280 Greg St Suite 9
Reno Nevada 89502

Broadband Wireless

775-329-5544
www.bwt-amps.com

Linearized Amplifier
2110-2170 MHz Band, 200 Watts Peak Power
PART NUMBER: BW-2140-45-50

Parameter	Specifications
Frequency Band	2110-2170 MHz
Pout, maximum	49 dBm (80 Watts)
Peak Power	53 dBm (200W)
Output Power Linearized	47 dBm, 50 watts
ACPR, 5 MHz WCDMA PAR 7.5 dB 50W watts	<-40 dBc @ 5 MHz <-55dBc @ 10 MHz
5/10 MHz LTE, 50W	ACP <-45 dBc at 5/10 MHz
IMD, GSM 4-tones, 50W ave	-45 dBc
RF Gain	45 ± 0.5 dBm, adj
RF Gain over freq range	± 0.5 dB
RF Gain vs. temp.	± 0.5 dB
DC Current @ 28V	4.5 A max at 50W avg RF power
Operating Temperature	-30°C to + 80°C Base Plate Temperature
Cooling	Thru Base Plate
Package	P-8040
Connectors	sma female for RF 9pin D-Sub female, 2pin Molex 0428202222 for DC power
Harmonics	-45 dBc
Input/Output Return Loss	18 dB min. (50 ohms)

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I/O Interfaces
Control & Alarm (9 Pin D-sub female Connector)

Pin Number	Function	Description	Remarks
1	Reverse Power Detection	1 - 4 Vdc (0.12 V/dB step) analog detector voltage for power levels of 20 dBm - 45 dBm (1V = 35dBm, 1.7V = 47 dBm).	
2	Output Power Detection	1 - 4 Vdc (0.12 V/dB step) analog detector voltage for power levels of 20 dBm - 45 dBm (1V = 20dBm, 4V = 45 dBm).	
3	Enable	The amplifier is enabled with this pin is pulled low	Pulled up internally thru 10k ro 5V
4	Over Power	A TTL output indicated the output power is move than 49 dBm	
5	VSWR Alarm	A TTL output indicated the reverse power is move than 30 dBm	
6	GND		
7	GPIO	Optional Input/Output	
8	Overtempeature alarm	If heat sink temperature exceeds 85°C, the High Temperature Alarm will occur and HPA will disable automatically. The HPA will re-start after temperature drops to 70°C.	
9	Input Power Detection	1 - 4 Vdc (0.12 V/dB step) analog detector voltage for power levels of 20 dBm - 45 dBm (1V = xxdBm, 4V = xx dBm).	

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50W LTE Waveform, 8.6 dB PAR

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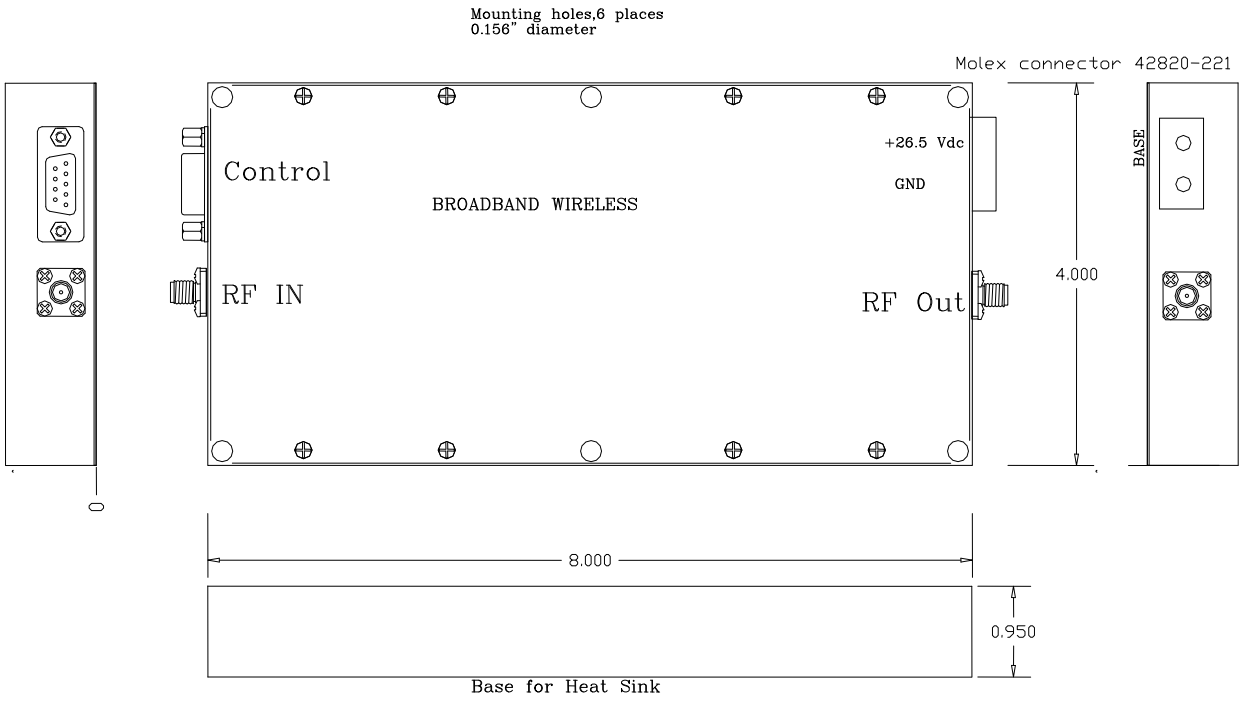
Package Drawing



BROADBAND WIRELESS
Package P-8040

DATE 7/30/09	BROADBAND WIRELESS
DWN JM/BM	280 Greg st, SUITE 9 RENO NEVADA 89502 702-329-5544
FILE housngs/P-8040	Package P-8040
QC	
REV	MODEL NO.