

AV4 BLABBH2H500/100/250 700-900 P/N : W148223 EC10			
RF SPECIFICATIONS	CHANNEL H100	CHANNEL BB500	CHANNEL 2H250
Frequency Range	650 to 900 MHz	15 to 600 MHz	105 to 140 MHz
Linear Gain	49dB ±1dB typ. ±1.5dB max.	57dB ±1dB typ. ±3dB max.	54 dB ±0.5dB typ. ±0.5dB max.
Minimum Pulsed Output Power (@ nominal input +4dBm)	100W min. full range	500W min. 20-600MHz 400W min. below 20MHz	250W min. full range
CW Output Power	25W max. (internal limitation)	50W max. (internal limitation)	25W max. (internal limitation)
Linear Output Power	100W typ. @1dB compression	400W typ. @1dB compression	250W typ. @1dB compression
Linearity	-0.5/+1dB to 100W typ.	+1.5dB / -1dB to 500W typ.	±1dB to 250W typ.
Amplifier Biasing	Class AB Operation	Class AB Operation	Class AB Operation
Blanking Delay	1µs min.	1µs min.	3 µs min. (due to PIN Switch Commut.)
RF Rise Time V 10%-90%	< 50 ns	< 100 ns above 30MHz < 200 ns below 30MHz	< 500 ns (due to PIN Switch Commut.)
RF Fall Time V 90%-10%	< 30 ns	< 60 ns above 30MHz < 150 ns below 30MHz	< 50 ns
DC Ringing	±20mV after 1µs	±200mV after 1µs	±100mV after 1µs
Input Noise Figure	8dB typ.	8dB typ.	6dB typ
Output Noise Power (Unblanked)	-117dBm @1Hz	-109dBm @1Hz	-114dBm @1Hz
Output Noise Power (Blanked)	Thermal Noise	Thermal Noise	< 27dB over Thermal Noise
In / Out Impedance	50 Ohms	50 Ohms	50 Ohms
Input VSWR	1.6 max	1.5 max.	1.4 max.
Output Harmonics	H2 < -30dBc ; H3 < -50dBc max. at 100W	H2 < -30dBc typ ; H3 < -10dBc max. at 500W ; H4 < -45dBc @ 10W	H2 < -20dBc ; H3 < -20 dBc max. at 250W
Pulse Width (Int. Limitation)	100ms @100W (Up to CW @25W)	100ms @500W (Up to CW @50W)	5ms @250W (Up to CW @25W)
Duty Cycle (Int. Limitation)	25% @100W (Up to 100% @25W)	10% @500W (Up to 100% @50W)	10% @250W (Up to 100% @25W)
Pulse amplitude flatness	±2% typ for 100 ms PW	±3% typ. @ 500W for 100 ms PW	±5% typ. @ 250W for 5 ms PW
Amplitude Stability vs Temperature	±0.15% / °C max	±0.15% / °C max	±0.2% / °C max
PIN Diodes Switch			
Isolation 2H OUT vs FO IN	Not Applicable	Not Applicable	Better than 60 dB full range
Insertion FO IN vs 2H OUT	Not Applicable	Not Applicable	0.4dB typ