

LoPim Product Catalog

Youth Electronics
Solutions for Connection



Youth Electronics

The Company

YOUTH ELECTRONICS

Youth Electronics focuses on optimizing customer's connectivity network on RF/Microwave, optical and power connection. We provides complete product portfolio for DAS, interconnect product for Microwave and Test systems.

Our company locates in East China. Our office in Ningbo focus on R&D, Sales and supporting function. Cable plant in Hangzhou and Assembly plant in Ningbo focus on manufacturing and quality.



Office: Ningbo, China

Assembly plant: Ningbo, China

Braiding cable & Corrugated cable plant: Hangzhou, China



Product Series

LoPim™ series – Low PIM Antenna, cable, jumper, connector and passive components

YLB™ series – Series of braiding LMR alternative cables and connectors

HiONE™ series – Optical & Power connectivity products

PremTest™ series – High precision RF/MW test cable assemblies and adaptors

Quality

Good design, powerful manufacturing, assembly and performance test capability, complete quality control system form Youth's core competitiveness. Our quality procedure is approved by ISO9001.

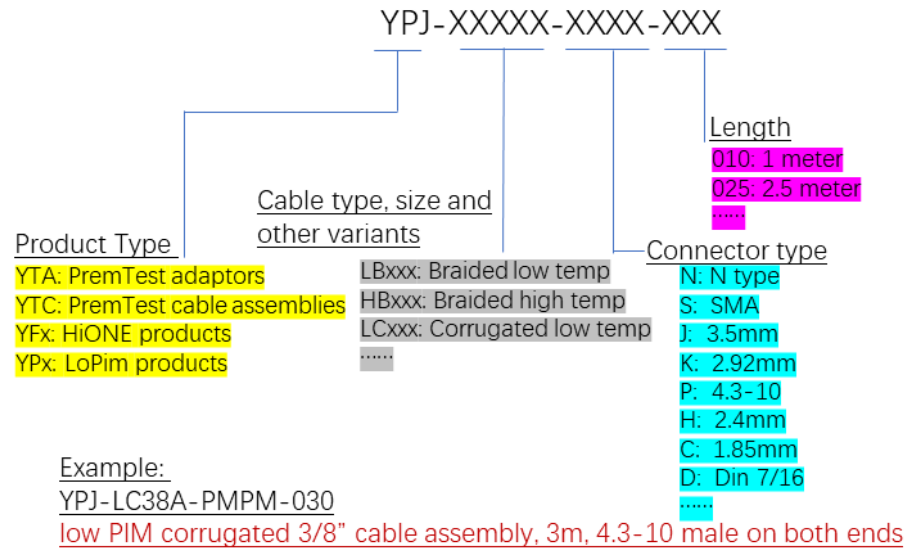
Recognize the social and economic importance of environmental protection and action has been taken to meet the requirements of the RoHS Directive.

Contents

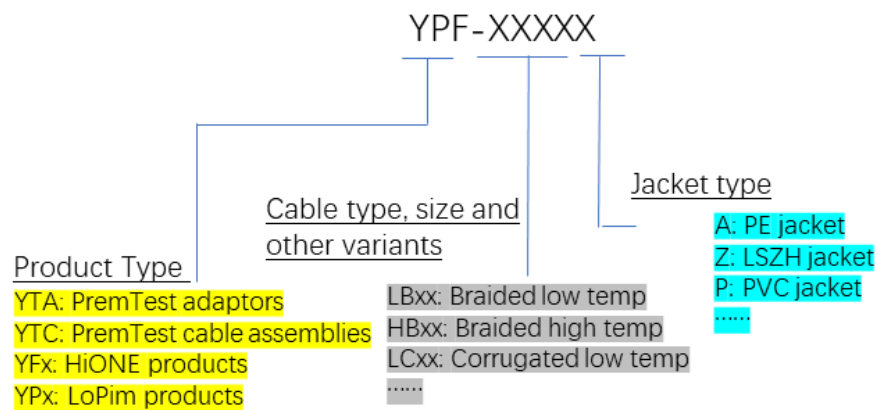
<u>LoPim™ Feeders and Jumpers Nomenclature-----</u>	<u>4</u>
<u>LoPim™ Corrugated Feeders -----</u>	<u>5</u>
<u>LoPim™ Corrugated Low Temperature Jumpers -----</u>	<u>6</u>
<u>LoPim™ Braided Low Temperature and High Temperature Jumpers-----</u>	<u>8</u>
<u>LoPim™ Connectors Nomenclature-----</u>	<u>10</u>
<u>LoPim™ Clamp type Connectors-----</u>	<u>11</u>
<u>LoPim™ Passive Components Nomenclature-----</u>	<u>12</u>
<u>LoPim™ Passive Components-----</u>	
<u>Indoor Antenna-----</u>	<u>13</u>
<u>Power Splitter-----</u>	<u>14</u>
<u>Directional Coupler-----</u>	<u>14</u>
<u>Hybrid Coupler-----</u>	<u>15</u>
<u>Attenuator-----</u>	<u>15</u>
<u>Terminal Load-----</u>	<u>16</u>
<u>LoPim™ Passive Components ordering guide-----</u>	<u>17</u>
<u>Service and customization-----</u>	<u>18</u>



