

Product Selection Guide

October 2014

Amplifiers
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SMA Connectors & Cables
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wavelex 

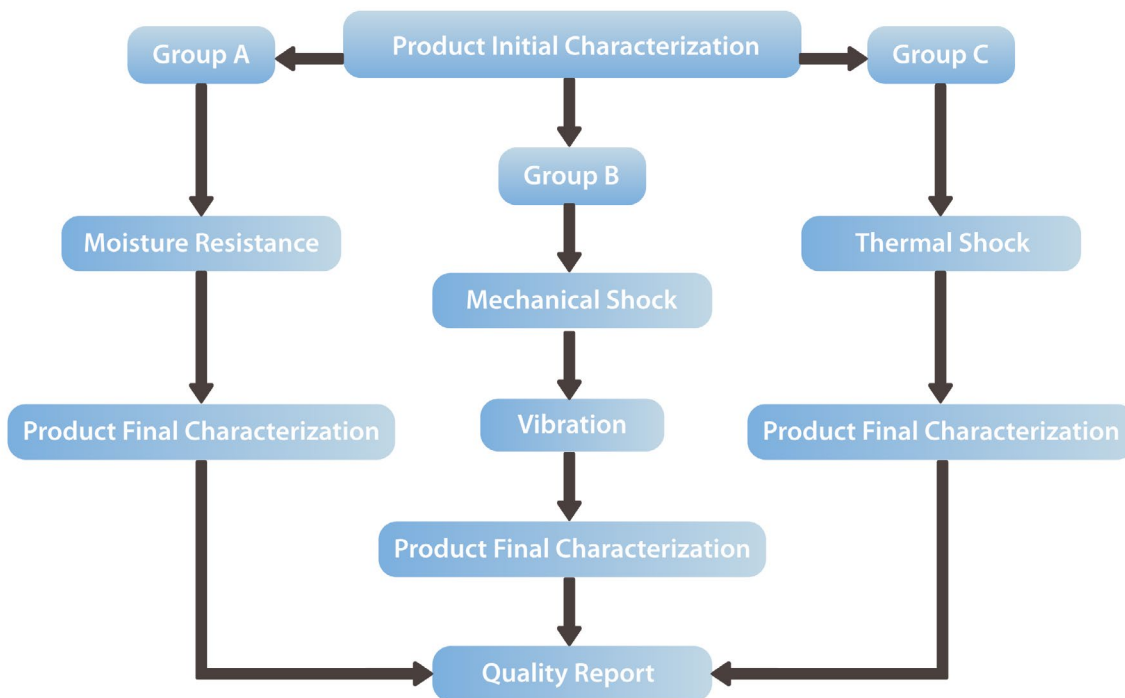
Wavelex, powered by WanTcom technology, provides RF, IF and microwave signal processing components for the RF and Microwave industry. By leveraging its core competencies in manufacturing GaAs, passive, silicon and other technologies, as well as its nearly 15-year WanTcom history, Wavelex is able to supply high quality products for test and measurement, wireless infrastructure, medical, and military applications. Wavelex products are distributed worldwide exclusively by Richardson RFPD. For more information, visit wavelex.com and richardsonrfpd.com.

Wavelex Quality

Wavelex ensures that quality is designed-in for all our products, from design to materials, development, testing, production and documentation. Our devices are built on MIL-compliant processes and thoroughly tested, including electrical and environmental performance tests.

We are committed to providing quality products that meet our stated specifications and exceed customer expectations.

Datasheets and S-parameters are available. Please email us at wavelex@richardsonrfpd.com.



Wavelex Products

Switches

Model No.	Frequency (Min.) (MHz)	Frequency (Max.) (MHz)	Insertion Loss (dB)	Isolation (dB)	RF CW Handling (W)	VSWR (Typ.)	Package
SMA Connectorized							
WSW0127A	100	2700	0.5	18	10.0	1.25:1	1.1" x 1.0"
WSW10180A	1000	20000	1.5	35	1.0	1.5:1	0.7" x 0.7"

