

40Gbit/s Single Electrode Intensity Modulator (for OC768)

Specifications

Model	T·MZH1.5-40X-ADC-Y-Z	
Operating wavelength	1.55μm	
Insertion loss	</=6.0dB	
DC Port Vπ	</=5.5Vp-p	
Drive Voltage(Vπ) at RF Port @1GHz	</=5.0V(Typ</=5.5V@40Gbit/s)	
Optical bandwidth*1	>/=30GHz	
ON/OFF extinction ratio at DC	>/=20dB	
Polarization extinction ratio*2	>/=20dB	
Optical return loss	>/=30dB	
Maximum input power*3	</=13dBm	
Electrode impedance	Approx.50Ω	
RF connector	V,female	
Optical fiber	Input	0.9mmΦ PMF
	Output	0.9mmΦ PMF or SMF
Fiber lead length	at each port 1.0~2.0m	
Operating temperature	0~60°C	
Polarizer	Output Side	

*1: 3dB down (1GHz reference)

*2: Only available for PMF output

*3: TE/TM extinction ratio >/=20dB at input. Input polarization must be aligned to the slow axis of polarization maintaining fiber before the maximum input power is inserted.

● Ordering Information

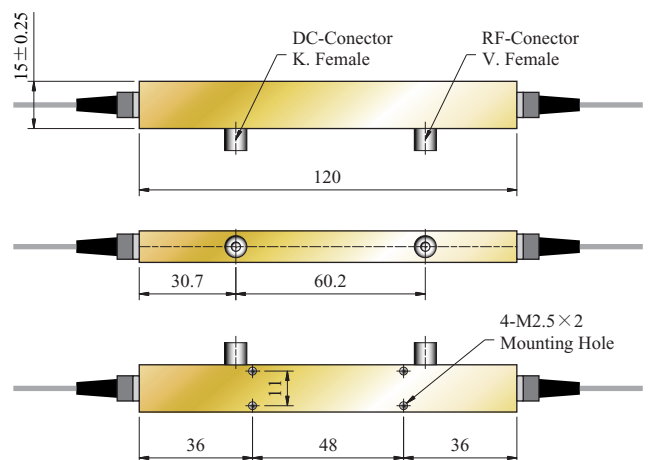
T·MZH1.5-40 **X** - ADC - **Y** - **Z**

X: Option	
With PD	PD
None	Blank

Y: Output Optical fiber *1	
0.9mmΦ PMF	P
0.9mmΦ SMF	S
Other	O

Z: Connector *1,2	
FC/SPC without key ring	FN
FC/SPC with key ring	FK
SC/SPC	SC
SC/APC(Angled PC)	FA
Other	O

● Package size(Hermetically-sealed)



[Dimension:mm]

*1: When Other **O** is selected in the above ordering code, please specify your requirements with as much detail as possible.

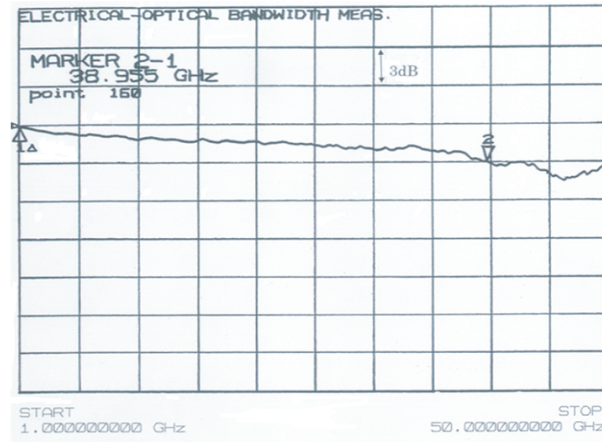
*2: The Polarization state of input and/or output PMF is slow axis aligned.



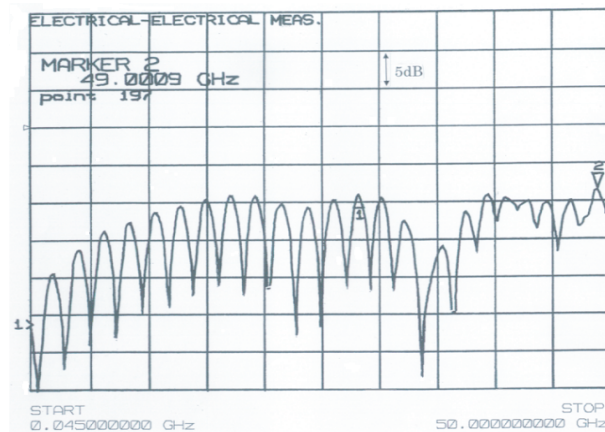
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Typical Data

