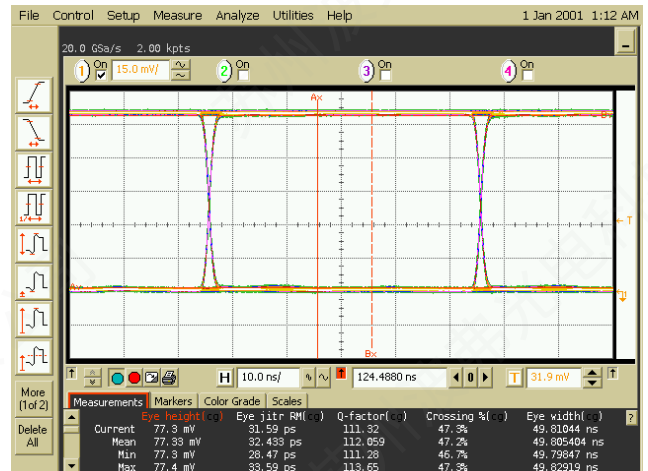
ELECTRICAL				
		Min	Typ	Max
Modulation bandwidth	MHz	100	400	-
V_{π} RF electrodes @ 50kHz	V	-	3.5	4
Driving voltage @200 Mb/s (50 Ω source, PRBS)	V	-	1.5	-
V_{π} DC electrodes	V	-	6.5	7
Ripple S_{21}	dB	-	0.5	1
RF port impedance matching	-	High impedance		
DC port impedance matching	M Ω	1	-	-
OPTICAL				
Crystal	Lithium Niobate X-Cut Y-Prop			
Waveguide process	Titanium in-diffusion			
Operating wavelength	nm	1530	1550	1580
Insertion loss (without connector)	dB	-	3.5	4.5
DC Extinction ratio (measured with narrow source, linewidth \leq 200 MHz)	dB	20	30	-
Optical return loss	dB	-40	-45	-
Chirp	-	-0.1	-	+0.1
INTERFACES				
Input fiber	Polarization maintaining 1550 nm Corning PM 15-U25D length: 1.5 meter, buffer diameter: 900 μ m			
Output fiber	Polarization maintaining 1550 nm Corning PM 15-U25D length: 1.5 meter, buffer diameter: 900 μ m			
Package size	85 x 15 x 9.65 mm ³			
Input RF connector	Female K			
DC electrodes and PD* connectors	Pins			
Input optical connector	FC/APC			
Input optical connector orientation	Slow axis parallel to connector key			
ENVIRONMENTAL				
Operating temperature	0°C to +70°C			
Storage temperature	-40°C to +85°C			
MAXIMUM RATINGS				
Maximum RF input power (CW mode)	-			
Bias voltage range	V	-20	-	20
Maximum optical input power (CW mode)	+20 dBm			



Digital NRZ modulation scheme results using the MX-LN-0.1 with the DR-VE-0.1-MO



10 kb/s, $V_{pp} = 1,2 V$

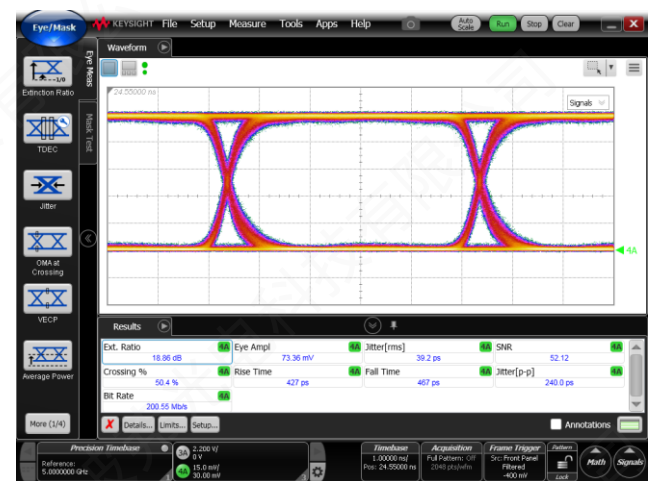


20 Mb/s, $V_{pp} = 1,2 V$

Equipment: Agilent 33600A with Agilent DSO 54853A



100 Mb/s, $V_{pp} = 1,3 V$



200 Mb/s, $V_{pp} = 1,4 V$

Equipment: PRBS Anritsu MP1800A and Scope Keysight DCA 86100D