Amplifiers: 1 to 1400 MHz PA

Model No.	Frequency (MHz)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	P1dB (Typ.) (dBm)	IP3 (Typ.) (dBm)	DC Idd (Typ.) (mA)	DC Power (V)	Package
SMA Connectorized									
WPA0001B	1 - 150	17.0	+/- 0.2	1.5:1/2:1	+29	+43	220	12.0 - 16.0	IP-3
WPA0006A	20 - 600	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-3
WPA0001A	30 - 90	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-3
WPA0101A	88 - 110	17.0	+/- 0.1	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-3
WPA0102A	135 - 175	17.0	+/- 0.1	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-3
WPA0214A	175 - 1400	13.5	+/- 0.5	1.8:1/2:1	+29	+43	220	12.0 - 16.0	IP-3
WPA0305A	380 - 530	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-3
WPA0409A	470 - 960	14.0	+/- 0.5	1.8:1/2:1	+29	+43	220	12.0 - 16.0	IP-3
N Connectorized									
WPA0001P	1 - 150	17.0	+/- 0.2	1.5:1/2:1	+29	+43	220	12.0 - 16.0	IP-2
WPA0006N	20 - 600	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-2
WPA0001N	30 - 90	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-2
WPA0101N	88 - 110	17.0	+/- 0.1	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-2
WPA0102N	135 - 175	17.0	+/- 0.1	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-2
WPA0214N	175 - 1400	13.5	+/- 0.5	1.8:1/2:1	+29	+43	220	12.0 - 16.0	IP-2
WPA0305N	380 - 530	17.0	+/- 0.2	1.5:1/2:1	+30	+43	220	12.0 - 16.0	IP-2
WPA0409N	470 - 960	14.0	+/- 0.5	1.8:1/2:1	+29	+43	220	12.0 - 16.0	IP-2

Amplifiers: 1 to 2700 MHz LNA

Model No.	Frequency (MHz)	NF (Typ.) (dB)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	P1dB (Typ.) (dBm)	IP3 (Typ.) (dBm)	DC Idd (Typ.) (mA)	DC Power (V)	Package
SMA Connectorized										
WLA0005B	1 - 500	1.0/1.4	20.0	+/- 0.5	1.5:1/1.8:1	+10	+20	25	8.0 - 16.0	IP-3
WLA0005A	20 - 500	1.0/1.4	20.0	+/- 1.0	1.5:1/1.8:1	+10	+20	25	8.0 - 16.0	IP-3
WLA0010A	20 - 1000	1.0/1.6	20.0	+/- 1.0	1.35:1/1.8:1	+10	+25	25	8.0 - 16.0	IP-3
WLA0110A	100 - 1000	0.9/1.3	19.0	+/- 1.0	1.35:1/1.5:1	+10	+22	25	8.0 - 16.0	IP-3
WLA0116A	100 - 1600	1.0/1.4	19.0	+/- 1.5	1.5:1/1.8:1	+10	+22	25	8.0 - 16.0	IP-3
WLA0210A	200 - 1000	0.7/1.0	20.0	+/- 1.0	1.35:1/1.5:1	+17	+33	65	8.0 - 16.0	IP-3
WLA0813A	800 - 1300	1.0/1.4	17.0	+/- 1.5	1.35:1/1.5:1	+10	+25	25	8.0 - 16.0	IP-3
WLA1722A	1700 - 2200	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+13	+27	25	8.0 - 16.0	IP-3
WLA1727A	1700 - 2700	1.0/1.4	15.0	+/- 1.0	1.35:1/1.5:1	+13	+27	25	8.0 - 16.0	IP-3
WLA2227A	2200 - 2700	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+15	+27	25	8.0 - 16.0	IP-3
N Connectorized										
WLA0005P	1 - 500	1.0/1.4	20.0	+/- 0.5	1.5:1/1.8:1	+10	+20	25	8.0 - 16.0	IP-2
WLA0005N	20 - 500	1.0/1.4	20.0	+/- 1.0	1.5:1/1.8:1	+10	+20	25	8.0 - 16.0	IP-2
WLA0010N	20 - 1000	1.0/1.6	20.0	+/- 1.0	1.35:1/1.8:1	+10	+25	25	8.0 - 16.0	IP-2
WLA0110N	100 - 1000	0.9/1.3	19.0	+/- 1.0	1.35:1/1.5:1	+10	+22	25	8.0 - 16.0	IP-2
WLA0116N	100 - 1600	1.0/1.4	19.0	+/- 1.5	1.5:1/1.8:1	+10	+22	25	8.0 - 16.0	IP-2
WLA0210N	200 - 1000	0.7/1.0	20.0	+/- 1.0	1.35:1/1.5:1	+17	+33	65	8.0 - 16.0	IP-2
WLA0813N	800 - 1300	1.0/1.4	17.0	+/- 1.5	1.35:1/1.5:1	+10	+25	25	8.0 - 16.0	IP-2
WLA1722N	1700 - 2200	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+13	+27	25	8.0 - 16.0	IP-2
WLA1727N	1700 - 2700	1.0/1.4	15.0	+/- 1.0	1.35:1/1.5:1	+13	+27	25	8.0 - 16.0	IP-2
WLA2227N	2200 - 2700	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+15	+27	25	8.0 - 16.0	IP-2