LoPim Jumpers Part Number Nomenclature



LoPim Feeders Part Number Nomenclature



LoPim™ Corrugated Feeders

Application

- Antenna and Feeder system
- Indoor DAS
- Connection between RF/MW components

Performance of cable

Cable Part No.	YPF-LC78A	YPF-LC114A	YPF-LC158A
Construction			
Inner conductor	Copper Tube	Copper Tube	Helical Copper Tube
Dielectric	Foam PE	Foam PE	Foam PE
Outer conductor	Corrugated Coper	Corrugated Coper	Corrugated Coper
Jacket	PE	PE	PE
Electrical Characteristics			
Impedance(Ohm)	50		
Operation frequency(GHz)	5.2	3.7	2.7
Capacity(pF/m)	76	76	76
Velocity(%)	89%	89%	89%
Screening effectiveness(dB@1GHz)	120	120	120
3 rd Passive Intermodulation (dBc@2*43dBm)	<-160	<-160	<-160
Mechanical Characteristics			
Single bending radius(mm)	130	200	280
Multiple bending radius(mm)	250	380	500
Weight(g/m)	340	700	980
Outer diameter(mm)	27.5	38.8	49.8
Environmental Characteristics			
Operation temperature (°C)	-40~+85	-40~+85	-40~+85

Attenuation and Power rating

Parameter	Attenuation (typ. dB/100m)*							Power rating(KW @ amb. 40°C)						
	800	900	1800	2200	2700	3000	4000	800	900	1800	2200	2700	3000	4000
LC78A	3.45	3.62	5.36	6.01	6.79	7.20	8.78	2.8	2.6	1.8	1.6	1.2	1.1	0.9
LC114A	2.67	2.86	4.28	4.76	5.36	5.72	-	3.9	3.7	2.4	2.2	1.9	1.7	-
LC158A	2.19	2.35	3.58	4.06	4.65	-	-	5.3	5.0	3.3	2.9	2.4	-	-

*: Typical values. Guaranteed within 5%

LoPim™ Corrugated Low Temperature Jumpers

Application

- Antenna and Feeder system
- In cabinet system
- Indoor DAS
- Connection between RF/MW components



Performance of cable

Cable Part No.	LL14C	LL12C	LL38C
Construction			
Inner conductor	Copper Clad Aluminum	Copper Clad Aluminum	Copper Clad Aluminum
Dielectric	Foam PE	Foam PE	Foam PE
Outer conductor	Corrugated Coper	Corrugated Coper	Corrugated Coper
Jacket	PE	PE	PE
Electrical Characteristics			
Impedance(Ohm)	50		
Operation frequency(GHz)	6	6	6
Capacity(pF/m)	80	80	80
Velocity(%)	83%	83%	83%
Screening effectiveness(dB@1GHz)	120	120	120
3 rd Passive Intermodulation (dBc@2*43dBm)	<-162	<-162	<-162
Mechanical Characteristics			
Single bending radius(mm)	25	25	25
Multiple bending radius(mm)	45	50	45
Weight(g/m)	71	167	127
Outer diameter(mm)	7.7	13.4	10.8
Environmental Characteristics			
Operation temperature (°C)	-40~+85	-40~+85	-40~+85

