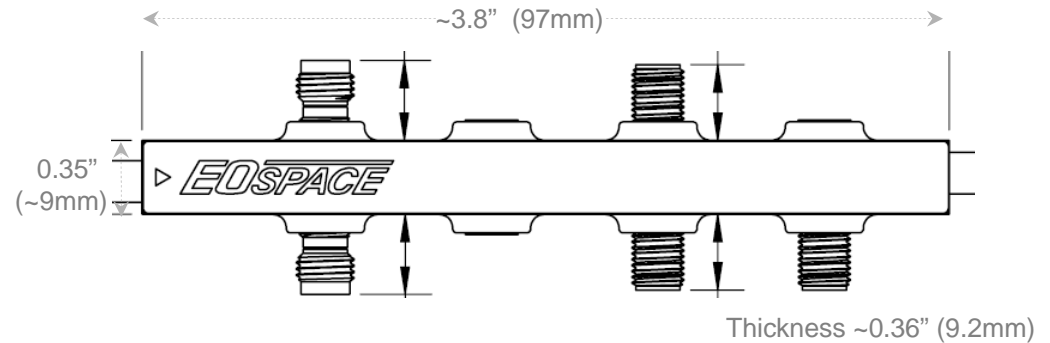
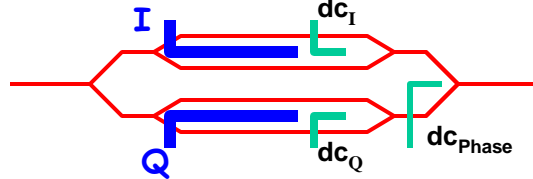
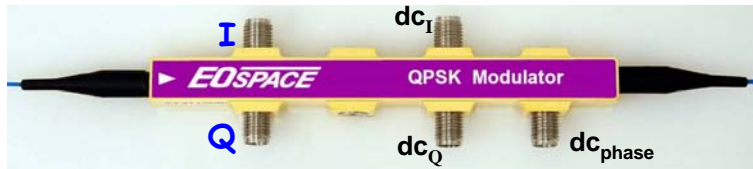


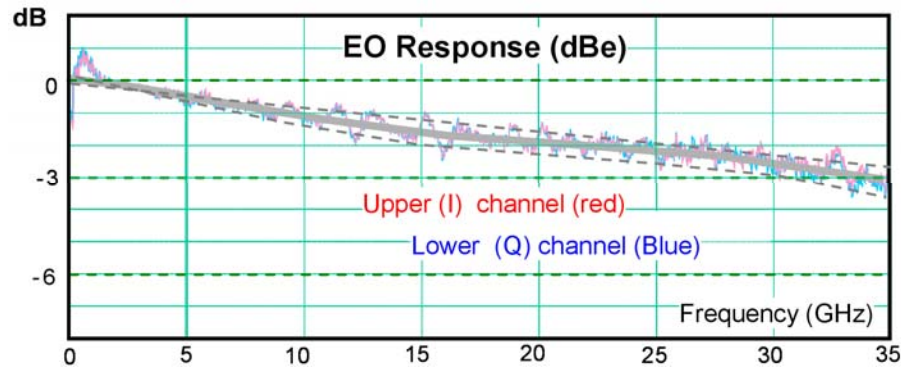
Dual-Parallel (I/Q) Modulator

(Larger-BW version)

EDSPACE



Typical measured Electro-Optic Response



- Wavelength of operation: $\lambda \sim 1.55\mu\text{m}$
- RF connectors for I/Q: 1.85mm (or V), (or 2.92mm (or K))
- RF connectors for DC: SMA
- Fiber Input (PMF); Output (SMF or PMF)
- Fiber connector: FC/UPC, FC/APC, SC, etc.

- X-cut LiNbO₃ (zero-chirp), Single-drive
- Dual-Parallel - Nested Modulator
- I/Q Modulator • QPSK Modulator
- ~ 25-50 GBaud (each I & Q channel)

Insertion Loss: <5 dB (std); (option: <4dB)
(all DC biases set at peak transmission)

I/Q V_{π} ~4.0 V @1GHz (Maximum 4.3V)

BW ~30-35 GHz

(usable to >40GHz with no response dips)

S_{11} < -10dB (dc→30GHz)