Amplifiers: 17 to 25W PA

Model No.	Frequency (MHz)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	Psat (Typ.) (W)	DC PAE (Typ.) (%)	DC Idd (Max.) (A)	DC Power (V)	Package
SMA Connectorized									
WPA08-35B	820 - 890	34.5	+/-0.3	1.2:1/1.4:1	25	55	2.5	26.0 - 30.0	WP-1M
WPA08-53A	820 - 890	53.5	+/-0.3	1.45:1/1.65:1	25	51	2.5	26.0 - 30.0	WP-1M
WPA0810A	820 - 960	53	+/-0.5	1.45:1/1.65:1	24	50	2.5	26.0 - 30.0	WP-1M
WPA0810C	820 - 960	46	+/-0.5	1.22:1/1.45:1	50	45	5.5	26.0 - 30.0	WP-1M
WPA09-35B	925 - 960	35	+/-0.25	1.22:1/1.5:1	24	55	2	26.0 - 30.0	WP-1M
WPA09-53A	925 - 960	53	+/-0.3	1.35:1/1.55:1	24	50	2	26.0 - 30.0	WP-1M
WPA18-45A	1805 - 1880	45	+/-0.5	1.27:1/1.5:1	17	44	2	26.0 - 30.0	WP-1M
WPA19-43A	1930 - 1990	43	+/-0.4	1.27:1/1.5:1	17	45	2	26.0 - 30.0	WP-1M
WPA21-41A	2110 - 2170	41.5	+/-0.5	1.22:1/1.5:1	17	41	2	26.0 - 30.0	WP-1M

Amplifiers: GPS LNA

Model No.	Frequency (MHz)	NF (Typ.) (dB)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	P1dB (Typ.) (dBm)	IP3 (Typ.) (dBm)	DC Idd (Typ.) (mA)	DC Power (V)	Package
SMA Connectorized										
WLA1116A	1100 - 1650	0.50/0.80	32.0	+/- 1.0	1.35:1/1.5:1	+7	+17	20	8.0 - 16.0	IP-3
WLA1216A	1200 - 1600	0.90/1.2	17.0	+/-0.2	1.35:1/1.6:1	+15	+29	35	8.0 - 16.0	IP-3
N Connectorized										
WLA1116N	1100 - 1650	0.50/0.80	32.0	+/- 1.0	1.35:1/1.5:1	+7	+17	20	8.0 - 16.0	IP-2
WLA1216N	1200 - 1600	0.90/1.2	17.0	+/-0.2	1.35:1/1.6:1	+15	+29	35	8.0 - 16.0	IP-2

Amplifiers: LTE LNA

Model No.	Frequency (MHz)	NF (Typ.) (dB)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	P1dB (Typ.) (dBm)	IP3 (Typ.) (dBm)	DC Idd (Typ.) (mA)	DC Power (V)	Package
SMA Connectorized										
WLA0527A	500 - 2700	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+10	+20	20	8.0 - 16.0	IP-3
WLA0627A	600 - 2700	1.0/1.4	30.0	+/- 1.5	1.35:1/1.5:1	+12	+25	50	8.0 - 16.0	IP-3
N Connectorized										
WLA0527N	500 - 2700	1.0/1.4	15.0	+/- 0.5	1.35:1/1.5:1	+10	+20	20	8.0 - 16.0	IP-2
WLA0627N	600 - 2700	1.0/1.4	30.0	+/- 1.5	1.35:1/1.5:1	+12	+25	50	8.0 - 16.0	IP-2