LoPim™ Corrugated Low Temperature Jumpers

Attenuation and Power rating

Parameter	Attenuation (typ. dB/100m)							Power rating(KW @ amb. 40°C)						
	824	900	960	2200	3000	3800	6000	824	900	960	2200	3000	3800	6000
LL14C	17.6	18.4	19.1	30.1	35.7	40.9	53.3	0.6	0.5	0.5	0.33	0.28	0.23	0.18
LL12C	9.9	10.3	10.7	16.9	20.1	23.0	30.2	1.0	0.9	0.9	0.58	0.49	0.41	0.32
LL38C	12.0	12.6	13.1	20.5	24.4	27.9	36.2	0.6	0.6	0.6	0.37	0.30	0.27	0.20

Cable Assembly ordering guide*

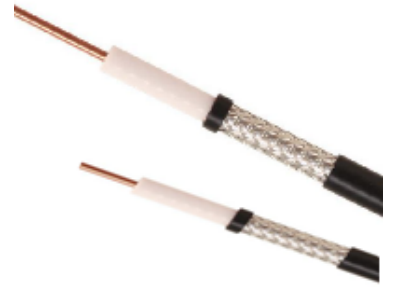
PN	Cable Type	Connector A	Connector B	Length (M)	Frequency (GHz)	3 rd PIM (dBc)	Stock
YPJ-LL14C-XXXM-020	LL14C	Nex10 M	Nex10 M	2.0	6	-162	Yes
YPJ-LL14C-XXXF-020	LL14C	Nex10 M	Nex10 F	2.0	6	-162	Yes
YPJ-LL14C-NMNM-020	LL14C	N M	N M	2.0	6	-160	Yes
YPJ-LL14C-NMNF-020	LL14C	N M	N F	2.0	6	-160	Yes
YPJ-LL14C-PMPM-020	LL14C	4.3-10 M	4.3-10 M	2.0	6	-163	Yes
YPJ-LL14C-PMPF-020	LL14C	4.3-10 M	4.3-10 F	2.0	6	-163	Yes
YPJ-LL14C-DMDM-020	LL14C	Din 7/16 M	Din 7/16 M	2.0	6	-162	Yes
YPJ-LL14C-DMDF-020	LL14C	Din 7/16 M	Din 7/16 F	2.0	6	-162	Yes
YPJ-LL12C-NMNM-020	LL12C	N M	N M	2.0	6	-160	Yes
YPJ-LL12C-NMNF-020	LL12C	N M	N F	2.0	6	-160	Yes
YPJ-LL12C-PMPM-020	LL12C	4.3-10 M	4.3-10 M	2.0	6	-163	Yes
YPJ-LL12C-PMPF-020	LL12C	4.3-10 M	4.3-10 F	2.0	6	-163	Yes
YPJ-LL12C-DMDM-020	LL12C	Din 7/16 M	Din 7/16 M	2.0	6	-162	Yes
YPJ-LL12C-DMDF-020	LL12C	Din 7/16 M	Din 7/16 F	2.0	6	-162	Yes
YPJ-LL38C-XXXM-020	LL38C	Nex10 M	Nex10 M	2.0	6	-162	No
YPJ-LL38C-NMNM-020	LL38C	N M	N M	2.0	6	-160	No
YPJ-LL38C-NMNF-020	LL38C	N M	N F	2.0	6	-160	No
YPJ-LL38C-PMPM-020	LL38C	4.3-10 M	4.3-10 M	2.0	6	-163	No
YPJ-LL38C-PMPF-020	LL38C	4.3-10 M	4.3-10 F	2.0	6	-163	No
YPJ-LL38C-DMDM-020	LL38C	Din 7/16 M	Din 7/16 M	2.0	6	-162	No

*: For combination of other different connector interface and different length please contact us.

