

# DP-QPSK 100Gbps LN Modulator

## General Description

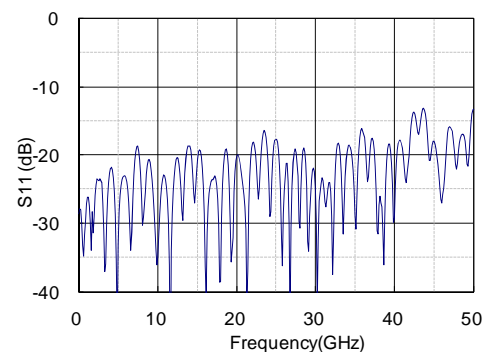
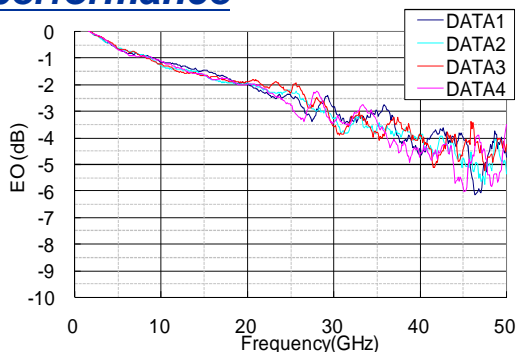
- 128Gbps (32Gbaud) Mach-Zehnder modulator for “DP-QPSK” transmission format
- 2 QPSK modulators and Polarization Beam Combiner are integrated in one package
- Low drive voltage: <math>< 7V (2V\pi)</math>
- Built-in monitor photo diodes for each polarization
- RoHS compliant
- OIF compliant



## Specifications

Part Number	FTM7977HQA (*1) / FTM7978HQ (*2)			
Parameter	Condition	Target spec		Unit
		Min	Max	
Operating Temperature	Case Temperature	-5	75	degC
Operating Wavelength	-	1530	1610	nm
Optical Bandwidth	-3dB Down	23.0	-	GHz
Insertion Loss	maximum transmission (Total power for each polarization)	-	13	dB
Polarization Dependent Loss	Loss (X) – Loss(Y)  @ C-band	0.6 (Typ.)		dB
RF Drive Voltage	2 x Vpi @32Gbaud	-	7.0	Vpp
DC Extinction Ratio for parent MZI	-	22	-	dB
DC Extinction Ratio for Child MZI	-	20	-	dB
Optical Delay between X and Y	*1	-5.2	-1.2	ps
	*2	13.5	18.5	
Package Size (L x W x H)	90.5 x 13.2 x 7.0mm/3.56 x 0.52 x 0.27 inches			

## RF performance



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Specifications are subject to change without prior notice.