

Phase Shifter

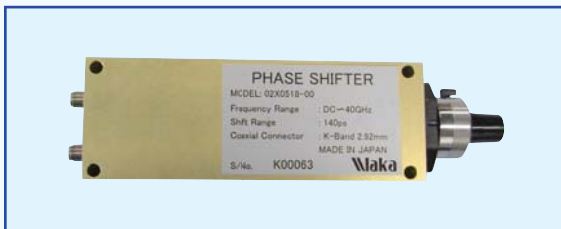
► Overview

This product is a mechanical delay circuit best suited for phase adjustment of ultra high-speed digital transmission.

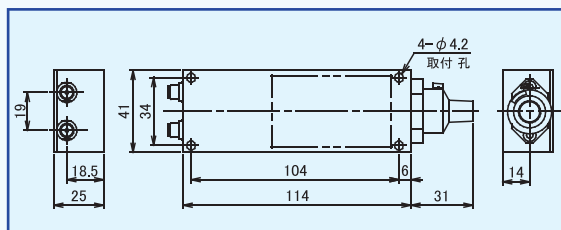
140ps delay time can be changed in the frequency range of DC up to 60 GHz. A PC controlled system units using a dial and stepping motor are available.

► Product

■ Vernier Dial Type [02X0518-00]

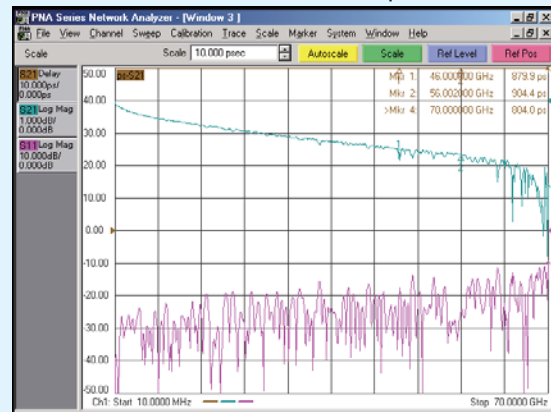


■ Dimensional Drawing



■ Sample Data

02X0518-00 (DC ~ 40GHz 140ps)



► Feature

1. Low VSWR and low insertion loss in the wide band.
2. Flat group delay characteristics up to DC upper limit frequency.
3. Excellent 100Gbps pulse response characteristic and distortion such as jitters are controlled.
4. No backlash.
5. Setting by the 0.00666ps per step can be done, when PC is used for control



WAKA MANUFACTURING CO.,LTD
TEL: +81-3-6635-5410 FAX: +81-03-6635-5420
URL: <http://www.waka.co.jp/>

▶ Applications

1. Physical test in the optical transmission circuits.
2. Phase calibration for the phased array type antenna for radars.
3. Delay adjustment for devices.

▶ Products Specification

	Phase Shifter	
Model No.	02X0518-00	02X0508-00
Terminal	2.92mmK/J	1.85mmV/J
Drive mechanism	Control shift ϕ 3mm Vernier Dial	
Delay time(ps)	140	140
Frequency(GHz)	DC ~ 40	DC ~ 60
Phase shift(deg/GHz)	50.4	50.4
Delay time repeatability	–	–
*V.S.W.R.(DC ~ 20GHz)	1.15	1.2
*V.S.W.R.(20 ~ 40GHz)	1.3	1.3
*V.S.W.R.(40 ~ 60GHz)	–	1.4
*Insertion loss(DC ~ 20GHz)	1.0 dB	1.4 dB
*Insertion loss(20 ~ 40GHz)	1.3 dB	2.3 dB
*Insertion loss(40 ~ 60GHz)	–	3.0 dB

*Indicates the value when the variable length is at the maximum.