LoPim™ Braided Low Temperature and High Temperature Jumpers

Application

- Antenna and Feeder system
- In cabinet system
- Indoor DAS
- Connection between RF/MW components



Performance of cable

Cable Part No.	LL14B	LL38B	LH14B
Construction			
Inner conductor	Copper Clad Aluminum	Copper Clad Aluminum	Copper Clad Aluminum
Dielectric	Foam PE	Foam PE	LD PTFE
Outer conductor	Metal-PE tape+Braid	Metal-PE tape+Braid	Metal-PE tape+Braid
Jacket	PE	PE	FEP
Electrical Characteristics			
Impedance(Ohm)	50		
Operation frequency(GHz)	6	6	6
Capacity(pF/m)	79	78	93
Velocity(%)	84%	85%	72%
Screening effectiveness(dB@1GHz)	90	90	90
3 rd Passive Intermodulation (dBc@2*43dBm)	<-160	<-160	<-160
Mechanical Characteristics			
Single bending radius(mm)	25	25	32
Multiple bending radius(mm)	45	50	64
Weight(g/m)	55	87	96
Outer diameter(mm)	6.9	10.1	6.8
Environmental Characteristics			
Operation temperature (°C)	-40~+85	-40~+85	-55~+150

LoPim™ Braided Low Temperature and High Temperature Jumpers
Attenuation and Power rating

Parameter	Attenuation (typ. dB/100m)							Power rating(KW @ amb. 40°C)						
	824	900	960	2200	3000	3800	6000	824	900	960	2200	3000	3800	6000
LL14B	19.7	20.7	21.4	33.3	39.4	44.8	57.8	0.4	0.4	0.4	0.25	0.21	0.19	0.14
LL38B	12.1	12.7	13.2	1.43	24.7	28.3	36.9	0.7	0.6	0.6	0.36	0.30	0.27	0.20
LH14B	21.9	22.9	23.7	37.3	44.4	50.7	66.0	0.7	0.7	0.6	0.40	0.34	0.30	0.23

