

# LN MODULATORS

## 40GHz/s Pulse Carver LN Modulator (Dual Electrode Model)

### Specifications

Model		T·DKH1.5DP-40PD-ADC-Y-Z
Operating wavelength		1.55μm
Insertion loss		≤9.0dB
ON/OFF extinction ratio @DC port		≥20dB
Driving voltage @DC Port <sup>*1</sup>		≤5.0 V
Driving voltage (Vπ) at RF Port <sup>*2</sup>		≤4.0Vpp
Polarization extinction ratio <sup>*3</sup>		≥20dB
Optical return loss		≥30dB
Maximum input power <sup>*4</sup>		50mW
Electrical connector		GPPO connector
Optical fiber	Input	0.4mmΦPMF
	Output	0.9mmΦ SMF or PMF
Fiber lead length		≥0.7m (for both ports)
Operating temperature		0°C~70°C
Polarizer		Included

PD characteristics	
Monitor PD sensitivity	0.04~0.40mA/mW
Monitor PD extinction ratio	≥8dB

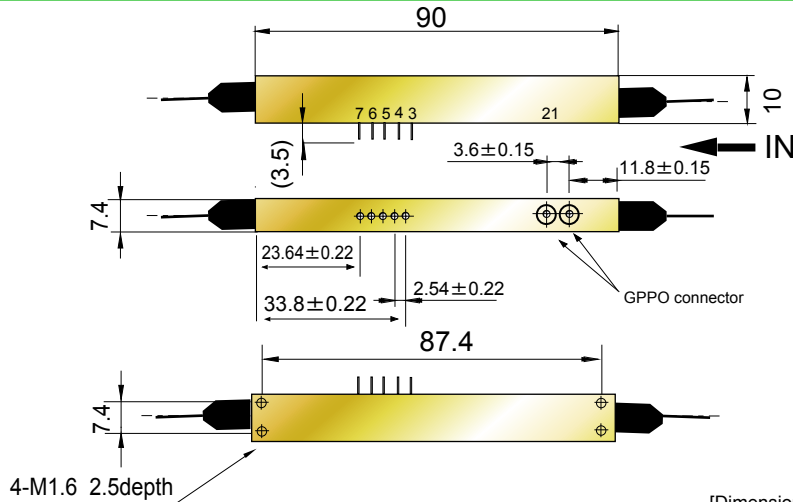
\*1: The use of one electrode only.

\*2: Measured frequency is 20GHz. The use of one electrode only.

\*3: This specification is only available for PMF output.

\*4: Input polarization must be aligned to the slow axis of polarization maintaining fiber before the maximum input power is inserted.

### Package size(Hermetically-sealed)



[PIN No.]

- 1:RF1 GPPO Connector
- 2:RF2 GPPO Connector
- 3:GND PIN
- 4:DC1 PIN
- 5:DC2 PIN
- 6:PD Anode PIN
- 7:PD Cathode PIN

[Dimension:mm]

### Ordering Information

T·DKH1.5DP-40PD-ADC - Y - Z

Y: Output Optical fiber <sup>*1</sup>	
0.9mmΦ PMF	P
0.9mmΦ SMF	S
Other	O

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

\*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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Specifications subject to change without any notice.

Manufactured by :

**SUMITOMO OSAKA CEMENT CO.,LTD.**  
OPTOELECTRONICS BUSINESS DIVISION