Amplifiers: L- and S-Band LNA

Model No.	Frequency (MHz)	NF (Typ.) (dB)	Gain (Typ.) (dB)	Gain Flatness (Typ.) (dB)	VSWR (Typ./Max.)	P1dB (Typ.) (dBm)	IP3 (Typ.) (dBm)	DC Idd (Typ.) (mA)	DC Power (V)	Package
SMA Connectorized										
WLA0030A	20 - 3000	1.3/1.6	15.0	+/- 0.5	1.35:1/1.8:1	+12	+25	25	8.0 - 16.0	IP-3
WLA0545A	500 - 4000	1.2/1.5	25.0	+/- 1.0	1.5:1/1.8:1	+12	+25	65	8.0 - 16.0	IP-3
WLA1020A	1000 - 2000	1.0/1.3	33.0	+/- 1.0	1.35:1/1.5:1	+12	+25	40	8.0 - 16.0	IP-3
WLA1222A	1200 - 2200	0.9/1.2	17.0	+/- 0.5	1.35:1/1.6:1	+15	+29	35	8.0 - 16.0	IP-3
WLA1535A	1500 - 3200	1.2/1.5	28.0	+/- 1.0	1.35:1/1.5:1	+12	+25	55	8.0 - 16.0	IP-3
WLA2040A	2000 - 4000	1.2/1.5	25.0	+/- 1.0	1.5:1/1.8:1	+12	+25	55	8.0 - 16.0	IP-3
WLA3035A	3000 - 3500	1.2/1.5	25.0	+/- 0.5	1.35:1/1.5:1	+12	+25	55	8.0 - 16.0	IP-3
N Connectorized										
WLA0030N	20 - 3000	1.3/1.6	15.0	+/- 0.5	1.35:1/1.8:1	+12	+25	25	8.0 - 16.0	IP-2
WLA1020N	1000 - 2000	1.0/1.3	33.0	+/- 1.0	1.35:1/1.5:1	+12	+25	40	8.0 - 16.0	IP-2
WLA1222N	1200 - 2200	0.9/1.2	17.0	+/- 0.5	1.35:1/1.6:1	+15	+29	35	8.0 - 16.0	IP-2

Attenuators

Model No.	Frequency (Min.) (MHz)	Frequency (Max.) (MHz)	Attenuation (dB)	Attenuation Variation (dB)	RF CW Handling (W)	VSWR (Typ.)	Package
SMA Connectorized							
WAT06A	DC	6000	3.5	+/- 1.0	20.0	1.2:1	IP-11
WAT06B	DC	6000	10.0	+/- 1.0	20.0	1.2:1	IP-11
WAT06C	DC	6000	15.0	+/- 1.0	20.0	1.2:1	IP-11
WAT06D	DC	6000	20.0	+/- 1.0	20.0	1.2:1	IP-11
WAT06E	DC	6000	30.0	+/- 1.0	20.0	1.2:1	IP-11
WAT06F	DC	6000	6.0	+/- 1.0	20.0	1.2:1	IP-11

Bias-Ts

Model No.	Frequency (Min.) (MHz)	Frequency (Max.) (MHz)	DC Current (Max.) (mA)	Insertion Loss (Typ.) (dB)	Isolation (RF Port to DC Port) (dB)	DC Voltage (Max.) (V)	RF CW Power (Max.) (W)	VSWR (Typ.)	Package
SMA Connectorized									
WBT0030A	10	3000	3000	0.3	45	50	30	1.22:1	IP-3
WBT0040A	15	4500	600	0.2	45	50	20	1.2:1	IP-3
WBT0060A	20	6000	350	0.3	45	50	10	1.22:1	IP-3
WBT00120A	20	13800	220	0.3	40	50	2	1.22:1	0.7" x 0.7"
WBT00180A	20	18000	220	0.5	40	16	2	1.22:1	0.7" x 0.7"
WBT00200A	20	20000	220	0.5	40	16	2	1.22:1	0.7" x 0.7"
N Connectorized									
WBT0030N	10	3000	3000	0.3	45	50	30	1.22:1	IP-2
WBT0040N	15	4200	600	0.3	45	50	20	1.2:1	IP-2