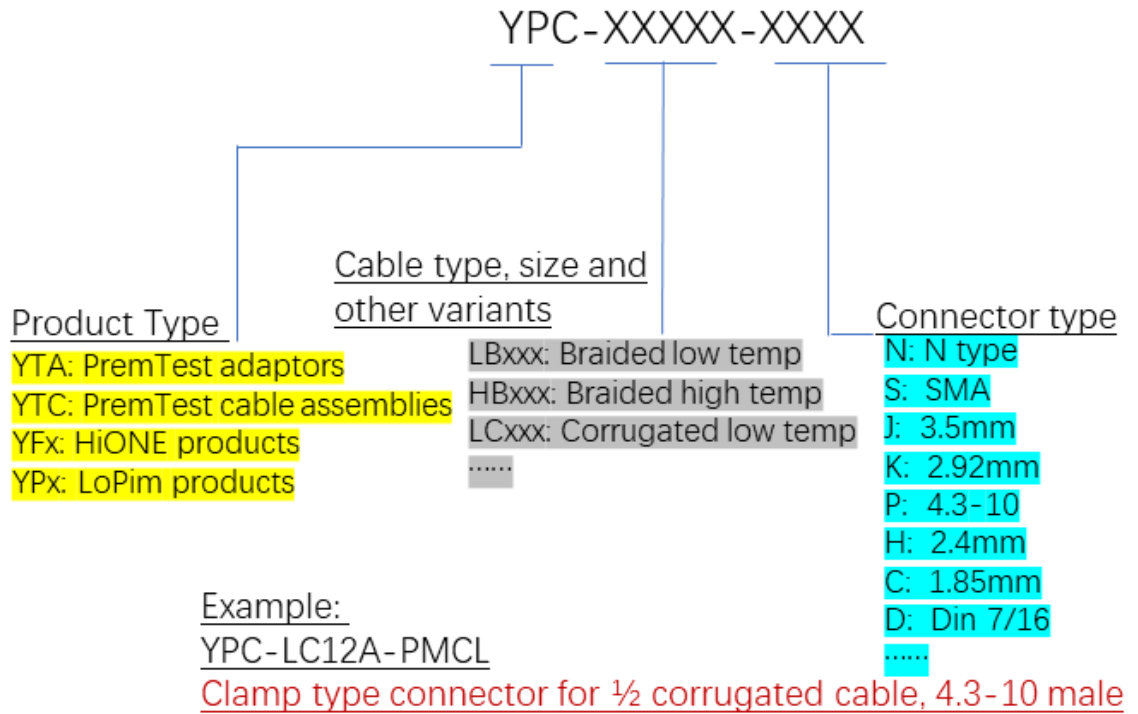
Cable Assembly ordering guide*

PN	Cable Type	Connector A	Connector B	Length (M)	Frequency (GHz)	3 rd PIM (dBc)	Stock
YPJ- LL14B-XXMXM-020	LL14B	Nex10 M	Nex10 M	2.0	6	-158	No
YPJ- LL14B -XXMF-020	LL14B	Nex10 M	Nex10 F	2.0	6	-158	No
YPJ- LL14B -NMNM-020	LL14B	N M	N M	2.0	6	-158	No
YPJ- LL14B -NMNF-020	LL14B	N M	N F	2.0	6	-158	No
YPJ- LL14B -PMPM-020	LL14B	4.3-10 M	4.3-10 M	2.0	6	-158	No
YPJ- LL14B -PMPF-020	LL14B	4.3-10 M	4.3-10 F	2.0	6	-158	No
YPJ- LP38B-XXMXM-020	LP38B	Nex10 M	Nex10 M	2.0	6	-158	No
YPJ- LP38B-NMNM-020	LP38B	N M	N M	2.0	6	-158	Yes
YPJ- LP38B-NMNF-020	LP38B	N M	N F	2.0	6	-158	Yes
YPJ- LP38B -PMPM-020	LP38B	4.3-10 M	4.3-10 M	2.0	6	-160	Yes
YPJ- LP38B -PMPF-020	LP38B	4.3-10 M	4.3-10 F	2.0	6	-160	Yes
YPJ- LP38B -DMDM-020	LP38B	Din 7/16 M	Din 7/16 M	2.0	6	-160	No
YPJ- LH14B -XXMXM-020	LH14B	Nex10 M	Nex10 M	2.0	6	-158	No
YPJ- LH14B -NMNM-020	LH14B	N M	N M	2.0	6	-158	No
YPJ- LH14B -NMNF-020	LH14B	N M	N F	2.0	6	-158	No
YPJ- LH14B -PMPM-020	LH14B	4.3-10 M	4.3-10 M	2.0	6	-158	No
YPJ- LH14B -PMPF-020	LH14B	4.3-10 M	4.3-10 F	2.0	6	-158	No

*: For combination of other different connector interface and different length please contact us.



LoPim Connectors Part Number Nomenclature



LoPim™ Clamp Type Connectors

Application

- Antenna and Feeder system
- In cabinet system
- Indoor DAS
- RF connection for MW link



Construction & Characteristics	Description
Male contact	Brass, tri-metal plating
Female contact	Bronze or Beryllium copper, silver plating
Body and Outer Contacts	Brass, tri-metal plating
Clamping component	Brass, tri-metal or nickel plating
Insulator	PTFE per ASTM-D1457
Gasket	Silicone rubber (weatherproof), ZZ-R-75
Package	Single
Impedance(Ohm)	50
Mating Life	500
Frequency range(GHz)	DC-6GHz
3rd order Inter-Modulation Distortion	-165 dBc typical (+43 dBm carriers)
VSWR	<1.25
Operation temperature (°C)	-55~+150

Product ordering guide

Interface Cable Type	Din 7/16 M	Din 7/16 F	Din 7/16 MR	4.3-10 M	4.3-10 F	Type N M	Type N F	Type N MR
7/8" Annual C**	S	S	NA	S	S	A	A	NA
1/2" Annual C	S	S	A	S	S	S	S	A
1/2" Helical C***	S	S	A	S	S	S	S	A
3/8" Helical C	A	A	NA	A	A	A	A	A
3/8" Braiding	A	A	A	A	A	A	A	A
1/4" Helical C	NA	NA	NA	A	A	A	A	A
1/4" Braiding	NA	NA	NA	A	A	S	S	A

