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Government Scientific Source

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Angebot: **A22.0544-3**
Auftrag: **B22.0381**
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Customer No.: 60237
PO-#: 19412675
PO date: 23.11.2022 00:00:00
Enduser: SLAC, Eylon Persky

Date: **11/30/2022**

Produktionsauftrag

B22.0381 - Government Scientific Source | PO: 19412675

Pos.	Product & Description	Our Article No.	Your Article No.	Qty.
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copied from offer A22.0544 from 2022-11-16

1.0 B22.0381_Pos.1: PM7-SWIR1_5.2 +T1 +W +TXC +DC | Qty. 1x A00012 - 1

Resonant, free-space electro-optic PHASE modulator for SWIR1 Laser applications

- PM7-series: select fixed resonance frequency within **2 - 30 MHz**
- optimised resonance frequency fo: **5.2 MHz** (+/-0.1MHz std. tol.) | RF bandwidth (-3dB): typ. **1 - 2% of fo**
- RF connector: **SMA-f**, straight | impedance @ fo: ca. **50 Ohms**, return loss (S11): typ. < **-10dB**
- housing dimensions: **40x40x40mm^3** | mounting: 3x M4 for s- & p- pol.
- user wavelength λ_o : **1550 nm** | crystal aperture: **3x3mm^2**, CA $\geq 90\%$
- BBAR: **1.0 - 1.7 μm** ($R_{\text{avg}} < 1\%$, $T_{\text{avg}} > 95\%$) | wavefront distortion (WFD): < **$\lambda/6$** (633nm)
- max. recommended laser intensity @ λ_o : ca. **2 W/mm^2** | Laser insertion loss (LIL) @ λ_o : < **2 %**
- modulation efficiency @ (1rad, fo, λ_o): typ. **(16 +/-1) dBm** | max. RF power: ca. **0.5W**
- applications: **Sagnac interferometry**
- CoO: GERMANY, HS code: 90139080, RoHS compliant, net weight: 0.125kg

1.1 +T1 A00205 - 1

Tuning option:

- function/purpose: manual adjustment (set&forget) of the EOM's resonance frequency:
- tuning range: ca. **fo +/- 10%** | tuning tool included
- Note: this option reduces the modulation efficiency by: **1-2dB**

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1.2	+W Crystal Wedge option: - function/purpose: RAM suppression caused by e.g. polarisation misalignment & etalon effects - Ref.: Vol. 41, No. 14 / July 15 2016 / Optics Letters 3331 - number of wedged facets: 1 (one) wedge angle: 4° anti reflection coating as stated above	A00203	-	1
1.3	+TXC Temperature Control option: - function/purpose: active temperature stabilisation of the modulator / crystal: - incl. thermal crystal mount - internal T-sensor (PT1000) TEC (30x30mm ² , 12V, 4A, >30W) - incl. mounting hardware (plastic screws, spacer, etc.) for external temperature control (< 0.1K)	A00210	-	1
1.4	+DC Extra DC-port option: - function/purpose: Active RAM suppression via voltage feedback on the crystal - Ref.: . Zhang, et. al. OPTICS LETTERS / Vol. 39, No. 7 / April 1, 2014 - Bandwidth (-3dB): 0 - 10kHz connector: SMA-f, bulkhead (max. +/-500V), - Halfwave voltage: (@ 400 770nm): ~ 130 240V - Note: DC-port reduces the AC modulation efficiency by ca. 3dB	A00209	-	1
2.0	B22.0381_Pos.2: Shipping & Packaging Qty. 1x 1 Parcel: 30x20x12cm ³ , ca. 1kg	A01174	-	

Shipping date: Donnerstag, 8. Dezember 2022