Couplers

Model No.	No. of Ways	Frequency (MHz)	Insertion Loss (Typ./Max.) (+/- dB)	Phase Unbalance (Typ./Max.) (Degree)	Amplitude Unbalance (Typ./Max.) (dB)	VSWR (Typ./Max.)	PWR Rating (W)	Isolation (dB)	Package
SMA Connectorized									
WHC0405A	2	380 - 520	0.2 / 0.7	0.5 / 5.0	0.2 / 0.8	1.22:1/1.5:1	10	20	IP-1
WHC0510A	2	470 - 930	0.5 / 1.1	0.5 / 5.0	0.4 / 0.8	1.22:1/1.5:1	10	20	IP-1
WHC0727A	2	700 - 2700	0.5 / 1.3	0.5 / 5.0	0.2 / 0.8	1.22:1/1.5:1	10	20	IP-1
WHC0810A	2	820 - 960	0.2 / 0.5	0.3 / 3.0	0.2 / 0.5	1.22:1/1.5:1	10	30	IP-1
WHC1219A	2	1200 - 1850	0.5 / 1.0	0.5 / 4.0	0.4 / 0.8	1.22:1/1.5:1	10	20	IP-1
WHC1720A	2	1700 - 2000	0.5 / 1.0	0.5 / 4.0	0.4 / 0.8	1.22:1/1.5:1	10	20	IP-1
WHC1920A	2	1930 - 1980	0.25 / 0.5	0.3 / 3.0	- / 1.0	1.22:1/1.5:1	10	23	IP-1
WHC2023A	2	2000 - 2300	0.25 / 0.5	0.3 / 3.0	- / 1.0	1.22:1/1.3:1	10	23	IP-1
WHC2040A	2	2000 - 4000	0.5 / 1.2	0.5 / 5.0	- / 1.3	1.22:1/1.5:1	10	20	IP-1
WHC2129A	2	2100 - 2900	0.3 / 0.7	0.5 / 4.0	- / 1.0	1.22:1/1.5:1	10	23	IP-1
WHC2327A	2	2300 - 2700	0.25 / 0.6	0.5 / 4.0	- / 1.0	1.22:1/1.5:1	10	23	IP-1

DC Blocks

Model No.	Frequency (Min.) (GHz)	Frequency (Max.) (GHz)	Insertion Loss (dB)	RF CW Handling (W)	VSWR (Typ.)	Voltage (Max.) (V)	Package
WDCB0040A	0.01	4	0.2	20.0	1.22:1	50	0.7" x 0.7"
WDCB00180A	0.01	18	0.3	2.0	1.25:1	16	0.7" x 0.7"
WDCB00250A	0.01	25	0.5	2.0	1.25:1	16	0.7" x 0.7"

Splitters & Combiners

Model No.	No. of Ways	Frequency (MHz)	Insertion Loss (Typ./Max.) (+/- dB)	Phase Unbalance (Typ./Max.) (Degree)	Amplitude Unbalance (Typ./Max.) (dB)	VSWR (Typ./Max.)	PWR Rating (W)	Isolation (dB)	Package
SMA Connectorized									
WPD0010A	2	10 - 1000	0.50 / 1.20	1.0 / 5.0	0.2 / 1.00	1.22:1/1.5:1	0.1	20	IP-1
WPD0727A	2	700 - 2700	0.50 / 1.20	1.0 / 5.0	0.2 / 1.00	1.22:1/1.5:1	0.1	18	IP-1
WPD1040A	2	1000 - 4000	0.50 / 1.20	1.0 / 5.0	0.2 / 1.00	1.22:1/1.5:1	0.1	18	IP-1

SMA Connectors & Cables

Model No.	Frequency (Min.) (GHz)	Frequency (Max.) (GHz)	Insertion Loss (dB)	RF CW Handling (W)	VSWR (Typ.)	Package
WCBL01A	DC	18	0.5	50.0	1.22:1	6-Inch, SMA M to SMA M
WCBL02A	DC	18	0.8	50.0	1.22:1	12-Inch, SMA M to SMA M
WSMA01A, Super SMA	DC	27	0.1	50.0	1.22:1	SMA F
WSMA02A, Super SMA	DC	27	0.1	50.0	1.22:1	SMA M

Terminators & Loads

Model No.	SMA Type	Frequency (Min.) (GHz)	Frequency (Max.) (GHz)	RF CW Handling (W)	VSWR (Typ.)	Package
SMA Connectorized						
WLD0060A1	SMA Female	DC	6000	20.0	1.20:1	0.7" x 0.7"
WLD0060A2	SMA Male	DC	6000	20.0	1.20:1	0.7" x 0.7"
WLD000130A1	SMA Female	DC	13000	20.0	1.20:1	0.7" x 0.7"
WLD000130A2	SMA Male	DC	13000	20.0	1.20:1	0.7" x 0.7"