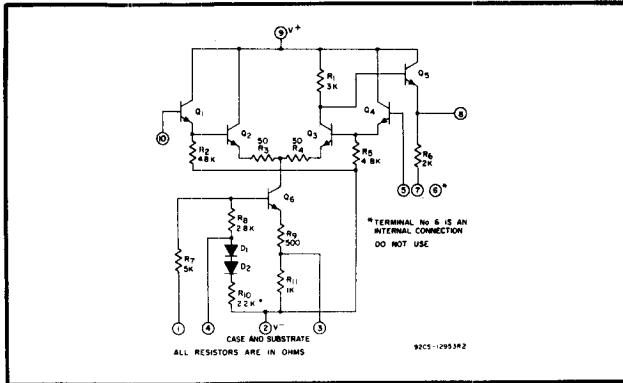


IF Amplifier

CA3002



Applications and Features

- AM detector
- Communications equipment
- IF and video amplifier
- Product detector
- Schmitt trigger
- Frequency range: dc to 15 MHz

Electrical Characteristics at $T_A = 25^\circ\text{C}$

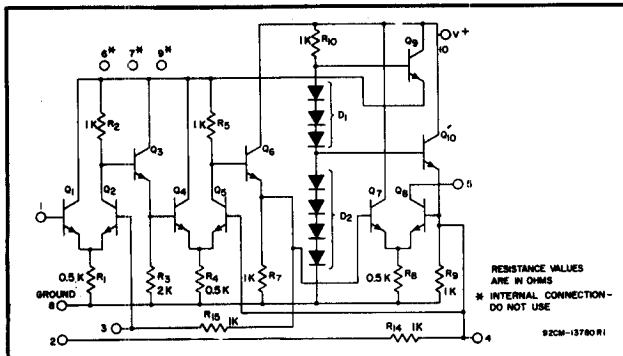
Voltage Gain at 1.75MHz	19	dB min.
Noise Figure at 1.75MHz	8	dB max.
AGC Range at 1.75MHz	60	dB min.
Input Impedance at 1.75MHz	100	$k\Omega$ typ.
Output Impedance at 1.75MHz	70	Ω typ.
Bandwidth (-3dB point)	11	MHz typ.

Package	Suffix	T_A ($^\circ\text{C}$)
10-Lead TO-5 Chip	None H	-55 to 125 Page 59

File No. 123; ICAN-5036*
High-Reliability Version, See Page 41

FM IF Amplifiers

CA3011
CA3012



Applications and Features

- General-purpose linear amplifiers
- IF amplifiers
- Sense amplifiers
- The CA3012 is like the CA3011 except for Max. dc Supply Voltage: CA3011, 7.5; CA3012, 10V

Electrical Characteristics at $T_A = 25^\circ\text{C}$

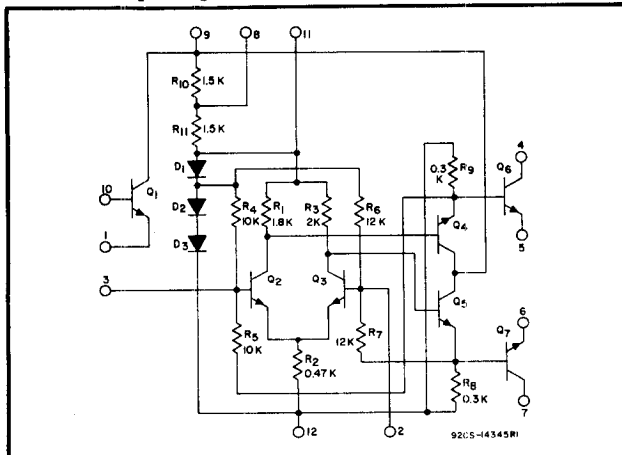
Total Device Dissipation at $V_{CC} = 7.5\text{V}$	187	mW max.
Voltage Gain:		
at 4.5MHz	60	dB min.
at 10.7MHz	55	dB min.
Input Limiting Voltage (knee)		
at 10.7MHz	600	μV typ.

Package	Suffix	T_A ($^\circ\text{C}$)
10-Lead TO-5 Chip (CA3012)	None H	-55 to 125 Page 59

File No. 128*

Multipurpose Wide-Band Power Amplifiers

CA3020
CA3020A



Applications and Features

- AF power amplifiers for portable and fixed sound and communications systems
- Fan-in and fan-out amplifiers for computer logic circuits
- Lamp-control amplifiers
- Motor-control amplifiers
- Power multivibrators
- Power switches
- Servo-control amplifiers
- Transmission-line driver ampl. (balanced and unbalanced)

- Video power amplifiers
- Wide-band linear mixers
- Wide frequency range: up to 8MHz with resistive loads
- The CA3020A is like the CA3020 except for the following: Single power supply for class B operation with transformer—CA3020, 3 to 9V; CA3020A, 3 to 12V
- High-power output—class B ampl. CA3020, 0.55W typ. at 9V; CA3020A, 1W typ. at 12V

Typical Electrical Characteristics at $T_A = 25^\circ\text{C}$

Power Gain	75	dB
Sensitivity: for $P_{OUT} = 400\text{mW}$ (CA3020)	35	mV
for $P_{OUT} = 800\text{mW}$ (CA3020A)	50	mV
Bandwidth (-3dB point)	8	MHz
Input Resistance	1	$k\Omega$
Signal-to-Noise Ratio: CA3020	70	dB
CA3020A	66	dB

Package	Suffix	T_A ($^\circ\text{C}$)
12-Lead TO-5 Chip (CA3020)	None H	-55 to 125 Page 59

File No. 339 ICAN-5766*
High-Reliability Version, See Page 41

* Refer to indicated File No. for data bulletin and where given to indicated ICAN No. for application note.