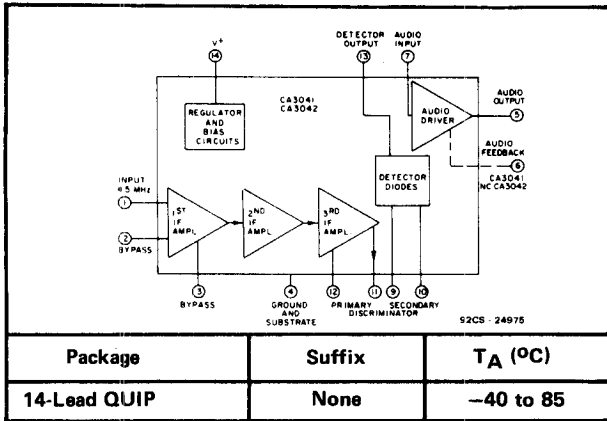


TV SOUND IF CIRCUITS SUMMARIZED							
Type	Characteristics						
	No. of IF Lim. Stages	Input Lim. Knee	Detector Type	Recovered Audio at Det.	Electronic Attenuator	Audio Voltage Gain	Audio Output Res.
CA2111A	3	250 $\mu$ V	Quadrature	720mV	No		2K $\Omega$
CA3041	3	150 $\mu$ V	Discrim.	250mV	No	40dB	30K $\Omega$
CA3042	3	150 $\mu$ V	(2 coils)	250mV	No	10dB	250 $\Omega$
CA3065	3	200 $\mu$ V	Diff. Peak (1 coil)	750mV	80dB	20dB	270 $\Omega$

**Wide-Band Amplifier/Limiter/FM Detector/Audio Drivers**

CA3041

CA3042



**Applications and Features**

For sound sections of TV receivers using:  
 Tube-type AF output amplifiers, (CA3041)  
 Transistor-type AF output amplifiers, (CA3042)

Inherent high stability, internally shielded  
 Internal Zener-diode-regulated voltage supply  
 Low total harmonic distortion (THD) High-audio-drive capability  
 Wide frequency range: < 100kHz to > 20MHz

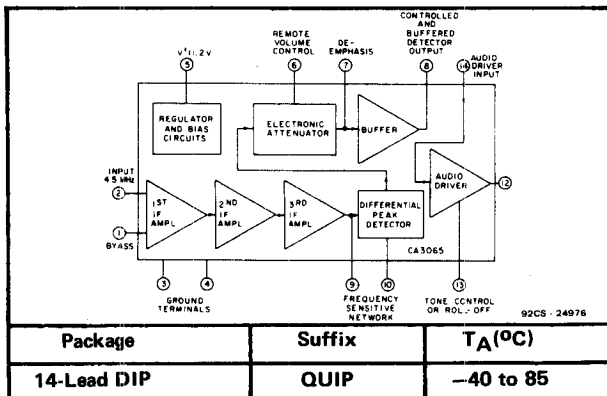
**Typical Electrical Characteristics at T<sub>A</sub> = 25°C**

Voltage Gain:		
IF Amplifier (both types) at 4.5MHz	67	dB
AF Driver (CA3041) at 1kHz	41	dB
AF Driver (CA3042) at 1kHz	30	dB
Input Limiting Voltage (knee) at 4.5MHz	150	$\mu$ V rms
AM Rejection at 4.5MHz	58	dB
Total Harmonic Distortion at 4.5MHz	1.5	%

File Nos. 318, 319\*; ICAN-5841, 5765\*

**TV Sound System IF Amplifier/Limiter/FM Detector/Electronic Attenuator/Audio Driver**

CA3065



**Applications and Features**

Sound IF amplifier  
 Differential peak (FM) detector: requires one single-tuned coil  
 Electronic attenuator: replaces sound system volume control  
 Audio driver  
 Internal Zener-diode supply-voltage regulator  
 Audio drive capability: 6mA p-p  
 Undistorted audio output voltage: 7V p-p  
 Low total harmonic distortion

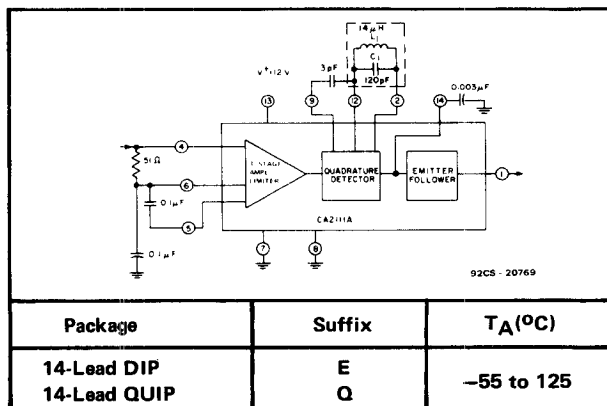
**Typical Electrical Characteristic at T<sub>A</sub> = 25°C**

Audio Voltage Gain	20	dB
Input Limiting Voltage at 4.5MHz	200	$\mu$ V
Recovered AF Voltage	0.75	V rms
AM Rejection at 4.5MHz	50	dB
Audio Attenuation	80	dB

File No. 412\*

**TV or FM IF Amplifier-Limiter/Quadrature Detector**

CA2111A



**Applications and Features**

Sound if amplifier and quadrature detector for both TV and FM receiver applications  
 Single-coil tuning  
 Direct replacement for types ULN-2111A and MC1357

**Typical Dynamic Characteristics at T<sub>A</sub> = 25°C, V<sup>+</sup> = 12V**

	fo -	4.5MHz	5.5MHz	10.7MHz	Units
Amplifier Voltage Gain (V <sub>IN</sub> ≤ 50 $\mu$ V rms)	$\Delta f$ -	$\pm 25$ kHz	$\pm 50$ kHz	$\pm 75$ kHz	
AM Rejection (V <sub>IN</sub> = 10mV rms)		36	40	45	dB
Input Limiting Voltage		250	250	400	$\mu$ V rms
Recovered AF Voltage		720	1200	500	mV rms
Total Harmonic Distortion		3	5	1.4	%

File No. 612\*

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