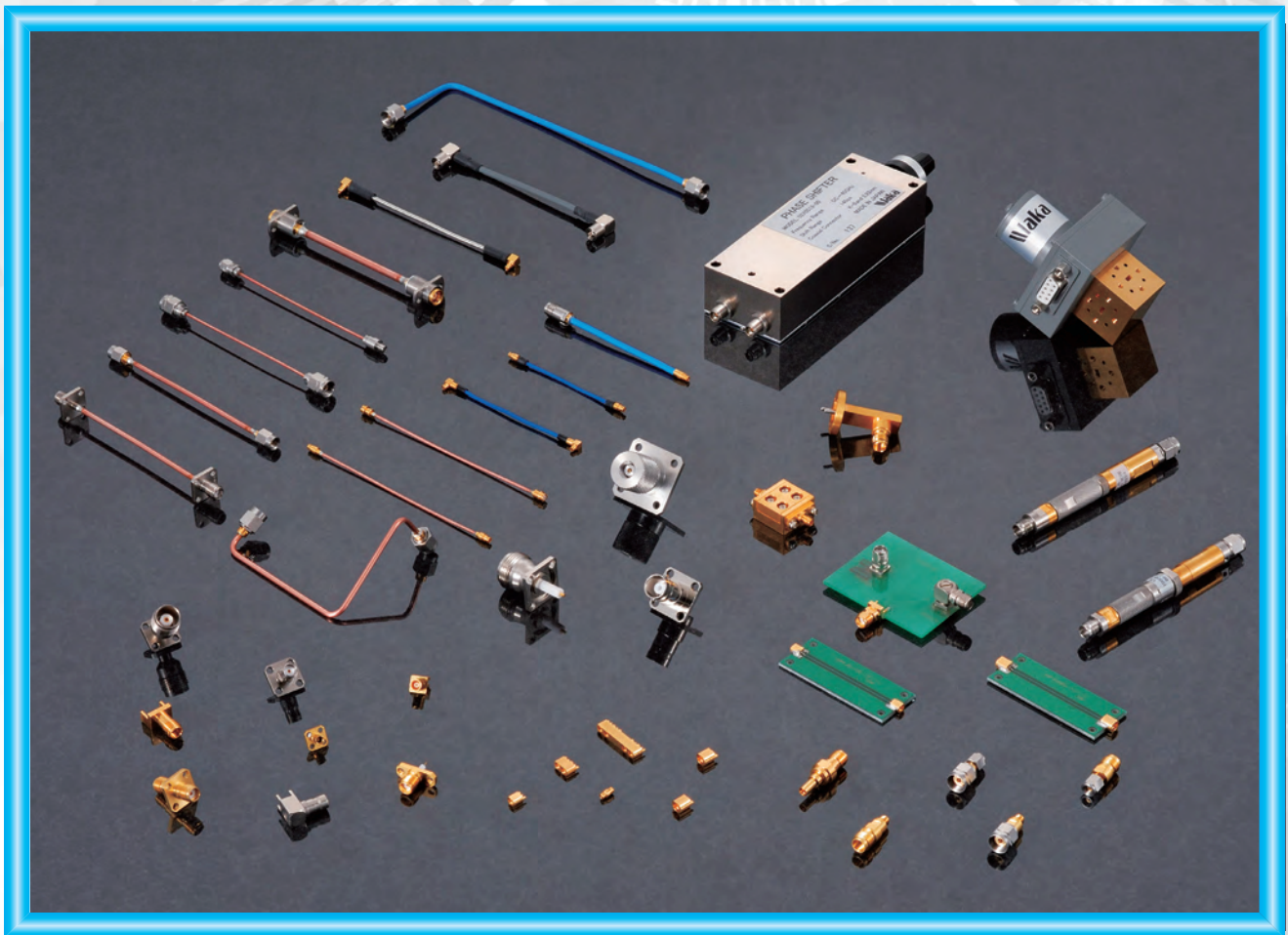


**Kokyo**

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Web : <https://www.symphotony.com/>

# Micro wave Coaxial Components Introduction



**Waka**

WAKA MANUFACTURING Co.,Ltd.