Note:

NA: Not available

A: Available. No stock

S: In stock

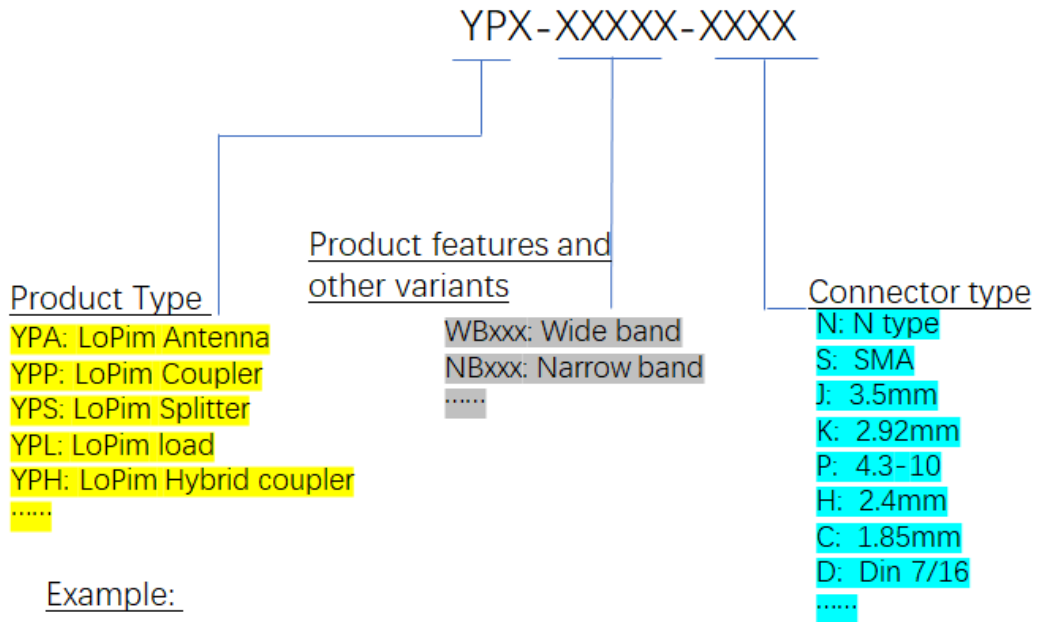
***:** For other different connector interface and different cable types please contact us.

****:** Annual C – Annual Corrugated Cable

*****:** Helical C – Helical Corrugated Cable



LoPim Passive Components Part Number Nomenclature



Example:

YPS-WB02A-NFNF

Low Pim wide band 2 ways power splitter, N female input, N female output

Indoor Antenna**Features**

- Wide band up to 3800MHz
- High Gain
- Low PIM
- MIMO Antenna ready



Part No.	YPA-WBOSA-PF01			YPA-WBOMA-PFPF		
Description	Wide band single polarization Omni-Directional Antenna			Wide band Omni-Directional MIMO Antenna		
Electrical Characteristics						
Frequency Range(MHz)	698-960	1710~ 2700	3300~ 3800	698-960	1710~ 2700	3300~ 3800
Gain(dBi)	1.5	4	4	4	5	6
VSWR	≤1.7	≤1.5	≤1.5	≤2.0	≤1.8	≤1.8
Polarization	Vertical			Vertical, Horizontal		
Horizontal beam width(°)	360°			360°		
Vertical beam width(°)	85	55	28	80	50	40
PIM3(dBc @2×33dBm)	≤-150			≤-150		
Power(W)	50			50		
Mechanical & Environmental Characteristics						
Connector Interface	4.3-10 Female			2 x 4.3-10 Female		
Operation temperature (°C)	-30~70			-30~70		
RoHS	Compliant			Compliant		

