



JITAI Technology Co., LTD.

Your 1st Partner

Product Catalog

Microwave Passive Device
Design and Manufacture

QUALITY MANAGEMENT SYSTEM - ISO 9001:2008





*Microwave Passive Device
Design and Manufacture*

*The Best Quality,
Service and Price
from JITAI*

Rotary Joints

Single Channel Rotary Joints

Wide Band Coaxial Rotary Joint	2
WR28 Rotary Joint	3
WR42 Rotary Joint	3
WR75 Rotary Joint	4
WR90 Rotary Joint	4
WR112 Rotary Joint.....	5
WR284 Rotary Joint.....	5

Multi Channel Rotary Joints

Coaxial Two Channel Rotary Joint	6
WR90 Two Channel Rotary Joint	6
WR90 and Coaxial Three Channel Rotary Joint	7
Waveguide and Coaxial Three Channel Rotary Joint	7
WR90 and Coaxial Four Channel Rotary Joint	8

Rotary Joint with Slip Ring

Rotary Joint with Slip Ring	9
-----------------------------------	---

Waveguide Components

Waveguide Magic T

Conventional Magic T	11
Folded H-Plane Magic T	11
Folded E-Plane Magic T	11
Waveguide Monopulse Comparator	12

Waveguide Coupler

Broadwall Coupler	13
Sidewall Couplers	13
Crossguide Couplers	13

Combiner

WR90 4ways Power Combiner.....	14
WR28 16ways Power Combiner	14



*Microwave Passive Device
Design and Manufacture*

*The Best Quality,
Service and Price
from JITAI*

Waveguide Components

Circulator

H-Plane Circulator	15
E-Plane Circulator	15
Circulator with Load	15

Isolator

Coaxial Isolator.....	16
-----------------------	----

Load

Load	17
------------	----

Diplexer

Compline Diplexer	18
-------------------------	----

Waveguide to Coaxial Adapter

Waveguide to Coaxial Adapter	19
------------------------------------	----

Waveguide Bend

Waveguide E-Bend	20
Waveguide H-Bend.....	20

Bend Waveguide

Bend Waveguide	21
----------------------	----

Straight / Flexing / Twist Waveguide

Straight / Flexing / Twist Waveguide	22
--	----

Flange / Transition / Pressure Window

Flange / Transition / Pressure Window	23
---	----

High Power Waveguide Subsystem

High Power Waveguide Subsystem.....	24
-------------------------------------	----



*Microwave Passive Device
Design and Manufacture*

*The Best Quality,
Service and Price
from JITAI*

Arc Sensor

Arc Sensor	26
------------------	----

High Power Tubular Low Pass Filter

High Power Tubular Low Pass Filter	27
--	----

Antennas

Blade Antenna	28
Monopole Antenna	28
Broadband Dipole Antenna	28

VAST Products

WR75 KU OMT	29
Band Rejection Filter	29
Circular Polarization OMT Transmitter	29
OMT-TRF	29
VAST Transceiver Box	29

Rotary Joints



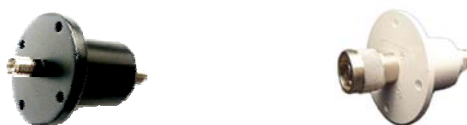
Single Channel Rotary Joint

Wide Band Coaxial Rotary Joint

Wide Band, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JSRJC001A	JSRJC003A	JSRJC003AB
Connector	SMA	SMA	SMA
Frequency Range	DC~10 GHz	DC~18 GHz	DC~18 GHz
VSWR	1.25 max	1.5 max	1.5 max
VSWR -WOW	0.05 max	0.07 max	0.05 max
Insertion Loss	0.2 dB max	0.5 dB max	0.5dB max
Insertion Loss -WOW	0.05 dB max	0.07 dB max	0.1dB max
Peak Power	-	3 kW min	3kW min
Average Power	-	200 W min	75 W min



Part No.#	JSRJC005A	JSRJC007A	JSRJ-NF-NM-1A
Connector	K connector	K connector	Type N Male - Female
Frequency Range	18 ~ 40 GHz	DC~40 GHz	DC~5 GHz
VSWR	1.5 max	1.8 max	1.15 max
VSWR -WOW	0.1 max	0.1 max	0.05 max
Insertion Loss	0.8 dB max	1.0 dB max	0.1 dB max
Insertion Loss -WOW	0.1 dB max	0.1dB max	0.05 dB max
Peak Power	500 W min	300 W min	10 kW min
Average Power	50 W min	30 W min	100 W min

Single Channel Rotary Joint

WR28 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JSRJU028A1
Type	U type
Frequency Range	29 ~31 GHz
VSWR	1.3 max
Insertion Loss	0.50dB max
Peak Power	2Kw max
Average Power	20W min
Input	WR28

WR42 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JSRJI042A2
Type	I type
Frequency Range	18 ~21 GHz
VSWR	1.3 max
Insertion Loss	0.50dB max
Peak Power	2.5 Kw max
Average Power	20W min
Input	WR42

Single Channel Rotary Joint

WR75 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JSRJI075A1	JSRJU075A1	JSRJU075A2
Type	I type	U type	U type
Frequency Range	14 ~ 14.5 GHz	14 ~ 14.5 GHz	13.7 ~ 14.8 GHz
VSWR	1.20 max	1.20 max	1.20 max
VSWR -WOW	0.05 max	0.05 max	0.05 max
Insertion Loss	0.22 dB max	0.22 dB max	0.22 dB max
Insertion Loss -WOW	0.05 dB max	0.05 dB max	0.05 dB max
Peak Power	4Kw max	8Kw max	8Kw max
Average Power	100W min	100W min	100W min
Input	WR75	WR75	WR75

