Down East Microwave Inc. 954 Route 519 Frenchtown, NJ 08825 Phone: 908-996-3584 (Voice) 908-996-3702 (Fax)

<u>M57762 Pin Out</u>		
1	RF In	
2	Vcc 1	
3	Bias	
4	Vcc 2	
5	RF Out	
6	RF & DC ground (Flange)	
5 6	RF Out RF & DC ground (Flange)	

Brass Strap



DEM Part Number 2318PAK and 2318PACK <u>Parts List</u>						
			Qty.	Description		
		C3	3	0.1 uF chip		
		C4	3	1000 pF chip		
		C1	5	2.2 uF electrolytic		
		C2	1	100 uF electrolytic		
ge)			1	78S09 regulator		
			1	M57762		
		FB	3	Ferrite bead		
M5776	2 6		1	Printed circuit board		



- 1. Install all components on PCB, except for the power module (M57762) and regulator.
- 2. Install assembled PCB in the box and heat sink using the 4-40 x $\frac{1}{2}$ screws. Do no tighten.
- 3. Install prepped "N" connectors using the 4-40 x 3/16" screws.
- 4. Install feed-thru capacitors. Use #4 hardware and ground lug to install 78S09 (bend leads to clear PCB).
- 5. Apply heatsink grease to the power module and line it up. Use the 6-32 hardware to hold lightly in place.
- 6. Once everything is aligned properly proceed to tighten all screws. Cut the excess lead length of module.
- 7. Solder power module and 78S09 leads to the PCB.
- 8. Use buss wire with beads to make connection from feed-thru capacitors to the PCB.
- 9. Form provided brass straps as shown on picture above and solder in place for the RF connectors.
- 10. Apply voltage. You should see 9.0V on pin 3 and Vcc on pins 2 and 4. Idle current with TXON and no RF drive should be approximately 600mA.

8-32 Feed thru capacitors (1000 pF) 2 5 $4-40 \ge 1/2$ " round screws 2 Panel "N" connectors 2 6-32 x 5/16" pan screws 2 Brass straps 1 #4 ground lug 1 1590B die cast box 1 4-40 nut 1 heat sink 6" #18 Buss wire 8 4-40 x 3/16" round screws

Additions for Complete Kit (PACK)

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DEM Part Number 2318PA, 2318PAHS, 2318PAK, and 2318PACK 16Watts, 1240 to 1300 MHz Linear Amplifier

<u>Specifications</u>				
Frequency range:	1240 to 1300 MHz			
Power Out (at 1 dB compression):	16Watts			
Power Out (saturated):	>20 Watts			
Power Input for rated power out:	1 Watts max., 500 mW linear			
Power requirements:	13.8 VDC @ 5 amps.			
Connectors:	Type "N" female			
Size:	4.5" L x 2.5" W x 2.5" H (standard)			
	4.5" L x 3" W x 2.5" H on PAHS model			
Active devices:	1 M57762			
Options:	PAHS - Extra large heat sink			

Instructions for Use

The 2318PA is a broadband linear power amplifier covering the entire 23cm band with no tuning. It has a linear power output of 16 Watts min. with 500 mW of drive or a saturated output of over 20 Watts with a maximum of 1 W of drive. Type "N" connectors are used on both input and output. The 2318PA requires well regulated 13.8 VDC at 5A for full power output. Keying is done by applying voltage to the TX ON connection. Being that it is a linear amplifier it can be used for all modes in the 23 cm band (ATV @ reduced output ratings). A oversize heat sink option is available for ATV and repeater use.

<u>Caution</u>: Do not exceed 1.5 W RF input, or 15 volts on the DC line. Use high quality coaxial cables on both RF connections. Install the amplifier with the heat sink on top or with the fins vertical so the amplifier will convection-cool. A fan could be used in continuous duty applications to blow air through the heat sink fins. It is recommended not to keep the amplifier continuously keyed in a Repeater or ATV use.



Note: The heat sink option model is 4.5" L x 3" W x 2.5" H