# 1.0mmW Connector

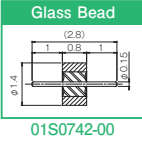
DC~110GHz

## Receptacle (Jack)

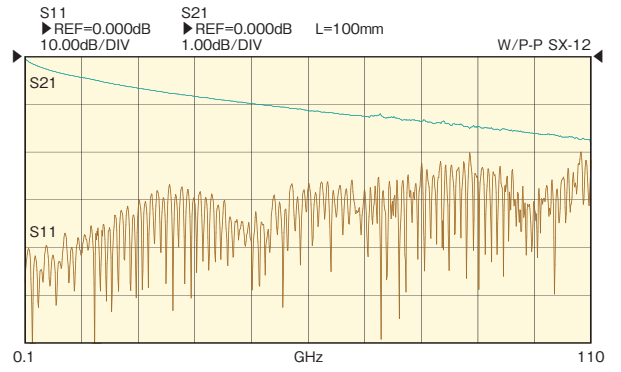


Material Finish  
 Inner conductor : BeCu Au  
 Outer conductor : SUS Pv

### Related parts



## Cable assemblies



# 1.85mmV Connector

DC~65GHz

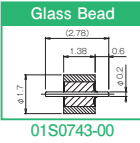
## Receptacles

### Jacks

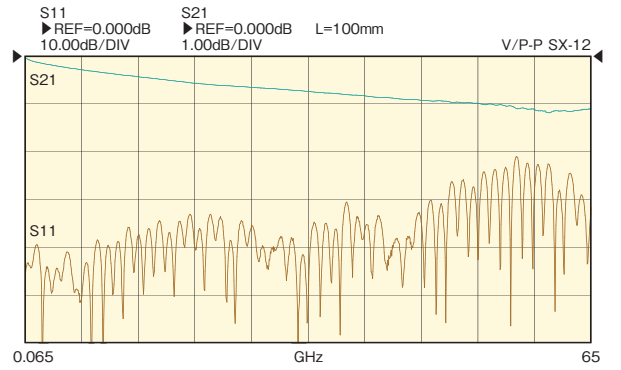
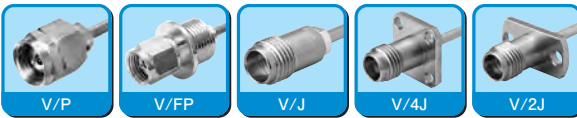


### Plugs

### Related parts



## Cable assemblies

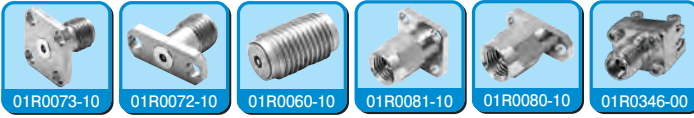


# 2.92mmK Connector

DC~45GHz

## Receptacles

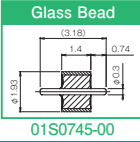
### Jacks



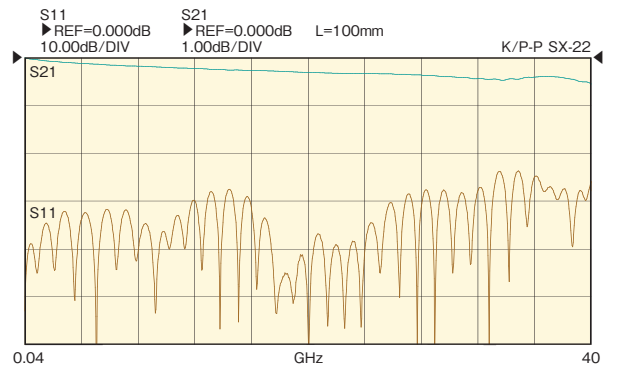
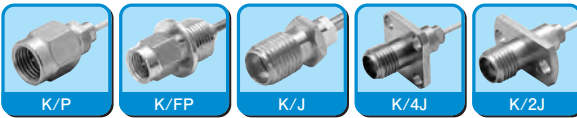
### Plugs