WR90 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque

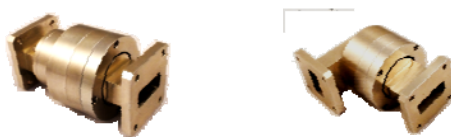


Part No.#	JSRJI090A	JSRJU090A
Type	I type	U type
Frequency Range	8.2 ~ 10 GHz	8.5 ~ 10 GHz
VSWR	1.25 max	1.35 max
VSWR -WOW	0.05 max	0.05 max
Insertion Loss	0.2 dB max	0.3 dB max
Insertion Loss -WOW	0.05 dB max	0.05 dB max
Peak Power	175 kW min @ 0 Psi	20 kW min
Average Power	500 W min	500 W min
Pressure	30 Psi min	20 Psi min
Input	WR90	WR90

Single Channel Rotary Joint

WR112 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JSRJI112A	JSRJL112A
Type	I type	L type
Frequency Range	8.5 ~ 9.6 GHz	8.5 ~ 9.6 GHz
VSWR	1.2 max	1.2 max
VSWR -WOW	0.05 max	0.05 max
Insertion Loss	0.2 dB max	0.2 dB max
Insertion Loss -WOW	0.05 dB max	0.05 dB max
Peak Power	160 kW min	160 kW min
Average Power	500W min	500W min
Pressure	10 Psi min	10 Psi min
Input	WR112	WR112

WR284 Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque

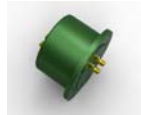


Part No.#	JSRJI284A	JSRJL284A	JSRJL284B2	JSRJU284B	JSRJI284B1
Type	I type	L type	L type	U type	I type
Frequency Range	2.7 ~ 3.2 GHz	2.6 ~ 3.0 GHz	2.851 ~2.861 GHz	2.851 ~2.861 GHz	2.851 ~2.861 GHz
VSWR	1.25 max	1.2 max	1.10 max	1.10 max	1.10 max
VSWR -WOW	0.05 max	0.03 max	—	—	—
Insertion Loss	0.2 dB max	0.2 dB max	0.2dB max	0.2dB max	0.2dB max
Insertion Loss -WOW	0.05 dB max	0.03 dB max	—	—	—
Peak Power	700 kW min @ 0 Psi	850 kW min	8MW	8MW	8MW
Average Power	1KW min	1KW min	15KW	15KW	15KW
Pressure	30 Psi min	10 Psi min	43.5 Psi min	43.5 Psi min	43.5 Psi min
Input	WR284	WR284	WR284	WR284	WR284
Material	Aluminum	Aluminum	Brass	Brass	Brass

Multi Channel Rotary Joint

Coaxial Two Channel Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JDRJC001A		JDRJ2C001A	
	Channel 1	Channel 2	Channel 1	Channel 2
Channel	Channel 1	Channel 2	Channel 1	Channel 2
Frequency Range	DC ~ 1200 MHz	800 ~ 1200 MHz	800 ~ 1200 MHz	800 ~ 1200 MHz
VSWR	1.3 max	1.3 max	1.3 max	1.3 max
VSWR -WOW	0.05 max	0.05 max	—	—
Insertion Loss	0.4 dB max	0.4 dB max	0.6 dB max	0.6 dB max
Insertion Loss -WOW	0.05 dB max	0.05 dB max	—	—
Peak Power	1 kW min	1 kW min	1 kW min	1 kW min
Average Power	40 W min	40 W min	40 W min	40 W min
Connector	SMA	SMA	Type N (Female)	Type N (Female)

WR90 Two Channel Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	JDRJ2W090A		JDRJ1W1C090A2	
	Channel 1	Channel 2	Channel 1	Channel 2
Channel	Channel 1	Channel 2	Channel 1	Channel 2
Frequency Range	8.5 ~ 10.0 GHz	8.5 ~ 10.0 GHz	9.25 ~ 9.55 GHz	9.25 ~ 9.55 GHz
VSWR	1.35 max	1.35 max	1.2 max	1.2 max
VSWR -WOW	0.05 max	0.05 max	—	—
Insertion Loss	0.3 dB max	0.4 dB max	0.4dB	0.5dB
Insertion Loss -WOW	0.05 dB max	0.05 dB max	0.05dB max	0.05dB max
Channel Isolation	80dB min		80dB min	
Peak Power	20 kW min	3 kW min	1Kw	1Kw
Average Power	500 W min	5 W min	30W	30W
Pressure	20 Psi min	20 Psi min	—	—
Input	WR90	WR90	SMA(F)	SMA(F)

Multi-Channel Rotary Joint

WR90 and Coaxial Three Channel Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	J3RJ1W2C090A			J3RJ2W1C090A		
Channel	Channel 1	Channel 2	Channel 3	Channel 1	Channel 2	Channel 3
Frequency Range	8.5 ~ 10.0 GHz	1.0 ~ 1.1 GHz	1.0 ~ 1.1 GHz	8.8 ~ 9.9 GHz	8.8 ~ 9.9 GHz	8.5 ~ 10 GHz
VSWR	1.35 max	1.4 max	1.4 max	1.20 max	1.30 max	1.20 max
VSWR-WOW	0.05 max	0.05 max	0.05 max	0.05 max	0.05 max	0.05 max
Insertion Loss	0.3 dB max	0.6 dB max	0.6 dB max	0.25 dB max	0.40 dB max	0.65 dB max
Insertion Loss-WOW	0.05 dB max	0.05 dB max	0.05 dB max	0.05 dB max	0.05 dB max	0.05 dB max
Channel Isolation	80 dB min			60 dB min		
Peak Power	20 kW min	500 W min	500 W min	50 kW min	30 kW min	100 W min
Average Power	500 W min	10 W min	10 W min	500 W min	30 W min	10 W min
Pressure	20 Psi min	-	-	20 Psi min	-	-
Input	WR90	SMA	SMA	WR90	WR90	SMA