Part No.	YPA-WBDSA-PF01			YPA-WBDMA-PFPF		
Description	Wide band Panel Indoor Antenna			Wide band Panel Indoor MIMO Antenna		
Electrical Characteristics						
Frequency Range(MHz)	698-960	1710~ 2700	3300~ 3800	698-960	1710~ 2700	3300~ 3800
Gain(dBi)	6	8	8	7	7	6.5
VSWR	≤1.8	≤1.8	≤1.8	≤1.8	≤1.8	≤1.8
Polarization	Vertical			±45°		
Horizontal beam width(°)	90	75	60	85	70	60
Vertical beam width(°)	65	60	45	70	65	60
Front-Back Ratio (dB)	≥8	≥15	≥15	≥10	≥15	≥10
PIM3(dBc @2×33dBm)	≤-150			≤-150		
Power(W)	50			50		
Mechanical & Environmental Characteristics						
Connector Interface	4.3-10 Female			2 x 4.3-10 Female		
Operation temperature (°C)	-30~70			-30~70		
RoHS	Compliant			Compliant		

Power Splitter**Features**

- Wide band up to 3800MHz
- Low PIM
- Excellent VSWR
- High power



Part No.	YPS-WB2WA-PF03	YPS-WB3WA-PF04	YPS-WB4WA-PF05
Description	Wide band power splitter 2 ways	Wide band power splitter 3 ways	Wide band power splitter 4 ways
Electrical Characteristics			
Frequency Range(MHz)	698-3800	698-3800	698-3800
VSWR	≤1.25	≤1.25	≤1.25
Insertion loss(dB)	≤0.3dB	≤0.3dB	≤0.3dB
Split loss(dB)	3.0	4.8	6.0
Band ripple(dB)	≤0.5	≤0.5	≤0.5
PIM3(dBc @2×43dBm)	≤-150	≤-150	≤-150
Power(W)	200	200	200
Mechanical & Environmental Characteristics			
Connector Interface	4.3-10 Female	4.3-10 Female	4.3-10 Female
Operation temperature (℃)	-30~70	-30~70	-30~70
RoHS	Compliant	Compliant	Compliant

Directional Coupler**Features**

- Wide band up to 3800MHz
- Low PIM
- Excellent VSWR
- High power



Part No.	YPP-WBxxA-PF03						
Description	Wide band directional coupler						
Electrical Characteristics							
Frequency Range(MHz)	698-3800						
VSWR	≤1.2						
Coupling Value (dB)	6	8	10	15	20	25	30
Insertion loss(dB)	≤1.8dB	≤1.5dB	≤1.0dB	≤0.5dB	≤0.4dB	≤0.3dB	≤0.3dB
PIM3(dBc @2×43dBm)	≤-150						
Power(W)	200						
Mechanical & Environmental Characteristics							
Connector Interface	4.3-10 Female						
Operation temperature (℃)	-30~70						
RoHS	Compliant						

Hybrid Coupler

Features

- Wide band up to 3800MHz
- Low PIM
- Excellent VSWR
- High power

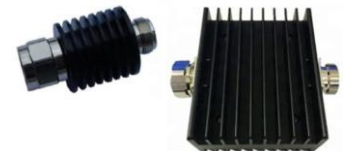


Part No.	YPH-WBxxA-xx04					
Description	Wide band Hybrid coupler					
Electrical Characteristics						
Frequency Range(MHz)	698-3800					
VSWR	≤1.2					
Coupling Value (dB)	3.1					
Isolation(dB)	>23					
PIM3(dBc @2×43dBm)	≤-150					
Power(W)	200					
Mechanical & Environmental Characteristics						
Connector Interface	Din 7/16 Female					
Operation temperature (°C)	-30~70					
RoHS	Compliant					

Attenuator

Features

- Wide band up to 3800MHz
- High Power
- Excellent VSWR



Part No.	YPL-WBxxA-XX02					
Description	Wide band Attenuator					
Electrical Characteristics						
Frequency Range(MHz)	698-3800					
VSWR	≤1.2					
Attenuation value (dB)	3	6	10	15	20	100
Power(W)	25	25	25	25	25	25
Mechanical & Environmental Characteristics						
Connector Interface	N Male to Female, Din 716 Male to Female, 4.3-10 Male to Female					
Operation temperature (°C)	-30~70					
RoHS	Compliant					

