

DQPSK 40Gbps LiNbO₃ External Modulator

General Description

- 40Gbps (22Gbaud) Mach-Zehnder modulator for “DQPSK” transmission format
- Wide EO Bandwidth equivalent to conventional 40G Modulator for each MZI's
- Low drive voltage: < 4V (Dual drive)
- The DC bias is adjusted at the separate DC port of the modulator.
- Built-in a monitor PD for auto bias control
- Applications:
 - 40Gbps optical transmission equipment (DQPSK)
 - DWDM optical transmission equipment
 - Measurement equipment for high speed telecommunications



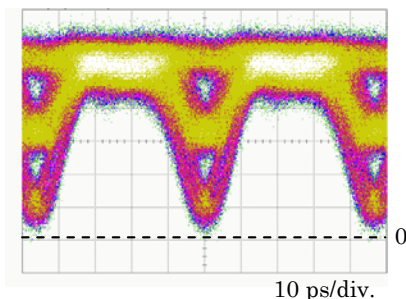
Specifications

Part Number		FTM7960EX
Optical Bandwidth (-3dB)		≥ 25 GHz
Operating Wavelength		1530 to 1610 nm
Driving Voltage (2V π) @22Gbps		≤ 4.0 V (*1)
Extinction Ratio at Low Frequency	Parent MZI (*2)	≥ 22 dB
	Child MZI	≥ 20 dB
Insertion Loss		≤ 9.0 dB
α Parameter (Typ.)		0 (*1)
RF Impedance (Typ.)		50 ohm
Monitor PD Responsivity		0.005 to 0.025 A/W
Operating Case Temperature		-5 to 75 °C
Package Size (L x W x H)		89.8 x 15 x 9.5 mm / 3.54 x 0.59 x 0.37 inches

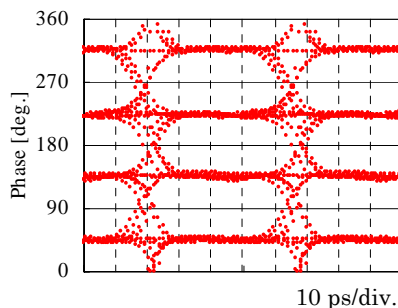
*1: at dual drive *2: Mach-Zehnder Interferometer

Characteristics

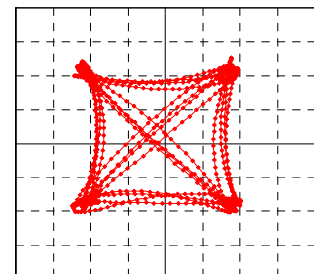
(1) Intensity Eye Pattern



(2) Phase Eye Pattern



(3) Constellation



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