Waveguide and Coaxial Three Channel Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	J3RJ2W1C011A		
Channel	Channel 1	Channel 2	Channel 3
Frequency Range	29 ~ 31 GHz	13.75 ~ 14.5 GHz	0.95 ~ 2.15 GHz
VSWR	1.35 max	1.2 max	1.5 max
Insertion Loss	0.80 dB max	0.30 dB max	0.5 dB max
Channel Isolation	50 dB min		
Peak Power	300 W max	500 W max	50W max
Average Power	20 W min	50 W min	5 W min
Input	WR28	WR75	SMA

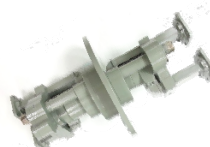
Multi-Channel Rotary Joint

WR90 and Coaxial Four Channel Rotary Joint

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	J4RJ2W2C090A			
Channel	Channel 1	Channel 2	Channel 3	Channel 4
Frequency Range	8.5 ~ 10.0 GHz	8.5 ~ 10.0 GHz	8.5 ~ 10.0 GHz	8.5 ~ 10.0 GHz
VSWR	1.35 max	1.35 max	1.5 max	1.5 max
VSWR-WOW	0.1 max	0.1 max	0.1 max	0.1 max
Insertion Loss	0.3 dB max	0.4 dB max	0.8 dB max	0.8 dB max
Insertion Loss-WOW	0.1 dB max	0.1 dB max	0.1 dB max	0.1 dB max
Channel Isolation	85 dB min			
Peak Power	20 kW min	20 kW min	20 W min	20 W min
Average Power	500 W min	500 W min	10 W min	10 W min
Pressure	20 Psi min	20 Psi min	—	--
Input	WR90	WR90	SMA	SMA



Part No.#	J4RJ2W2CN090A			
Channel	Channel 1	Channel 2	Channel 3	Channel 4
Frequency Range	1.02 ~ 1.10 GHz	1.02 ~ 1.10 GHz	8.50 ~ 10.5 GHz	8.50 ~ 10.5 GHz
VSWR	1.20 max	1.20 max	1.25 max	1.20 max
VSWR-WOW	0.05 max	0.05 max	0.05 max	0.05 max
Insertion Loss	0.30 dB max	0.50 dB max	0.45 dB max	0.30 dB max
Insertion Loss-WOW	0.10 dB max	0.10 dB max	0.05 dB max	0.05 dB max
Channel Isolation	65 dB min			
Peak Power	2.5 kW min	2.5 kW min	5kW min	20kW min
Average Power	100 W min	100 W min	300 W min	500 W min
Pressure	—	—	22 Psi min	22 Psi min
Input	N type (Female)	N type (Female)	WR90	WR90

Rotary Joint with Slip Ring

Four Channel Rotary Joint with 48 Channels Slip Ring

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	J4RJ2W2C090A1-S48			
Channel	Channel 1	Channel 2	Channel 3	Channel 4
Frequency Range	9.3 ~ 10.05 GHz	9.3 ~ 10.05 GHz	1030±10 MHz 1090±10 MHz	1030±10 MHz 1090±10 MHz
VSWR	1.40 max	1.40 max	1.40 max	1.40 max
VSWR-WOW	0.05 max	0.05 max	0.05 max	0.05 max
Insertion Loss	0.3 dB max	0.4 dB max	0.8 dB max	0.8 dB max
Insertion Loss-WOW	0.05 dB max	0.05 dB max	0.05 dB max	0.05 dB max
Channel Isolation	60dB min			
Peak Power	30 kW min	24 kW min	600 W min	600 W min
Average Power	1200 W min	300 W min	60 W min	60 W min
Input	WR90	WR90	TNC (Female)	TNC (Female)

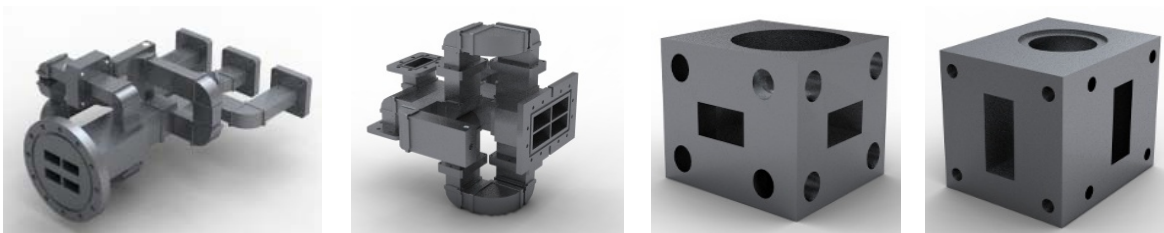
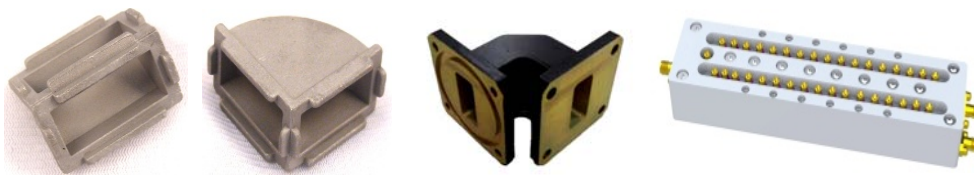
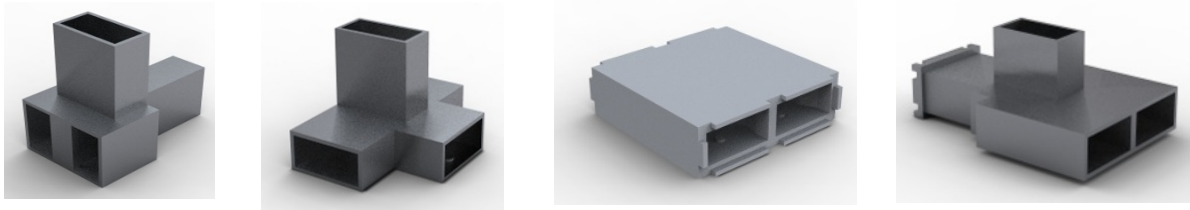
Three Channel Rotary Joint with 10 Channels Slip Ring