### End-Launch

### Related parts



## Cable assemblies



# SMPM Connector

DC~65GHz

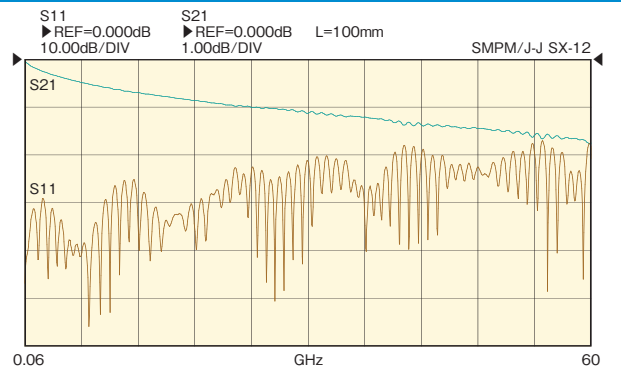
## Receptacles

### Plugs



### Adapter

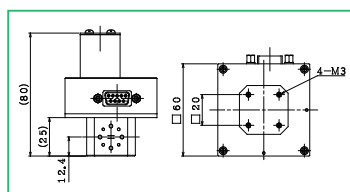
### Cable assemblies



# V Band Waveguide Transfer Switch



## Shape Diagram



## Products Specification

### Electrical

Requirement	Specification
Frequency	55 ~ 65 GHz
V.S.W.R.	1.2 max
Insertion Loss	0.6dB max
Isolation	50dB
Rated Voltage	DC 12V
Rated electric current	2A

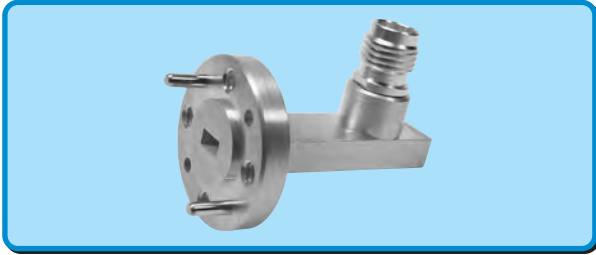
### Mechanical

Requirement	Specification
Flange	UG-385/U equivalent
Waveguide	WR-15
Control	D-SUB9P(Plug)
Transfer speed	100msec or less
Life	1million or more
Temperature	5°C ~ 40°C