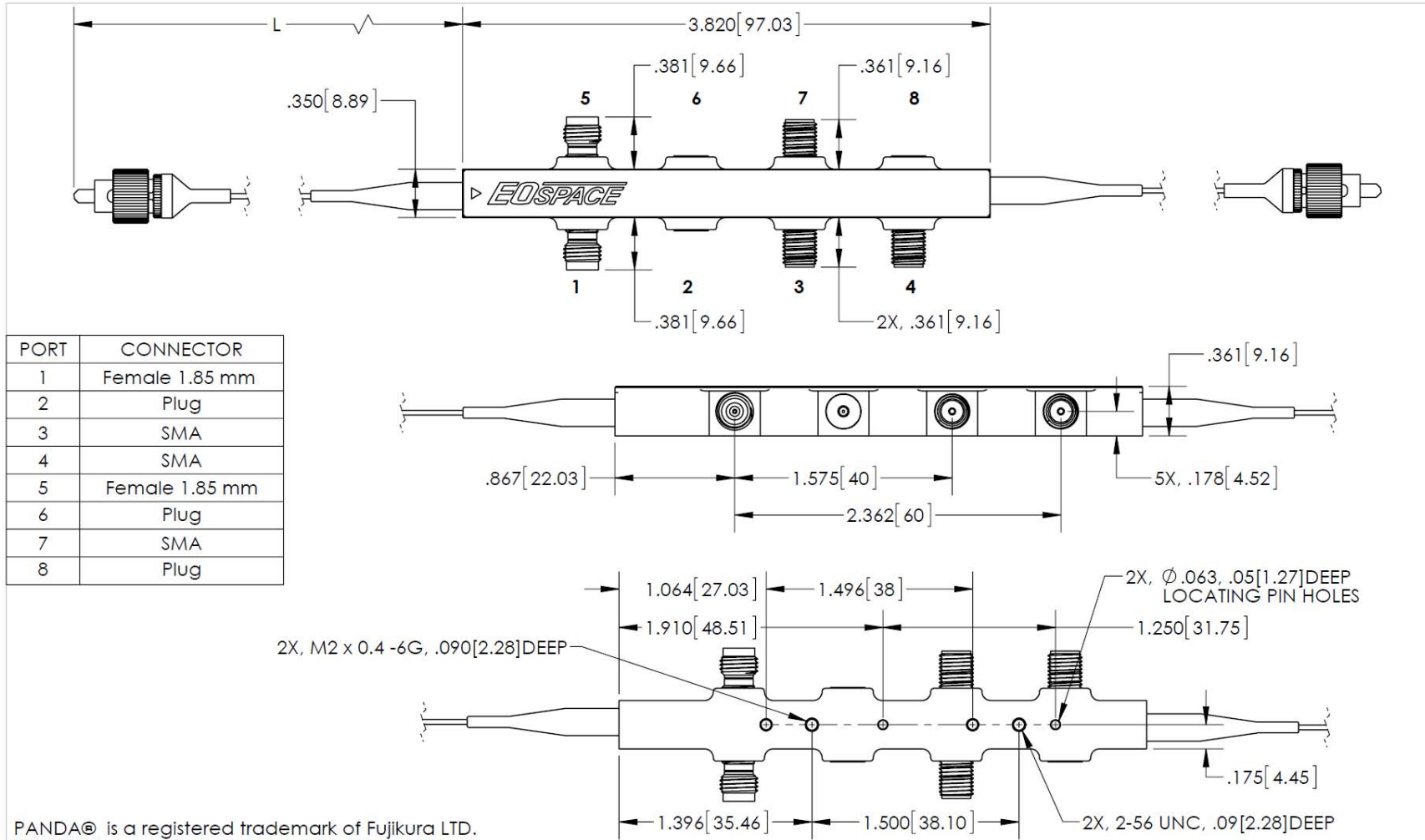
Bias voltages: dc-I V_{π} : <10 V

dc-Q V_{π} : <10 V

dc-phase V_{π} : <15 V

Extinction Ratio(ER): >20 dB

I/Q Modulator Package



PORT	CONNECTOR
1	Female 1.85 mm
2	Plug
3	SMA
4	SMA
5	Female 1.85 mm
6	Plug
7	SMA
8	Plug

PANDA® is a registered trademark of Fujikura LTD.
 HYTREL® is a registered trademark of DuPont for its thermoplastic polyester elastomers.

SPECIFICATIONS	
RF Port Connectors for I/Q	1.85 mm Female Connectors
RF Port Connectors for DC	SMA Female Connectors
Input Fiber	PANDA® Polarization Maintaining
Output Fiber	PANDA® Polarization Maintaining or Single Mode
Cabling	Ø 900 µm HYTREL® polyester loose tube
Optical Connectors	FC/UPC, FC/APC, SC, others

Customer Drawing

EOSPACE 8711 148th Ave. NE
Redmond, WA 98052

MODEL NUMBER:
PER SPECIFICATION

TITLE:
I/Q MODULATOR PACKAGE

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 OR INFORMATION CONTAINED HEREIN
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 ASSUMED AS A RESULT OF THEIR USE
 OR APPLICATION.

SIZE	DWG. NO.	REV
A	C2454D6.1.06	A
SCALE: 1:1	20130402	SHEET 1 OF 1

inch[mm]