

WiMAX PRODUCTS

Samples and evaluation boards are available and can be requested at <http://www.johansontechnology.com/contact/sample/>.

PRODUCT	JTI P/N	SPECS		SIZE	APPLICATION COMMENTS
Antenna (Chip)	2500AT52M3555	Frequency (MHz)	2300 - 2690	Case L= 0.394 (10.0) W=0.394 (10.0) T= 0.031 (0.80)	Newest & Industry leading triband antenna for WiMAX standard. Antenna has compact form factor (10 x 10 x 0.8 mm) and is equipped to cover 2.5/3.5/5.5 GHz bands. This part is suitable for WiMAX applications worldwide (US, Europe & Asia)
		Peak Gain (XZ-V)	2.0 dBi typ		
		Average Gain (XZ-V)	-2.0 dBi typ		
		Return Loss (min)	9.5 dB min.		
		Frequency (MHz)	3300 - 3900		
		Peak Gain (XZ-V)	2.0 dBi typ		
		Average Gain (XZ-V)	-4.0 dBi typ		
		Return Loss (min)	9.5 dB min.		
		Frequency (MHz)	5150 - 5875		
		Peak Gain (XZ-V)	2.0 dBi typ		
		Average Gain (XZ-V)	-3.0 dBi typ		
		Return Loss (min)	9.5 dB min.		
Antenna (Chip)	2500AT44M0400	Frequency (MHz)	2300 - 2700	Case L= 0.394 (10.0) W=0.394 (10.0) T= 0.031 (0.80)	Newest chip antenna release dedicated for WiMAX 2.3/2.5 GHz band. Excellent wideband performance in a compact profile. Also suitable for worldwide WiMAX application (US, Europe & Asia)
		Peak Gain (XZ-V)	2.5 dBi typ		
		Average Gain (XZ-V)	0.5 dBi typ		
		Return Loss (min)	9.5 dB min.		
Balun	2500BL14M050	Frequency (MHz)	2300 - 2700	Case 14-1 L= 0.063 (1.60) W=0.031 (0.80) T= 0.024 (0.60)	New 1:1 balun in EIA 0603 profile for WiMAX 2.3/2.5 GHz band. Excellent I.L, R.L and Phase difference performance over the entire band.
		Impedance Unbalanced/Balanced	50/50		
		Insertion Loss (max)	1.2 dB (Prelim)		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±15°		
		Amplitude Difference (max)	1.5 dB		

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Balun	2500BL14M100	Frequency (MHz)	2300 - 2700	Case 14-1 L= 0.063 (1.60) W=0.031 (0.80) T= 0.024 (0.60)	New 2:1 balun in EIA 0603 profile for WiMAX 2.3/2.5 GHz band. Excellent I.L, R.L and Phase difference performance over the entire band.
		Impedence Unbalanced/Balanced	50/100		
		Insertion Loss (max)	1.2 dB (Prelim)		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±15°		
		Amplitude Difference (max)	1.5 dB		
Balun	3600BL14M050	Frequency (MHz)	3300 - 3900	Case 14-1 L= 0.063 (1.60) W=0.031 (0.80) T= 0.024 (0.60)	New 1:1 balun in EIA 0603 profile for WiMAX 3.3/3.9 GHz band. Excellent I.L, R.L and Phase difference performance over the entire band.
		Impedence Unbalanced/Balanced	50/50		
		Insertion Loss (max)	1.2 dB (Prelim)		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±15°		
		Amplitude Difference (max)	1.5 dB		
Balun	3600BL14M100	Frequency (MHz)	3300 - 3900	Case 14-1 L= 0.063 (1.60) W=0.031 (0.80) T= 0.024 (0.60)	New 2:1 balun in EIA 0603 profile for WiMAX 3.3/3.9 GHz band. Excellent I.L, R.L and Phase difference performance over the entire band.
		Impedence Unbalanced/Balanced	50/100		
		Insertion Loss (max)	1.2 dB (Prelim)		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±15°		
		Amplitude Difference (max)	1.5 dB		
Balun	3700BL15B050	Frequency (MHz)	3400 - 4000	Case 15-1B L= 0.079 (2.00) W=0.049 (1.25) T= 0.035 (0.90)	A 1:1 balun suitable for WiMAX 3.5 GHz application. Features a 3.4/4.0 GHz application band in an EIA 0805 profile.
		Impedence Unbalanced/Balanced	50/50		
		Insertion Loss (max)	1.2 dB		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±25°		
		Amplitude Difference (max)	2.0 dB		
Balun	3700BL15B100	Frequency (MHz)	3400 - 4000	Case 15-1B L= 0.079 (2.00) W=0.049 (1.25) T= 0.035 (0.90)	A 2:1 balun suitable for WiMAX 3.5 GHz application. Features a 3.4/4.0 GHz application band in an EIA 0805 profile.
		Impedence Unbalanced/Balanced	50/100		
		Insertion Loss (max)	1.0 dB		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°± 20°		
		Amplitude Difference (max)	1.0 dB		