# Coaxial Waveguide Adapter

DC~110GHz

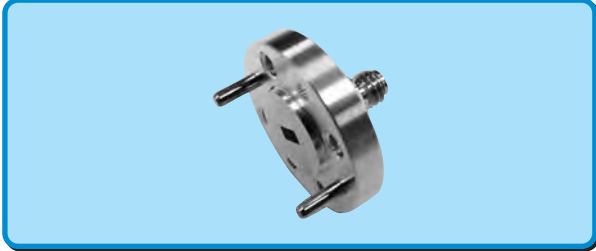
■ Side-Launcher (01X0543-00) V Band



■ End-Launcher (01X0591-00) V Band



■ End-Launcher (01X0562-00) E Band



■ End-Launcher (01X0573-00) W Band



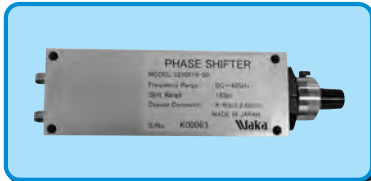
## Typical specification

Band	Model No	Type	Frequency	Waveguide	Flange	Connector	V.S.W.R	Insertion Loss	Length
V	01X0589-00	Side-launcher	50~65GHz	WR-15	UG-385/U	1.85mmV/J	under 1.5	under 0.6dB	29mm
V	01X0590-00	Side-launcher	50~65GHz	WR-15	UG-385/U	1.85mmV/P	under 1.6	under 0.7dB	29mm
V	01X0561-00	End-launcher	50~65GHz	WR-15	UG-385/U	1.85mmV/J	under 1.4	under 0.3dB	16.7mm
V	01X0571-00	End-launcher	50~65GHz	WR-15	UG-385/U	1.85mmV/P	under 1.4	under 0.4dB	20.2mm
V	01X0591-00	End-launcher	50~75GHz	WR-15	UG-385/U	1.0mmW/J	under 1.5	under 0.4dB	12.5mm
E	01X0562-00	End-launcher	60~92GHz	WR-12	UG-387/U	1.00mmW/J	under 1.5	under 0.4dB	12.6mm
E	01X0572-00	End-launcher	60~92GHz	WR-12	UG-387/U	1.00mmW/P	under 1.5	under 0.5dB	15.6mm
W	01X0563-00	End-launcher	74~110GHz	WR-10	UG-387/U-M	1.00mmW/J	under 1.5	under 0.5dB	11.3mm
W	01X0573-00	End-launcher	74~110GHz	WR-10	UG-387/U-M	1.00mmW/P	under 1.5	under 0.5dB	14.5mm

## Phase Shifter

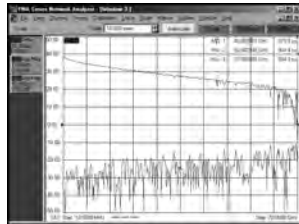
DC~60GHz

■ Dial type shifter [02X0518-00]



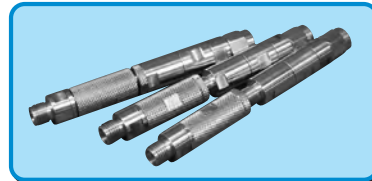
■ Sample Data

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

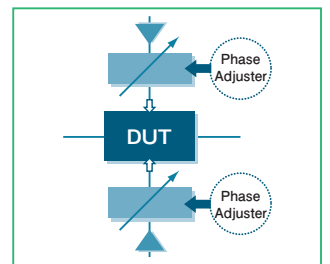


## Phase Adjuster

DC~60GHz



■ Sample application : Phase adjustment of optical transmission converter



## Typical specification

Model No.	Phase shifter	
	02X0518-00	02X0508-00
Terminal	2.92mmK/J	1.85mmV/J
Drive mechanism	Control shift $\phi$ 3mm Varnier Dial	
Adjustable delay time (ps)	140	140
Frequency (GHz)	DC~40	DC~60
Adjustable phase shift (deg/GHz)	50.4	50.4
Delay time repeatability	$\pm 0.1$ ps	$\pm 0.1$ ps
*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)	1.0dB	1.4dB
*Insertion Loss (20~40GHz)	1.3dB	2.3dB
*Insertion Loss (40~60GHz)	—	3.0dB

\*When the adjustable delay time is at the maximum.

## Typical specification

	A18S	A45K	A45V	A60V
Model No.	02X0445-00	02X0450-00	02X0450-10	02X0527-00
Terminal	SMA/P-J	2.92mmK/P-J	1.85mmV/P-J	
Length (mm)	(86~104)		(89~108)	
Drive mechanism	Trapezoid screw			
Delay time adjustable (ps)	60			
Frequency range (GHz)	DC~18	DC~40		DC~60
Phase shift adjustable (ps/1 cycles)	1.666/1 cycles			
Impedance ( $\Omega$ )	50			
V.S.W.R.	1.3 (at 18GHz)	1.4 (at 40GHz)		1.5 (at 60GHz)
*Insertion Loss (DC~18GHz)	0.7 dB			1.0 dB
*Insertion Loss (18~40GHz)	1.0 dB			1.3 dB
*Insertion Loss (40~60GHz)	—			1.5 dB

\*When the adjustable delay time is at the maximum.