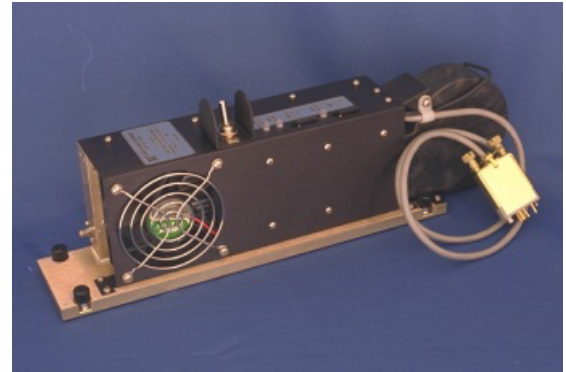


Northern Telecom RD11 TWTA SSPA Replacement Kits

Features:

- ✕ Units operate over the full 10.7-11.7 GHz frequency range
- ✕ 5, 10, and 15 Watt output power levels are available
- ✕ Simple and easy Installation Instructions are included
- ✕ All units accept -21 to -56 VDC input voltage range
- ✕ Standard 5-Year Warranty



Description:

Mimix Broadband's SMArTPAK (Standard Microwave Radio TWT replacement Power Amplifier Kit) amplifiers are uniquely designed to combine the DC/DC Converter, microwave amplifier and cooling devices into one single integrated unit. Each unit has been designed using modern device technology and includes reverse polarity, overvoltage and excess thermal protection. Unlike TWT's and other TWT replacement options, SMArTPAKs do not require a separate, bulky and often unreliable power supply.

All units are designed to directly drop-in place of existing TWT or SSPA units with no modifications saving significant time and effort. Using the proper equipment, unit installations and alignment can typically be done almost effortlessly in less than an hour. It is recommended that all first time users have a Mimix Broadband representative present during initial installation. Ask us about our onsite installation and alignment options.

Mimix is confident that you will be pleased with our product and each unit comes with a standard five-year warranty. If you do not see a part number that covers your desired frequency, power or radio type, feel free to contact us and we will gladly review your requirements.

| Electrical Characteristics (T=25°C) | | 1006534 - 10W | | | 1006382 - 15W | | | 10-105780-01 - 20W | | |
|-------------------------------------|-------|---------------|--------|--------|---------------|--------|--------|--------------------|--------|--------|
| Parameter | Units | Min | Typ | Max | Min | Typ | Max | Min | Typ | Max |
| Frequency Range | GHz | 10.7 | - | 11.7 | 10.7 | - | 11.7 | 10.7 | - | 11.7 |
| Input Return Loss | dB | - | -14.0 | -9.5 | - | -14.0 | -9.5 | - | -14.0 | -9.5 |
| Input/Output Impedance | ohms | - | 50 | - | - | 50 | - | - | 50 | - |
| Gain | dB | 45.0 | 50.0 | - | 45.0 | 50.0 | - | 45.0 | 50.0 | - |
| Gain Flatness | dB | - | +/-0.5 | +/-1.0 | - | +/-0.5 | +/-1.0 | - | +/-0.5 | +/-1.0 |
| Noise Figure | dB | - | 8.0 | 10.0 | - | 8.0 | 10.0 | - | 8.0 | 10.0 |
| Input Power | dBm | - | -12.0 | +5.0 | - | -12.0 | +5.0 | - | -12.0 | +5.0 |
| Output Power (P1dB) | dBm | +40.0 | +41.0 | - | +41.0 | +42.0 | - | +42.0 | +43.0 | - |
| Third Order Intermodulation (1) | dBc | - | 52.0 | 48.0 | - | 52.0 | 48.0 | - | 52.0 | 48.0 |
| Spurious | dBc | - | - | 70.0 | - | - | 70.0 | - | - | 70.0 |
| Harmonics | dBc | - | - | 60.0 | - | - | 60.0 | - | - | 60.0 |
| Base Operating Temperature | °C | -20 | - | +70 | -20 | - | +70 | -20 | - | +70 |
| Humidity (Non-Condensing) | % | 0.0 | - | 95 | 0.0 | - | 95 | 0.0 | - | 95 |
| Altitude (Operating) | ft | 0.0 | - | 16,000 | 0.0 | - | 16,000 | 0.0 | - | 16,000 |
| Altitude (Storage) | ft | 0.0 | - | 60,000 | 0.0 | - | 60,000 | 0.0 | - | 60,000 |
| DC Power | V | -21.0 | - | -56.0 | -21.0 | - | -56.0 | -21.0 | - | -56.0 |
| DC Current @ +12 Volts | A | - | 10.5 | 11.0 | - | 12.5 | 13.5 | - | 13.5 | 14.0 |

(1) Units meet intermod specifications using 2, 3, or 4 tones at radio stack outputs of +30 dBm - 10W/+33 dBm - 15W/+35 dBm - 20W.

Specifications are subject to change without notice. Export of this item may require appropriate export licensing from the U.S. Government. In purchasing these parts, U.S. Domestic customers accept their obligation to be compliant with U.S. Export Laws. Revision-02-May-02