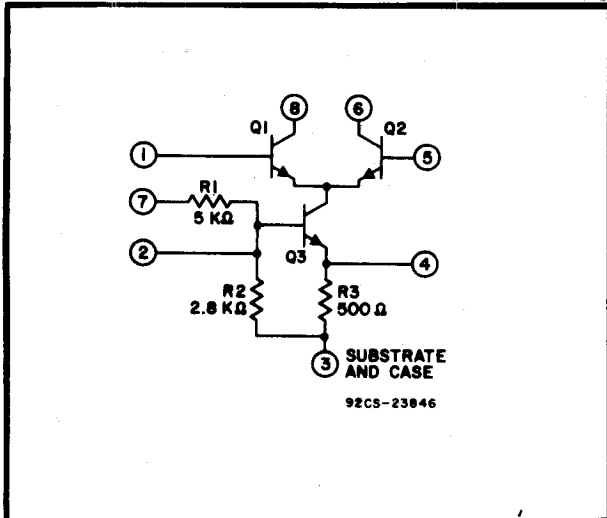


Differential/Cascode Amplifiers

CA3028A
CA3028B
CA3053



Applications and Features

Balanced agc capability
Balanced differential amplifier
Converter in the commercial FM band
DC, audio and sense amplifiers
Mixer
Oscillator
RF and if amplifiers (differential or cascode)

Limiter

Frequency range (operating):
to 120MHz — CA3028A, CA3028B
to 10.7MHz — CA3053
Single- and dual-ended operation
Wide operating-current range
The CA3028B is like the CA3028A but will provide premium performance in critical dc and differential amplifier applications

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

	CA3028A	CA3028B	CA3053	
Input Offset Voltage:				
with 6V supply	—	5	—	mV max.
with 12V supply	—	5	—	mV max.
Input Offset Current:				
with 6V supply	—	5	—	μA max.
with 12V supply	—	6	—	μA max.
Power Gain:				
at 100MHz (cascode)	20	20	—	dB typ.
at 10.7MHz (cascode)	39	39	39	dB typ.
Noise Figure at 100MHz (cascode)	7.2	7.2	—	dB typ.
Bandwidth (—3dB point)	—	7.3	—	MHz typ.

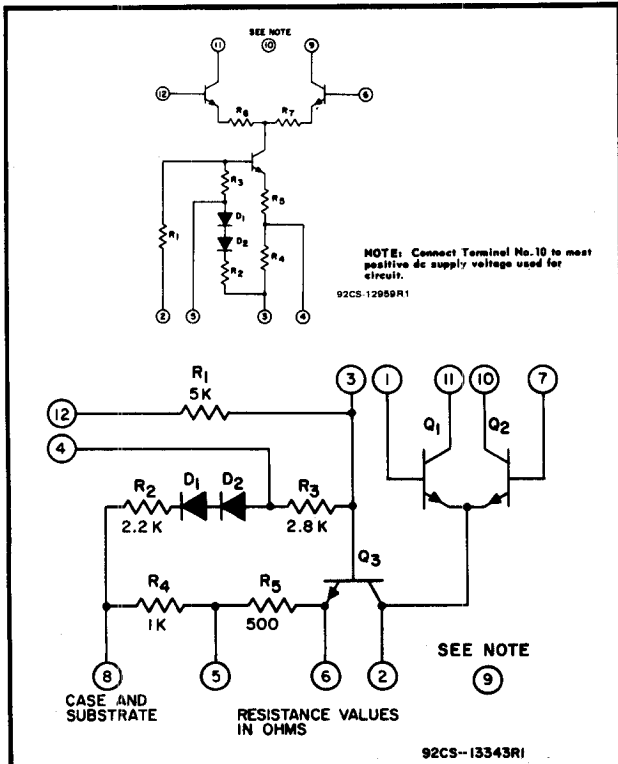
Package	Suffix	T_A ($^\circ\text{C}$)
8-Lead TO-5	None	—55 to +125
8-Lead TO-5 DIL-CAN	S	—55 to +125
8-Lead Frit-Seal	F	—55 to +125
Beam Lead (CA3028A)	L	Page 59
Chip (CA3028A)	H	Page 59

File No. 382; ICAN-5337*

High-Reliability Version (CA3028B) See Page 41

RF Amplifiers

CA3004
CA3005
CA3006



Applications and Features

AGC
Cascade amplifier
Detector
Limiter
Mixer
Modulator
Operation from dc to 100 MHz
RF, if, and video-frequency capability
Wide- and narrow-band amplifier
Push-pull input and output

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

	CA3004	CA3005	CA3006	
Input Offset Voltage	1.7	2.6	0.8	mV typ.
Input Offset Current	0.125	1.4	1.4	μA typ.
Power Gain at 100MHz	12	16	16	dB typ.
Noise Figure at 100MHz	6.3	7.8	7.8	dB typ.
AGC Range at 1.75MHz	—60	—60	—60	dB min.

Package	Suffix	T_A ($^\circ\text{C}$)
12-Lead TO-5 Chip (CA3005)	None H	—55 to +125 Page 59

File Nos. 124, 125; ICAN-5022, 5269* High-Reliability Versions (CA 3004, CA3006), See Page 41

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