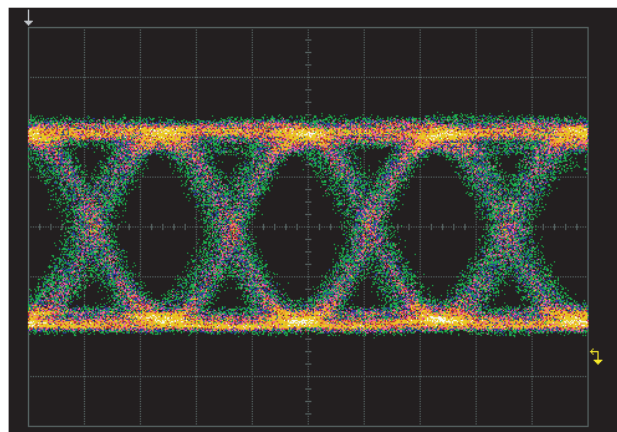
1, Optical Bandwidth of 40Gbps Intensity Modulator



2, Electrical Characteristics of 40Gbps Intensity Modulator



3, Eye Pattern of 40Gbps Intensity Modulator



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Recommended configuration

*** This recommended configuration is only for giving general ideas. Please refer to the operation manual which is included with the product when you use the product. The operation manual shows you the appropriate way to use with any note.**

(1) For proper adjustment, make optical connection prior to electrical connection otherwise the product may get damage.

The optical connection between the product and a power meter, or between the product and a laser source should be made when laser source is off.

⚠ Any risk of making connection while laser source is working, such as loss of eyesight, should be at the user.

(2) The input fiber of the modulator must be optically adjusted with an optical laser source.

The schematic diagram is illustrated below.

(3) The output fiber of the modulator must be optically adjusted with a power meter.

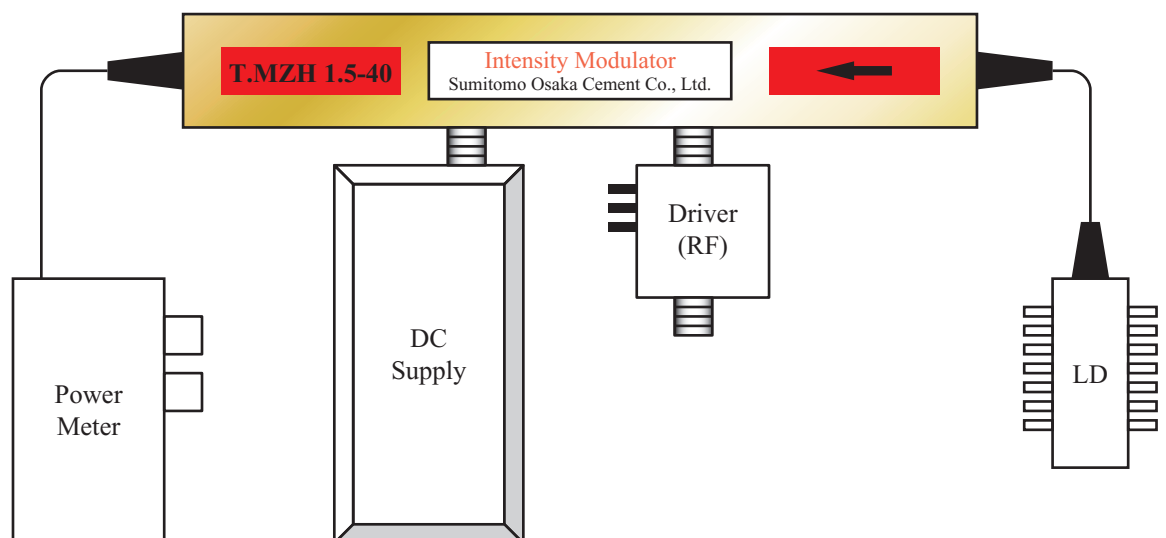
The schematic diagram is illustrated below.

(4) You can work the laser source.

(5) Adjust the input side connector appropriately so that the input light power to the module is maximized.

The internal polarizer will get damage by improper adjustment and cause unexpected optical loss.

(6) DC Supply is connected. The schematic diagram is illustrated below.



This product is a AC(RF)/DC separated type, thus you do not need Bias T, DC Block and Termination.