High Power, Low SWR, Low Loss, Low WoW, Low Torque



Part No.#	J3RJ1W2C187A1-S10		
Channel	Channel 1	Channel 2	Channel 3
Frequency Range	5.4 ~ 5.9 GHz	1.0 ~ 1.1 GHz	1.0 ~ 1.1 GHz
VSWR	1.2 max	1.30 max	1.30 max
VSWR-WOW	0.05 max	0.05 max	0.05 max
Insertion Loss	0.3 dB max	0.5 dB max	0.5 dB max
Insertion Loss-WOW	0.05 dB max	0.05 dB max	0.05 dB max
Channel Isolation	60dB min		
Peak Power	300 kW min	3 kW min	3 kW min
Average Power	300 W min	30 W min	30 W min
Input	WR187	N (Female)	N (Female)

Microwave Components

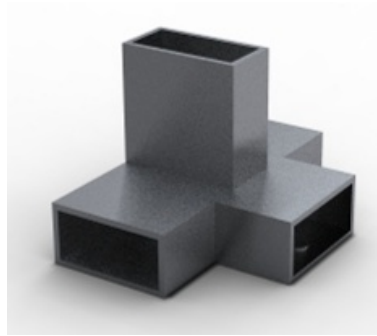


Waveguide Magic T

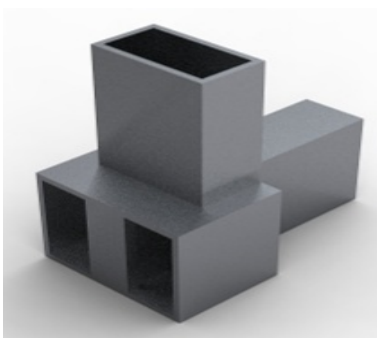


Part	WR28 2ways
Frequency Range	KA band
Bandwidth	1 GHz @ KA band
VSWR	1.2 max
Insertion Loss	0.2 dB max
Amplitude Unbalance	± 0.2 dB
Phase Unbalance	$\pm 3^\circ$
Waveguide	WR28

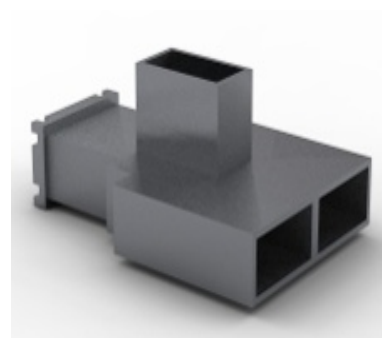
Conventional Magic T



Folded E-Plane Magic T

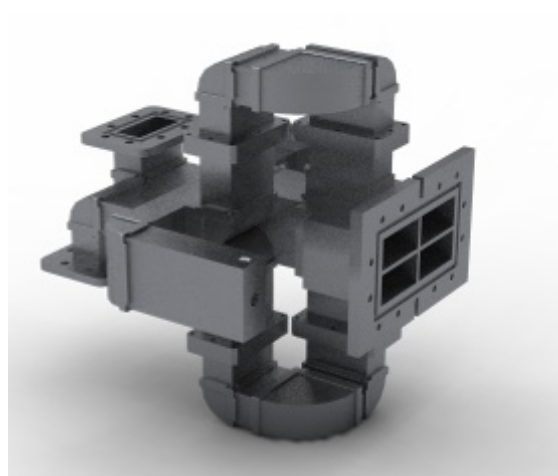
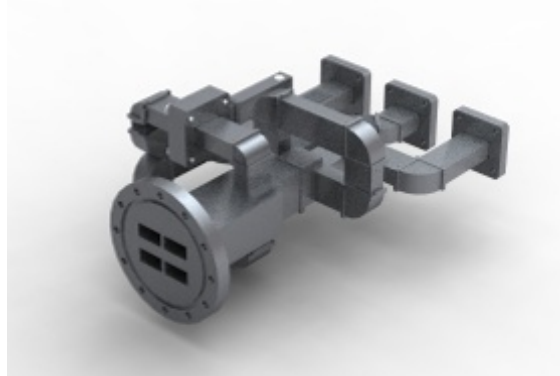


Folded H-Plane Magic T



JITAI can provide several kinds of low cost, wide band and low VSWR magic-T and couplers. Standard products are range from WR28 to WR 284. For more details on these products, please contact us directly.

