

CA3007

AF AMPLIFIER

Special-purpose audio amplifier used in audio driver applications, sound systems, and communications equipment. 12-lead "TO-5" package; Outline No. 2. For schematic diagram, see Fig. 89.

MAXIMUM RATINGS

Positive DC Supply Voltage	V_{CC}	+10	V
Negative DC Supply Voltage	V_{EE}	-10	V
Input Signal Voltage:			
Single-ended		± 2.5	V
Common-mode		± 2.5	V
Total Device Dissipation		300	mW
Temperature Range:			
Operating		-55 to 125	°C
Storage		-65 to 200	°C

TYPICAL CHARACTERISTICS (At ambient temperature = 25°C,

$$V_{CC} = +6V, V_{EE} = -6V)$$

Input Unbalance Voltage	V_{IU}	0.57	mV
Input Unbalance Current	I_{IU}	0.57	μA
Input Bias Current	I_I	11	μA
Quiescent Operating Voltage	V_s or V_{10}	0.87	V
Device Dissipation	P_T	30	mW
Power Gain (f = 1 kHz)	G_P	22	dB
Total Harmonic Distortion (f = 1 kHz)	THD	0.28	%
Useful Frequency Range		dc to 20	kHz
Common-Mode Rejection Ratio (f = 1 kHz)	CMR	77	dB
Input Impedance (f = 1 kHz)	Z_{in}	4	k Ω
Output Impedance (f = 1 kHz)	Z_{out}	60	Ω