

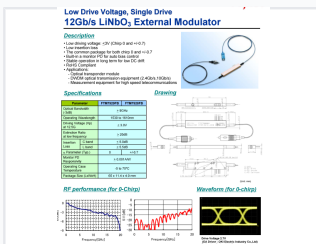
# 20G LiNbO3 External Modulator

This 20G modulator is a 12Gb/s LiNbO3 external modulator with low drive voltage. It features a built-in monitor PD for auto bias control and is suitable for high-speed telecommunications measurement equipment.

## Specifications

Parameter	FTM7929FB	FTM7928FB
Optical Bandwidth (-3dB)	≥ 9GHz	
Operating Wavelength	1530 to 1610nm	
Driving Voltage (Vp) at 12.5G	≤ 3.0V	
Extinction Ratio at low frequency	≥ 20dB	
Insertion Loss	C band	≤ 5.0dB
	L band	≤ 5.5dB
Parameter (Typ.)	0	+/-0.7
Monitor PD Responsivity	≥ 0.001AW	
Operating Case Temperature	-5 to 75°C	
Package Size (LxWxH)	65 x 11.4 x 4.9 mm	

## ADDITIONAL IMAGES



## Overview

### High-Performance LiNbO3 External Modulator

The FTM7928FB is a high-speed 12Gb/s LiNbO3 external modulator designed for demanding telecommunications applications. It features a low drive voltage of under 3V and low insertion loss, ensuring efficient signal transmission with reduced power requirements. With a built-in monitor photodiode for auto-bias control and stable long-term operation, this device is an ideal solution for optical transponder modules and DWDM transmission equipment.

## Key Metrics

### Optical Bandwidth (-3dB)

**9 GHz**

Optical Bandwidth

### Driving Voltage (Vp) at 12.5G

3 V

## Optical Performance

### Insertion Loss

Band	Max Loss
C Band	< 5.0 dB
L Band	< 5.5 dB

### Operating Wavelength

1530 to 1610 nm

### Extinction Ratio (Low Frequency)

20 dB

## Technical Specifications

Alpha Parameter	0, +/- 0.7
Monitor PD Responsivity	0.001 A/W
Operating Case Temperature	-5 to 75 °C
Package Size (LxWxH)	65 x 11.4 x 4.9 mm

## Features

### Compliance & Applications

- RoHS Compliant
- Optical transponder module
- DWDM optical transmission equipment (2.4Gb/s, 10Gb/s)
- Measurement equipment for high-speed telecommunications
- Built-in monitor PD for auto bias control