Waveguide Monopulse Comparator



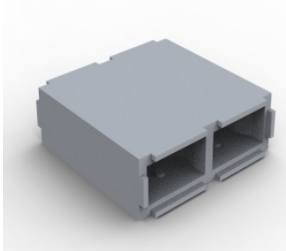
JITAI can build excellent monopulse comparators to fully meet customer's specific requirements. These products are optimally designed and precisely manufactured. For more details on these products, please contact us directly.

Waveguide Coupler

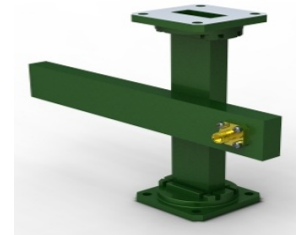


Part No.#	JLCO187SSA	JTW090BCOUP-30
Waveguide	WR187	WR90
Frequency Range	3.95GHz ~ 5.85GHz	8.5 ~ 10 GHz
Waveguide Flange	Cover or Choke	WR90
VSWR	Main ARM 1.05 Max	1.15 max
Coupling	50dB	30 ± 0.5 dB
Coupling Port Connector	SMA Female	WR90
Pressurization	30 PSIG Min	—

Sidewall Coupler



Crossguide Couplers



Broadwall Coupler



JITAI can provide several types of waveguide and coaxial couplers. The photos printed above are the three conventional waveguide couplers. The couplers are carefully designed and manufactured to have high directivity and wide bandwidth capability. Either high or low coupling value can be designed on customer's demand. For more details on these products, please contact us directly.

Combiner



Part	WR90 4ways Power Combiner	WR28 16ways Power Combiner
Frequency Range	9 ~10 GHz	KA band
Bandwidth	—	1 GHz @ KA band
Input Port VSWR	1.35 max	1.2 max
Output Port VSWR	1.4 max	1.4 max
Insertion Loss	0.4 dB max	0.7 dB max
Amplitude Unbalance	± 0.3 dB	± 0.4 dB
Phase Unbalance	± 5°	± 6°
Waveguide	WR90	WR28

Circulator

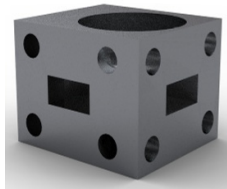


Part No.#	JHCIR028P3AI	JHCIR090P3A1	JHCR284P3A1	JHCR284P4A3
Frequency Range	36 ~ 36.1 GHz	9 ~ 10 GHz	2856 ± 10 MHz	2856 ± 5 MHz
Waveguide	WR28	WR90	WR284	WR284
VSWR	1.1 max	1.2 max	1.2 max	1.2 max
Insertion Loss	0.3 dB max	0.3 dB max	0.2 dB max	0.2 dB max
Isolation	25 dB min	20 dB min	25 dB min	20 dB min
Average Power	—	400 w min	5 kW	25 kW
Forward Pulse Power	600 w	—	3 MW/ 5μs	8 MW/ 10μs
Configuration	3 Ports	3 Ports	3 Ports	4 ports phase shift circulator

H-Plane Circulator



E-Plane Circulator



Circulator with Load



JITAI can provide a series of waveguide circulators from WR28 to WR 284.

Both H-plane and E-plane circulators are available.

These devices are designed to be wide bandwidth, low insertion loss and VSWR, high isolation. High power devices are also available on special demand.

In addition to the devices describe above, JITAI can also provide the other special types of high power circulators on customer's demand. For more details on these products, please contact us directly.

Isolator



Part No.#	JIS-080-012FM	JIS-015-030F	JIS-020-040F	JIS-079-085F
Frequency Range	8 ~ 12 GHz	1.5 ~ 3 GHz	2 ~ 4 GHz	7.9 ~ 8.5 GHz
VSWR	1.25 Max	1.4 max	1.35 max	1.2 max
Isolation	20 dB Min	16 dB min	18 dB min	25 dB min
Insertion Loss	0.6 dB Max	0.6 dB max	0.6 dB max	0.5 dB max
Connector	SMA Female (Input) SMA Male (Output)	SMA Female	SMA Female	SMA Female

Coaxial Isolator



JITAI can provide a series of waveguide/coaxial isolators from WR28 to WR 284. Both H-plane and E-plane isolators are available.

These devices are designed to be wide bandwidth, low insertion loss and VSWR, high isolation. High power devices are also available on special demand.

In addition to the devices describe above, JITAI can also provide the other special types of high power circulators/isolators on customer's demand. For more details on these products, please contact us directly.

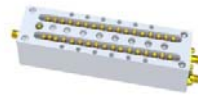
Load



Part No.#	JHLD028A1	JMLD28A1	JMLD090A1	JHLD284A1
Frequency Range	30 ~ 40 GHz	33 ~ 36 GHz	8.5 ~ 9.6 GHz	2856 ± 20 MHz
VSWR	1.2 max	1.15 max	1.15 max	1.2 max
Peak Power	1.5 kW	100 W	40 kW	5MW
Average Power	300 W	20W	40 w	6KW
Pressurization (Dry Nitrogen)	15 PSI	15 PSI	45 PSI	30 PSI
Waveguide	WR28	WR28	WR90	WR284

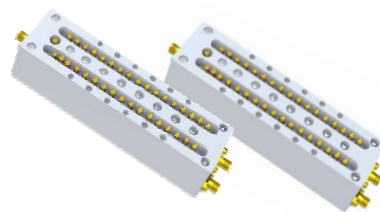
JITAI can provide a series of waveguide loads from WR28 to WR 284. These devices are designed to be wide bandwidth, low insertion loss and VSWR, high isolation. High power devices are also available on special demand. In addition to the devices describe above, JITAI can also provide the other special types of high power circulators/isolators on customer's demand. For more details on these products, please contact us directly.

