

CA3011

FM IF AMPLIFIER

Special-purpose amplifier used in if amplifiers for FM broadcast and TV sound applications. 10-lead "TO-5" package; Outline No. 1. For schematic diagram and characteristics curves, see Figs. 253, 255 through 258, and 260.

MAXIMUM RATINGS

Positive DC Supply Voltage	V_{CC}	+10	V
Recommended Minimum DC Supply Voltage (V_{CC}) ...		5.5	V
Input Signal Voltage (Single-ended)		± 3	V
Total Device Dissipation		300	mW
Temperature Range:			
Operating		-55 to 125	$^{\circ}\text{C}$
Storage		-65 to 200	$^{\circ}\text{C}$

TYPICAL CHARACTERISTICS (At ambient temperature = 25 $^{\circ}\text{C}$,

$$V_{CC} = +7.5\text{V})$$

Device Dissipation	P_T	120	mW
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TYPICAL CHARACTERISTICS (continued)

Voltage Gain:			
f = 1 MHz	A	70	dB
f = 4.5 MHz	A	67	dB
f = 10.7 MHz	A	61	dB
Parallel Input Resistance (f = 4.5 MHz)	R _{in}	3	kΩ
Parallel Input Capacitance (f = 4.5 MHz)	C _{in}	7	pF
Parallel Output Resistance (f = 4.5 MHz)	R _{out}	31.5	kΩ
Parallel Output Capacitance (f = 4.5 MHz)	C _{out}	4.2	pF
Noise Figure (f = 4.5 MHz)	NF	8.7	dB
Useful Frequency Range	100 kHz to	> 20 MHz	
Input Limiting Voltage, Knee (f = 4.5 MHz)	V _{i(lim)}	300	μV