

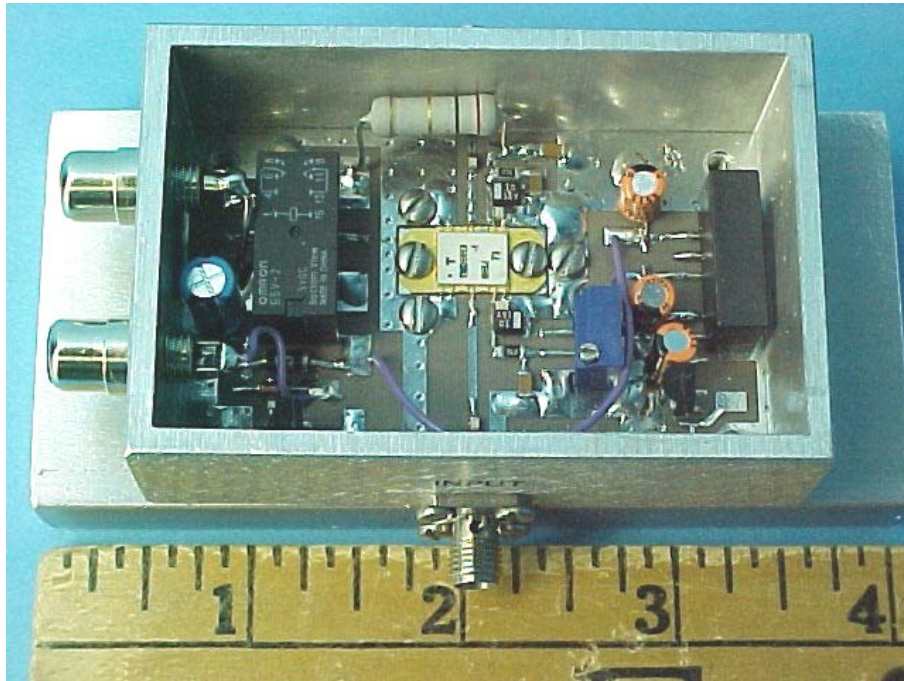
DEM Part Number 3-3PA
10GHz Linear Amplifier

Specifications

Frequency range:	10.0 - 10.5 GHz.
Power Out:	>3 Watts nominal 2.8 minimum
Power Input for rated power out:	10 mW for linear operation, 30 mw maximum
Return Loss	>10dB@ 10.368 GHz
DC requirements:	13.8 volts DC@ 2.5 amps. for nominal output 16 volts DC absolute maximum, 10Volts Minimum
Connectors:	SMA only
Size:	2" L x 4" W x 2" H Standard 1.5" L x 4.1" W x 2" H Optional
Active devices:	FMM5061VF (Eudyna)
Keying Option:	PTT - H (1.5-15Volts for transmit) PTT - L (Ground for transmit)

Instructions for Use

1. The Down East Microwave Inc. 3-3PA linear amplifier is a simple gain block for the amateur 3 cm band. It will provide >3 Watts saturated output power with 10mW of drive. It requires external T/R switching and can be used by itself or as a driver for a higher power amplifier.
2. The amplifier requires a single 13.8 volts DC supply at 2.5 amps, but will operate at reduce ratings down to 10 volts and up to 16 volts. The unit is provided with an internal negative bias supply and keying circuit for ease of use. It is either toggled to Ground or supplied with a 1.5-15VDC voltage to activate. See specifications for type of set up.
3. When operated at full saturated output power the drive level should not exceed 30mW. If the exciter cannot be turned down to this level, a attenuator pad can be used between the exciter and amplifier to reduce the drive.
4. To achieve maximum performance the amplifier should be mounted in a well ventilated area and bolted to a heat sink or enclosure.
5. It is advisable but not necessary to use circulators and band pass filters when available. This will prevent stray oscillations and needless waste of power by amplifying local oscillator frequencies or generating high power out of band spurious signals.



Inside View



3-3PAP needs to be mounted to existing Box or heatsink