Diplexer



Part No.#	JDPX4P7
Port 1	Common
Port 2	4,200MHz ~ 4,500MHz
Port 3	4,900MHz ~ 5,200MHz
Insertion Loss	1.25 dB Max
Pass Band Ripple	0.25 dB Max
Low Band Rejection	70 dB Min At 0-3,900MHz and 4,800MHz-10,000MHz
High Band Rejection	70 dB Min At 0-4,600MHz and 5,500MHz-10,000MHz
Connectors	SMA
VSWR	1.5:1 Max
Input Power	30W (CW)

Compline Diplexer



Waveguide to Coaxial Adapter

Waveguide Type	WR28	WR34	WR42	WR51	WR62
Connectors (Female)	2.9mm	2.9mm	SMA	SMA	SMA
Frequency (GHz)	26.6- 40.0	22.0- 33.0	18.0- 26.5	15.0- 22.0	12.4- 18.0
VSWR	< 1.3	< 1.25	< 1.25	< 1.25	< 1.25

Waveguide Type	WR75	WR90	WR112	WR137	WR187
Connectors (Female)	SMA	SMA	SMA	SMA	SMA
Frequency (GHz)	10.0- 15.0	8.2- 12.4	7.05- 10	5.85- 8.2	3.95- 5.85
VSWR	< 1.25	< 1.25	< 1.25	< 1.25	< 1.25

Waveguide Type	WR284
Connectors (Female)	SMA
Frequency (GHz)	2.6- 3.95
VSWR	<1.25



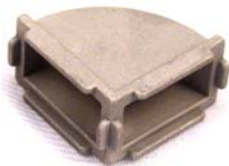
Waveguide Bends

Waveguide Type	WR 62	WR 75	WR 90
Frequency Range (GHz)	12.40 - 18.00 GHz	10.00 - 15.00 GHz	8.20 - 12.40 GHz
Angle	90° / 60° / 45° / 30°	90° / 45° / 35° / 30°	90° / 60° / 45° / 30°
Waveguide Type	WR 112	WR 137	WR 187
Frequency Range (GHz)	7.05 - 10.00 GHz	5.85 - 8.20 GHz	3.95 - 5.85 GHz
Angle	90° / 45° / 30°	90° / 45° / 30°	90° / 45° / 30°
Waveguide Type	WR 229	WR 284	
Frequency Range (GHz)	3.30 - 4.90 GHz	2.60 - 3.95 GHz	
Angle	90° / 45°	90° / 45° / 30°	

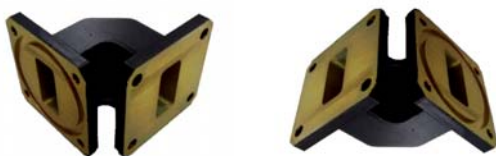
Waveguide E-Bend



Waveguide H-Bend



Bend Waveguide



Waveguide Type	WR 28	WR 42	WR 51	WR 62	WR 75
Frequency Range (GHz)	26.3-40.0	17.6-26.7	14.5-22.0	11.9-18.0	9.84-15.0
VSWR	1.1	1.1	1.1	1.1	1.1
Insertion Loss (dB) max	0.1	0.1	0.1	0.1	0.1
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu

Waveguide Type	WR 90	WR 112	WR 137	WR 187	WR 229
Frequency Range (GHz)	8.20-12.50	6.57-9.99	5.38-8.17	3.94-5.99	3.22-4.90
VSWR	1.1	1.1	1.1	1.1	1.1
Insertion Loss (dB) max	0.1	0.1	0.1	0.1	0.1
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu

Waveguide Type	WR 284	WR 650
Frequency Range (GHz)	2.60-3.95	1.12-1.7
VSWR	1.1	1.1
Insertion Loss (dB) max	0.1	0.1
Material	Al/Cu	Al

**WR650 Half-High
H-Plane Radius Bend Waveguide**



Straight / Flexing / Twist Waveguide

Waveguide Type	WR 28	WR 42	WR 51	WR 62	WR 75
Frequency Range (GHz)	26.3-40.0	17.6-26.7	14.5-22.0	11.9-18.0	9.84-15.0
VSWR	1.05	1.05	1.05	1.05	1.05
Insertion Loss (dB) max	0.1	0.1	0.1	0.1	0.1
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu

Waveguide Type	WR 90	WR 112	WR 137	WR 187	WR 229
Frequency Range (GHz)	8.20-12.50	6.57-9.99	5.38-8.17	3.94-5.99	3.22-4.90
VSWR	1.05	1.05	1.05	1.05	1.05
Insertion Loss (dB) max	0.1	0.1	0.1	0.1	0.1
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu

Waveguide Type	WR 284
Frequency Range (GHz)	2.60-3.95
VSWR	1.05
Insertion Loss (dB) max	0.1
Material	Al/Cu



