

Avantek Products

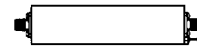
Wideband Small Signal Amplifiers 6.0 to 18.0 GHz

Technical Data

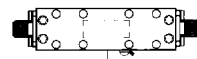
AWT Series

**AWT —
High Performance and
Temperature Compensated
Connectorized Amplifier
Series**

**Pin Configuration
IC₋, IS₋, IX₋**



MAC₋, MAS₋, MAX₋ ⁽⁴⁾



AWT Series³

Guaranteed Specifications @ 25°C Case Temperature

(See Section 5 for detailed case drawings.)

Model	Frequency Response (GHz) Minimum	Gain (dB) Minimum	Typical Gain (dB)	Noise Figure (dB) Typ./Max.	Power Output for 1 dB Gain Compression (dBm) Minimum	Gain Flatness (±dB) Maximum	Typical Third Order Intercept Point (dBm)	VSWR (50 ohms) Maximum In Out	Input Power Current @ +12 V ¹ Typical (mA)	Case Type
AWT-18613 ²	6-18	25	31	2.5/2.8	+8	1.0	+16	2.0 2.0	150	IX4
AWT-18614 ²	6-18	31	37	2.5/2.8	+14	1.5	+22	2.0 2.0	200	IX4
AWT-18615 ²	6-18	37	43	2.5/2.8	+17	1.5	+25	2.0 2.0	275	IX6
AWT-18616 ²	6-18	42	49	2.5/2.8	+20	2.0	+28	2.0 2.0	450	IX6
AWT-18632	6-18	14	20	5.2/5.5	+13	1.0	+21	2.0 2.0	140	IX2
AWT-18633	6-18	20	26	5.1/5.5	+13	1.0	+21	2.0 2.0	200	IX4
AWT-18634	6-18	26	32	5.1/5.5	+15	1.0	+23	2.0 2.0	260	IX4
AWT-18635	6-18	32	38	5.1/5.5	+15	1.5	+23	2.0 2.0	320	IX6
AWT-18636	6-18	38	44	5.1/5.5	+15	1.5	+23	2.0 2.0	380	IX6
AWT-18637	6-18	44	50	5.1/5.5	+15	2.0	+23	2.0 2.0	440	IX8
AWT-18654	6-18	24	30	5.5/6.0	+20	1.0	+28	2.0 2.0	370	IX4
AWT-18655	6-18	30	36	5.2/5.5	+20	1.5	+28	2.0 2.0	430	IX6
AWT-18656	6-18	36	42	5.2/5.5	+20	1.5	+28	2.0 2.0	490	IX6
AWT-18657	6-18	42	50	5.2/5.5	+20	2.0	+28	2.0 2.0	560	IX8

AWT Series —Temperature Compensated³

Guaranteed Specifications @ -54° to +100°C Case Temperature

AWT-18685	6-18	26	32	5.3/5.5	+10	2.5	-18	2.0 2.0	350	IX6
AWT-18686	6-18	30	38	4.8/5.0	+10	2.5	-18	2.0 2.0	410	IX8
AWT-18688	6-18	40	48	4.8/5.0	+15	3.0	-23	2.0 2.0	520	IX10
AWT-18695	6-18	26	32	5.8/6.0	+15	2.5	-23	2.0 2.0	350	IX6
AWT-18696	6-18	30	36	5.8/6.0	+18	2.5	+26	2.0 2.0	510	IX8
AWT-18698	6-18	40	48	5.3/5.5	+20	3.0	+28	2.0 2.0	630	IX10
AWT-18644	6-18	20	25	6.7/7.0	+12	2.0	+20	2.0 2.0	290	IX6
AWT-18645	6-18	25	30	6.7/7.0	+15	2.5	+23	2.0 2.0	350	IX6
AWT-18646	6-18	30	36	6.3/6.5	+15	2.5	+23	2.0 2.0	440	IX8
AWT-18647	6-18	36	44	6.3/6.5	+18	3.0	+26	2.0 2.0	510	IX8
AWT-18648	6-18	42	50	6.3/6.5	+18	3.0	+26	2.0 2.0	570	IX10
AWT-18666	6-18	28	36	7.0/7.5	+20	2.5	+28	2.0 2.0	520	IX8
AWT-18667	6-18	36	44	6.3/6.5	+20	3.0	+28	2.0 2.0	600	IX8

Notes:

- Units contain internal voltage regulator and operate with input voltage of +12 to +15 Vdc.
- Maximum RF input power for AWT-1861X Series is -17 dBm (CW), +27 dBm pulse, 1ms 1% D.C.
- For a description of all available product options, refer to the beginning of this subsection.
- MA-Series case options available on selected amplifiers upon special request.