Terminal Load**Features**

- Wide band up to 3800MHz
- Low PIM
- Excellent VSWR



Part No.	YPL-WBxxx-XX01						
Description	Wide band terminal load						
Electrical Characteristics							
Frequency Range(MHz)	698-3800						
VSWR	≤1.2						
Average power (W)	2	5	10	20	30	50	100
PIM3(dBc @2×43dBm)	≤-150						
Mechanical & Environmental Characteristics							
Connector Interface	N Female, N Male, Din 716 Female, Din 7/16 Male						
Operation temperature (°C)	-30~70						
RoHS	Compliant						

LoPim™ Passive Components ordering guide
Product ordering guide

PN	Product Type	Connector Interface	Connector Qty	Frequency Range(MHz)	3 rd PIM (dBc)	Stock
YPA-WBOSA-PF01	Antenna	4.3-10 F	1	698-3800	-150	Yes
YPA-WBOMA-PFPF	Antenna	4.3-10 F	2	698-3800	-150	No
YPA-WBDSA-PF01	Antenna	4.3-10 F	1	698-3800	-150	Yes
YPA-WBDMA-PFPF	Antenna	4.3-10 F	2	698-3800	-150	No
YPS-WB2WA-PF03	Power Splitter	4.3-10 F	3	698-3800	-150	Yes
YPS-WB3WA-PF04	Power Splitter	4.3-10 F	4	698-3800	-150	Yes
YPS-WB3WA-PF05	Power Splitter	4.3-10 F	5	698-3800	-150	Yes
YPS-WB3WA-NF03	Power Splitter	N F	3	698-3800	-150	Yes
YPS-WB3WA-NF04	Power Splitter	N F	4	698-3800	-150	Yes
YPS-WB3WA-NF05	Power Splitter	N F	5	698-3800	-150	Yes
YPP-WBxxA-PF03	Directional Coupler	4.3-10 F	3	698-3800	-150	Yes
YPP-WBxxA-NF03	Directional Coupler	N F	3	698-3800	-150	Yes
YPP-WBxxA-DF03	Directional Coupler	Din 7/16 F	3	698-3800	-150	No
YPH-WB03A-PF04	Hybrid Coupler	4.3-10 F	4	698-3800	-150	No
YPH-WB03A-NF04	Hybrid Coupler	N F	4	698-3800	-150	No
YPH-WB03A-DF04	Hybrid Coupler	Din 7/16 F	4	698-3800	-150	No
YPL-WBxxA-DMDF	Attenuator	Din 7/16 M to F	2	698-3800	NA	No
YPL-WBxxA-NMNF	Attenuator	N M to F	2	698-3800	NA	No
YPL-WBxxA-PMPF	Attenuator	4.3-10 M to F	2	698-3800	NA	No
YPL-WBxxx-NF01	Terminal load	N F	1	698-3800	-150	No
YPL-WBxxx-NM01	Terminal load	N M	1	698-3800	-150	No
YPL-WBxxx-DF01	Terminal load	Din 7/16 F	1	698-3800	-150	No
YPL-WBxxx-DM01	Terminal load	Din 7/16 M	1	698-3800	-150	No
YPL-WBxxx-PF01	Terminal load	4.3-10 F	1	698-3800	-150	No
YPL-WBxxx-PM01	Terminal load	4.3-10 M	1	698-3800	-150	No

*: For combination of other different connector interface and other parameters please contact us.



Service on line and offline

➤ Test solution proposal

Our expert team on test are ready to propose complete test solution for actual, precise test result for any specific test requirement, including test scheme, test method, test standard based, test equipment, etc.

➤ Test report

We could do specific test for DUT based on specific test requirement. Complete test report would be shared under the responsibility of accuracy and validity.

Customization

➤ We are well prepared to provide any customization to help our customer on specific project.

Normally response time 3 days for product design and data sheet; 3 weeks for sample and test result.

Anything we would like to get more information regarding test, please visit our website or contact us through

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