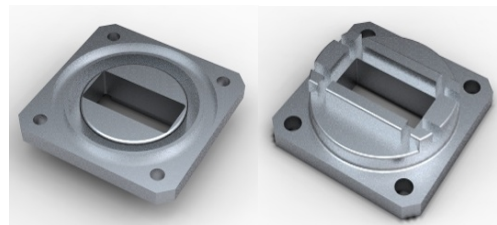
Flanges / Transition / Pressure Windows

Waveguide Type	WR 28	WR 42	WR 51	WR 62
EIA (ID)	.280x.140	.420x.170	.510x.255	.622x.311
Flange Type	COVER SLEEVE	COVER SLEEVE	COVER SLEEVE	COVER SLEEVE
	COVER BUTT	COVER BUTT	COVER BUTT	COVER BUTT
	CHOKE BUTT	CHOKE BUTT	CHOKE BUTT	CHOKE BUTT
Waveguide Type	WR 75	WR 90	WR 112	WR 137
EIA (ID)	.750x.375	.900x.400	1.122x.497	1.372x.622
Flange Type	COVER SLEEVE	COVER SLEEVE	COVER SLEEVE	COVER SLEEVE
	COVER BUTT	COVER BUTT	COVER BUTT	COVER BUTT
	CHOKE BUTT	CHOKE BUTT	CHOKE BUTT	CHOKE BUTT
Waveguide Type	WR 187	WR 284		
EIA (ID)	1.872x.872	2.840x1.340		
Flange Type	COVER SLEEVE	COVER SLEEVE		
	COVER BUTT	COVER BUTT		
	CHOKE BUTT	CHOKE BUTT		

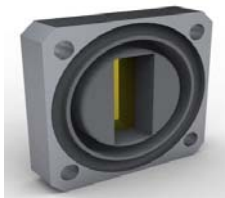
Transitions



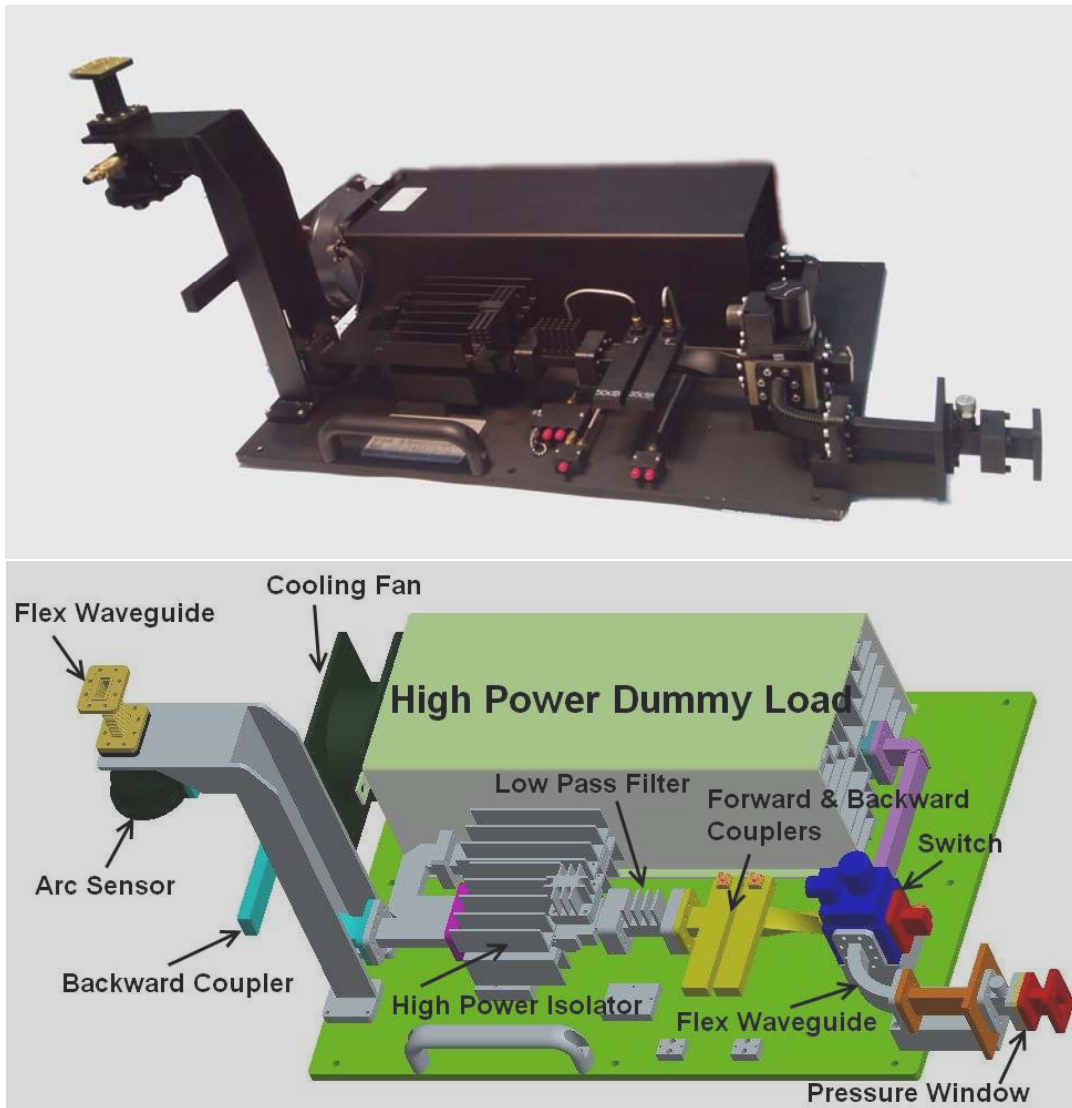
Flanges



Pressure Window



High Power Waveguide Subsystem



This subsystem consists of flex waveguides, backward and forward couplers, differential phase isolator, low pass (harmonic rejection) filter, waveguide switch, high power dummy load and the other components.

The specifications of this subsystem are listed on the next page.

