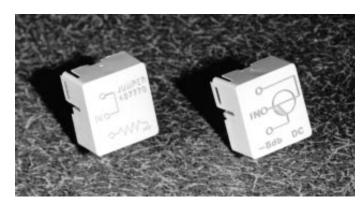
RF Electronics

RF Amplifier Accessories





22365

| Part Number | Туре | Tap/Thru Leg | Typical Insertion Loss (dB) at Various Frequencies (MHz) | | | | | | | | | | |
|-------------|--------|--------------|--|------|------|------|------|------|------|------|------|------|------|
| | | | 5 | 30 | 50 | 300 | 330 | 400 | 450 | 550 | 600 | 750 | 860 |
| 467778 | Jumper | | 0.02 | 0.03 | 0.05 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.16 |
| 502110 | 2-way | | 3.3 | 3.3 | 3.3 | 3.5 | 3.6 | 3.6 | 3.7 | 3.8 | 3.9 | 4.0 | 4.4 |
| 502115 | DC-8 | Thru | 1.4 | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.5 | 1.6 | 2.1 | 2.5 |
| | | Тар | 8.1 | 8.1 | 8.1 | 8.0 | 8.0 | 7.9 | 7.8 | 7.7 | 7.7 | 7.7 | 7.9 |
| 502120 | DC-12 | Thru | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.3 | 1.4 |
| | | Тар | 12.2 | 12.2 | 12.2 | 12.3 | 12.3 | 12.2 | 12.2 | 12.1 | 12.1 | 12.0 | 11.9 |

PLUG-IN PASSIVES

Plug-in passives are used in the System Amplifier I, II and III, and Variable FITT products to eliminate or reduce the need for external devices (jumper is used for continuity) at amplifier stations. The two-way splitter is also used as a reverse combiner in some amplifier products. Order by part number from the table above.

TRUE TILT CORRECTION NETWORKS (TTCN)

True Tilt Correction Networks are used during initial setup of broadband plant. It allows direct conversion of true tilt signals to a flat response. The TTCN is connected between the amplifier test point and the field test equipment with a short piece of 75 Ohm test cable. This results in a flat signal amplitude (frequency response observed when signals are properly tilted). Measurements can thus be made without lengthy, error-producing calculations to ascertain flatness of response. Order by part number from the table below.



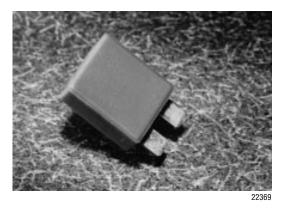
22361

| Part Number | True Tilt (dB) | Frequency Range (MHz) | Insertion Loss @ High Frequency (dB) |
|-------------|----------------|-----------------------|---|
| 344332 | 3 | 50-550 | 7 |
| 344331 | 9 | 50-550 | 15 |
| 503782 | 9 | 46-750 | 15 |
| 507720 | 6 | 46-750 | 15 |
| 509709 | 11 | 46-750 | 15 |

CIRCUIT BREAKERS

Circuit breakers can be used in place of fuses, fuse shunts, or jumpers in several product applications. Order by part number from the table below.

| Part Number | Ampere Rating | Product Application |
|-------------|---------------|-----------------------------|
| 501026 | 5 | System Amplifier I |
| 511216 | 5 | System Amplifier II and III |
| 511217 | 8 | System Amplifier II and III |





LONG REACH TEST POINT ADAPTER

The 75 ohm push-in test point adapter allows access to amplifier test points without opening the amplifier housing (when housings with external test point access are used). Order part number 501111.

21355

CABLE SEIZURE WRENCH

The cable seizure wrench is machined from high grade stainless steel and is used to secure the cable seizure fittings in the Line Extender II and III. Order part number 143190.



10049



21462

REVERSE INJECTION TEST PROBE (3 DB) FOR SYSTEM AMPLIFIER I, II AND III

The reverse injection test probe is used to inject a reverse test carrier into the network during system alignment. It has a 3 dB insertion loss, thus the measurement is 23 dB below actual level [(-20 dB test point) + (-3 dB test probe)]. Order part number 276982.



permits a test cable to be connected to reverse test points in a Line Extender II module. Order part number 500477.





22446

REVERSE INJECTION FILTER FOR LEII

The reverse injection filter for the LEII is used to inject a reverse test carrier into the network during system alignment. It replaces the reverse input filter during this process and has a -20 dB coupler in the filter module. Order part number that corresponds to system reverse split.

- #539356 Reverse Injection Filter (30/46 MHz split)
- #538643 Reverse Injection Filter (40/51 MHz split)
- #539358 Reverse Injection Filter (50/70 MHz split)
- #548531 Reverse Injection Filter (65/88 MHz split)

SYSTEM AMPLIFIER HIGH CURRENT SEIZURE KIT

The High Current Seizure Kit allows upgrading of existing System Amplifier II housings from 10 ampere current capacity to 15 ampere (steady state). This is achieved by replacing the tin plated connectors with silver plated ones. It is very important when upgrading that the System Amplifier module is also a high current version (with silver plated "F" connectors). This will be indicated by blue insulation on the "F" connector itself (the seizure assembly also has blue insulation). The High Current Seizure Kit consists of 4 seizure assemblies, 4 anvils, 2 housing labels, and installation instructions. Order part number 548775.

