

RF Devices Division  
TRW Electronic Components Group

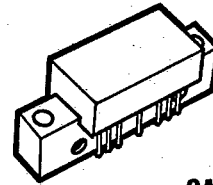
**TRW**

CA6520

T-74-09.01

## CATV Amplifiers

- Power Plus (+3dB Output)
- 550 MHz
- 20 dB Gain
- Low Noise Figure
- All Gold Metallization



CA6520

Electrical Characteristics for 75Ω Systems (T<sub>case</sub> = 25°C, V<sub>cc</sub> = 24V)

| Symbol  | Characteristics                                     | Test Conditions   | CA6520           |
|---------|-----------------------------------------------------|-------------------|------------------|
| Gain    | Gain                                                | 50 MHz            | 20.0±0.5 dB      |
| B.W.    | Frequency Response                                  | 40-550 MHz        | ±0.3 dB          |
| S.C.E.  | Slope Cable Equivalent                              | 40-550 MHz        | +0.3 to +1.5 dB  |
| X-Mod   | Cross Modulation<br>77 Channels Flat @ 44 dBmV      | CH 2              | -66 dB           |
| S.O.    | Second Order @ 50 dBmV                              | CH 2, H5, H14     | -70 dB           |
| C.T.B.  | Composite Triple Beat<br>77 Channels Flat @ 44 dBmV | CH H39            | -63 dB           |
| N.F.    | Noise Figure                                        | 50 MHz<br>550 MHz | 5.0 dB<br>7.5 dB |
| R.L.    | Return Loss Input/Output                            | 40-550 MHz        | 18 dB            |
| P. Req. | Power Requirement                                   | 24V               | 425 mA (Typ.)    |

### Absolute Maximum Ratings

| Symbol          | Characteristics              | CA6520          |
|-----------------|------------------------------|-----------------|
| V <sub>cc</sub> | Supply Voltage               | 28V             |
| P <sub>IN</sub> | RF Power Input               | +63 dBmV        |
| T <sub>st</sub> | Storage Temperature          | -40°C to +100°C |
| T <sub>op</sub> | Operating Temperature (Sink) | -20°C to +100°C |

### Pin Configuration