High Power Waveguide Subsystem



Electrical Specifications

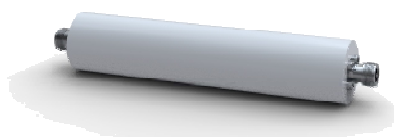
Part No.#	IOWA-090-001C
Waveguide	WR90
Center Frequency	X band
Bandwidth	3%
VSWR	1.15 max
Insertion Loss	0.8 dB max
Isolation	20dB min
Forward Coupling/Directivity	50dB/ 25dB
Backward Coupling/Directivity	35dB/ 25dB
Power Handling	2.5KW CW
Pressure	15PSI min
Switch Control Input Power	+28VDC
Switch Time	60 ms max

Arc Sensor



Part No.#	JAS284B1
Min. Light Intensity	2 LUX
Detection Speed	2~6 μ sec
Retention Time	500 msec
Function	Test & Reset
E- Bend Frequency range	2.6 ~ 3.95 GHz
VSWR of E- Bend	1.06 max
Insertion Loss of E-Bend	0.05 dB max
Waveguide	WR284

High Power Tubular Low Pass Filters



Diameter: 4cm max

CW Input Power: 2000 W min

PN#	LPFH-020-030	LPFH-030-045	LPFH-045-067
Pass Band (MHz)	20 ~ 30	30 ~ 45	45 ~ 67
SWR	1.25 max	1.25 max	1.25 max
Insertion Loss (dB)	0.4 max	0.4 max	0.4 max
Attenuation(dB)	35dB min at 40MHz 50 dB min at 60-400MHz	35dB min at 60MHz 50 dB min at 90-400MHz	35dB min at 90MHz 50 dB min at 134-600MHz
Length (cm)	62 max	54 max	44 max

PN#	LPFH-067-100	LPFH-225-400	LPFH-150-225
Pass Band (MHz)	67 ~ 100	225 ~ 400	150 ~ 225
SWR	1.25 max	1.25 max	1.25 max
Insertion Loss (dB)	0.4 max	0.4 max	0.4 max
Attenuation(dB)	35dB min at 134MHz 50 dB min at 200-600MHz	35dB min at 450MHz 45 dB min at 675-1200MHz	40dB min at 300MHz 50 dB min at 450-900MHz
Length (cm)	38 max	33 max	39 max

PN#	LPFH-100-150	LPFH-100-500
Pass Band (MHz)	100 ~ 150	100 ~ 500
SWR	1.25 max	1.25 max
Insertion Loss (dB)	0.4 max	0.4 max
Attenuation(dB)	40dB min at 200MHz 50 dB min at 300-600MHz	35dB min at 800MHz 45 dB min at 1200-1800MHz
Length (cm)	33 max	25 max

Antennas

Blade Antenna



Broadband Dipole Antenna



Monopole Antenna



Type	Blade Antenna	Monopole Antenna	Broadband Dipole Antenna
Frequency Range	900 ~ 930MHz 420 ~ 450MHz 415 ~ 435MHz 350 ~ 380MHz	420 ~ 450MHz 450 ~ 470MHz	225 ~ 400 MHz
Gain	1.0 dBi Min	0 dBi Min	2dBi Typ.
VSWR	2.0:1 Max	2.0:1 Max	2.0:1 Max
Connector	TNC Female	TNC Female	N Female
Power	30W(CW) min	30W(CW) min	400W(CW) min
Low Wind Resistance	≥ 1 Mach	≥ 1 Mach	—
Temperature Range	-40°C ~ +80°C	-40°C ~ +80°C	-40°C ~ +80°C
Material of Fixing Base	Aluminum	Aluminum	Aluminum
Radiation Pattern	Omni-Directional	—	Omni-Directional
	Vertical Polarization	Vertical Polarization	Vertical Polarization

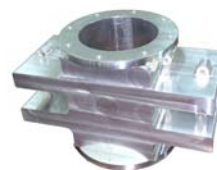
VAST products

WR75 KU OMT



Frequency Range	Vertical: 10.7 ~ 12.75 GHz Horizontal: 10.7 ~ 12.75 GHz
VSWR	1.3:1
V- and H- Ports Isolation	35 dB
Input	C120 (Circular Waveguide)
V- and H- Ports	WR75 Waveguide

Band Rejection Filter



Reject Center Frequency	3.735 / 3.745 / 3.755 GHz
Rejection	25 dB(Typ.) / 20 dB min
Bandwidth	10 MHz min
Pass Band Frequency	3.85 ~ 4.26 GHz
Pass Band Insertion Loss	0.1 dB max

Circular Polarization OMT transmitter



Frequency of Range	11.7 ~ 12.75 GHz
Left and Right Hand Polarization Ports Isolation	35 dB min
VSWR	1.25:1
Left and Right Hand Polarization Ports	WR75 waveguide
Antenna Port	C120 (circular waveguide)

OMT-TRF



Frequency Band	RX Port: 10.7 ~ 12.75 GHz TX port: 13.75 ~ 14.5 GHz
VSWR	1.20 max at both port
Isolation	40 dB min @RX Band 80 dB min @TX Band

VAST Transceiver Box



Include items inside	OMT / TRF / Twist / Adapter
----------------------	-----------------------------



JITAI Technology Co., LTD.

Your 1st Partner



No. 2, Gongjian South Rd., Qidu Dist.,
Keelung City, 206-47,
Taiwan, R.O.C.

TEL : 886-2-2451-7579 Fax : 886-2-2451-7582

e-mail: sales@jittc.com.tw

<http://www.jittc.com.tw>