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PRODUCT	JTI P/N	SPECS		SIZE	APPLICATION COMMENTS
Balun	3700BL15B200	Frequency (MHz)	3400 - 4000	Case 15-1B L= 0.079 (2.00) W=0.049 (1.25) T= 0.035 (0.90)	A 4:1 balun suitable for WiMAX 3.5 GHz application. Features a 3.4/4.0 GHz application band in a EIA 0805 profile.
		Impedence Unbalanced/Balanced	50/200		
		Insertion Loss (max)	1.0 dB		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±10°		
		Amplitude Difference (max)	2.0 dB		
Balun Filter	2345FB39A0050	Frequency (MHz)	2300 - 2390	Case 39-2B L= 0.098 (2.50) W=0.079 (2.00) T= 0.043 (1.10)	New Filter Balun for WiBro Applications. Features a passband of 2.3 - 2.39 GHz with integrated 1:1 balun. Good overall electrical performance. Note: WiBro is Korean market's version of WiMAX
		Impedence Unbalanced/Balanced	50/50		
		Insertion Loss (max)	3.2 dB		
		Return Loss (min)	11.73 dB		
		Phase Difference	180°±10°		
		Amplitude Difference (max)	1.5 dB		
Balun Filter	2595FB39A0050	Frequency (MHz)	2500 - 2690	Case 39-2B L= 0.098 (2.50) W=0.079 (2.00) T= 0.043 (1.10)	New Filter Balun for BRS Applications. Features a passband of 2.5 - 2.69 GHz with integrated 1:1 balun. Good overall electrical performance. Note: BRS - Broadband Radio Service
		Impedence Unbalanced/Balanced	50/50		
		Insertion Loss (max)	3.2 dB		
		Return Loss (min)	11.73 dB		
		Phase Difference	180°±10°		
		Amplitude Difference (max)	1.5 dB		
Balun Filter	3500FB39A0050	Frequency (MHz)	3400 - 3600	Case 39-2B L= 0.098 (2.50) W=0.079 (2.00) T= 0.043 (1.10)	New Filter Balun for ETSI Applications. Features a passband of 3.4 - 3.6 GHz with integrated 1:1 balun. Note: ETSI - European Telecom Std Institute
		Impedence Unbalanced/Balanced	50/50		
		Insertion Loss (max)	2.9 dB		
		Return Loss (min)	9.5 dB		
		Phase Difference	180°±12°		
		Amplitude Difference (max)	1.5 dB		
Band Pass Filter	2500BP15M400	Frequency (MHz)	2300 - 2700	Case 15-3A L= 0.079 (2.00) W=0.049 (1.25) T= 0.037 (0.95)	New WiMAX 2.3/2.5 GHz Band Pass Filter in EIA 0805 profile. Good I.L and harmonic rejection performance over entire band of operation.
		Insertion Loss (max)	2.0 dB		
		Attenuation (min)	15 dB @ 100-1800 MHz 20 dB @ 3400 - 11700 MHz		
		Return Loss (min)	9.5 dB		
Band Pass Filter	2593BP44B186	Frequency (MHz)	2500 - 2686	Case 44-1 L= 0.299 (7.60) W=0.138 (3.50) T= 0.051 (1.30)	2.5 Ghz Band Pass Filter suitable for WiMAX 2.5 GHz application. Features excellent attenuation performance.
		Insertion Loss (max)	2.0 dB		
		Attenuation (min)	40 dB @ 1870 - 2056 MHz		
		Return Loss (min)	9.5 dB		

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PRODUCT	JTI P/N	SPECS		SIZE	APPLICATION COMMENTS
Band Pass Filter	2600BP14M0200	Frequency (MHz)	2300 - 2700	Case 14-2 L= 0.063 (1.60) W=0.031 (0.80) T= 0.022 (0.55)	New WiMAX 2.5 GHz BPF in EIA 0603 profile. (T = 0.55 mm nom). Excellent attenuation performance over entire band of operation
		Insertion Loss (max)	2.2 dB @ 25 dB 2.5 dB @ -40 - 85 dB		
		Attenuation (min)	30 @ 806 - 915MHz 30 @ 1710 - 1785MHz 30 @ 1850 - 1910MHz 30 @ 1920 - 1980MHz 13 @ 3300 - 3900MHz 20 @ 4900 - 5900MHz		
		Return Loss (min)	9.5 dB		
Band Pass Filter	3600BP14M600	Frequency (MHz)	3300 - 3700	Case 14-2 L= 0.063 (1.60) W=0.031 (0.80) T= 0.022 (0.55)	New WiMAX 3.5 GHz BPF in EIA 0603 profile. (T = 0.55 mm nom). Excellent I.L and attenuation performance.
		Insertion Loss (max)	1.8 dB @ 25 dB 2.0 dB @ -40 - 85 dB		
		Attenuation (min)	30 @ 806 - 915MHz 30 @ 1710 - 1785MHz 30 @ 1850 - 1910MHz 30 @ 1920 - 1980MHz 31 @ 2400 - 2500MHz 18 @ 4900 - 5900MHz		
		Return Loss (min)	12 dB		
Band Pass Filter	3600BP15M600	Frequency (MHz)	3300 - 3900 (Prelim)	Case 15-3B L= 0.079 (2.00) W=0.049 (1.25) T= 0.026 (0.65)	New WiMAX 3.3/3.9 Ghz Band Pass Filter in EIA 0805 profile. Good I.L, R.L performance over band of operation.
		Insertion Loss (max)	1.8 dB (Prelim)		
		Attenuation (min)	15 dB @ 100 - 2600 MHz (Prelim) 9 dB @ 4400 MHz (Prelim) 20 dB @ 6000 - 9900 MHz (Prelim)		
		Return Loss (min)	9.5 dB (Prelim)		
Low Pass Filter	3550LP14A300	Frequency (MHz)	3400 - 3700	Case 14-1 L= 0.063 (1.60) W=0.031 (0.80) T= 0.024 (0.60)	3.5 GHz Low Pass Filter for WiMAX 3.5 GHz in an EIA 0603 profile. Excellent I.L, R.L & harmonic rejection performance throughout entire band of operation.
		Insertion Loss (max)	0.65 dB		
		Attenuation (min)	25 dB @ 2x F_o 25 dB @ 3x F_o		
		Return Loss (min)	14 dB		

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