

CA3022

VIDEO AND WIDE-BAND AMPLIFIER

General-purpose amplifier used in gain-controlled linear amplifier, AM/FM if amplifier, video amplifier, and limiter applications. 12-lead "TO-5" package; Outline No. 2. For schematic diagrams and characteristics curves, see Figs. 119 through 133. For maximum ratings, refer to type CA3021.

TYPICAL CHARACTERISTICS (At ambient temperature = 25°C, $V_{CC} = +6V$, $V_{EE} = 0$)

| | | | |
|---|-----------|----------|-----------|
| Device Dissipation | P_T | 12.5 | mW |
| Quiescent Output Voltage | V_O | 1.9 | V |
| AGC Source Current ($V_{AGC} = 6V$) | I_{AGC} | 0.8 | mA |
| Voltage Gain ($f = 2.5$ MHz) | A | 57 | dB |
| -3-dB Bandwidth | BW | 7.5 | MHz |
| Input Resistance ($f = 5$ MHz) | R_{in} | 1300 | Ω |
| Input Capacitance ($f = 5$ MHz) | C_{in} | 18 | pF |
| Output Resistance ($f = 5$ MHz) | R_{out} | 120 | Ω |
| Noise Figure ($f = 1$ MHz) | NF | 4.4 | dB |
| AGC Range ($f = 5$ MHz) | AGC | 33 | dB |
| Useful Frequency Range | | dc to 20 | MHz |
| Maximum Output Voltage ($f = 5$ MHz) | v_{out} | 0.7 | V_{rms} |