EXTERNAL DIPLEX FILTERS

External diplex filters are used wherever it is necessary to separate the forward and reverse path and an amplifier is not present. The filter is contained in a two-way splitter housing. The table on the following page lists the external diplex filters available. Order by part number.



22359

External Diplex Filters

| High Frequency (MHz) | Band Split (MHz) | Part Number | AC Power Passing (Yes/No) |
|----------------------|------------------|-------------|---------------------------|
| 550 | 30/46 | 234250 | No |
| 750 | 30/46 | 509748 | No |
| 750 | 30/46 | 510505 | Yes |
| 750 | 40/51 | 540028 | Yes |
| 750 | 40/51 | 540557 | No |
| 750 | 50/70 | 541384 | No |

Specifications for External Diplex Filters

| | | Part Number | | | | | | | | |
|-------------------------------|-----------|-------------|-----------|-----------|-----------|-----------|--|--|--|--|
| Specifications | 234250 | 509748 | 510505 | 540028 | 540557 | 541384 | | | | |
| Return Loss (Forward/Reverse) | 19.0/19.0 | 16.0/15.0 | 16.5/15.0 | 16.0/15.0 | 16.5/16.5 | 19.0/19.0 | | | | |
| Insertion Loss (dB) | 0.5 | 0.6 | 1.5 | 1.0 | 1.0 | 1.0 | | | | |
| Frequency Response (dB) | ±0.4 | ±0.25 | ±0.5 | ±1.0 | ±0.75 | ±0.4 | | | | |

Forward Group Delay¹

| | Part Number | | | | | | | | | | |
|------|---------------|------|--------|------|------------|------|--------|------|--------|------|-------|
| 234 | 234250 509748 | | 510505 | | 540028 | | 540557 | | 541384 | | |
| ns @ | Freq. | ns @ | Freq. | ns @ | ns @ Freq. | | Freq. | ns @ | Freq. | ns @ | Freq. |
| 3.58 | (MHz) | 3.58 | (MHz) | 3.58 | (MHz) | 3.58 | (MHz) | 3.58 | (MHz) | 3.58 | (MHz) |
| 2.8 | 55.25 | TBD | 55.25 | 3.1 | 55.25 | TBD | 55.25 | 8.9 | 55.25 | TBD | 67.25 |
| 1.6 | 61.25 | TBD | 61.25 | 1.8 | 61.25 | TBD | 61.25 | 3.9 | 61.25 | TBD | 77.25 |
| 1.1 | 67.25 | TBD | 67.25 | 1.3 | 67.25 | TBD | 67.25 | 2.2 | 67.25 | TBD | 83.25 |
| 0.6 | 77.25 | TBD | 77.25 | 0.7 | 77.25 | TBD | 77.25 | 1.1 | 77.25 | TBD | 91.25 |

Reverse Group Delay²

| | Part Number | | | | | | | | | | |
|------|---------------|------|-------|--------|------------|--------|-------|--------|-------|--------|-------|
| 234 | 234250 509748 | | 748 | 510505 | | 540028 | | 540557 | | 541384 | |
| ns @ | Freq. | ns @ | Freq. | ns @ | ns @ Freq. | | Freq. | ns @ | Freq. | ns @ | Freq. |
| 2.0 | (MHz) | 2.0 | (MHz) | 2.0 | (MHz) | 2.0 | (MHz) | 2.0 | (MHz) | 2.0 | (MHz) |
| 0.4 | 5-7 | TBD | 5-7 | 63.0 | 5-7 | TBD | 5-7 | 0.15 | 5-7 | TBD | 5-7 |
| 0.5 | 7-9 | TBD | 7-9 | 21.7 | 7-9 | TBD | 7-9 | 0.2 | 7-9 | TBD | 7-9 |
| 0.6 | 9-11 | TBD | 9-11 | 9.4 | 9-11 | TBD | 9-11 | 0.2 | 9-11 | TBD | 9-11 |
| 4.7 | 24-26 | TBD | 24-26 | 6.7 | 24-26 | TBD | 34-36 | 6.5 | 34-36 | TBD | 44-46 |
| 6.6 | 26-28 | TBD | 26-28 | 9.4 | 26-28 | TBD | 36-38 | 10.3 | 36-38 | TBD | 46-48 |
| 10.4 | 28-30 | TBD | 28-30 | 19.3 | 28-30 | TBD | 38-40 | 19.0 | 38-40 | TBD | 48-50 |

Notes:

¹ Chrominance / Luminance delay @ 3.58 MHz above video carrier

² Propagation delay in 2 MHz bandwidth

Specifications shown are typical. Actual measurements may vary.

RF Amplifier Accessories



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