

CA3033A

OPERATIONAL AMPLIFIER

General-purpose amplifier used in narrow-band and bandpass amplifier, feedback amplifier, dc and video amplifier, multivibrator, oscillator, comparator, and servo driver applications. 14-lead TO-116 dual-in-line ceramic package; Outline No. 7.

MAXIMUM RATINGS

Input Signal Voltage	± 10	V
Device Dissipation	600	mW
Temperature Range:		
Operating	-55 to 125	°C
Storage	-65 to 200	°C

TYPICAL CHARACTERISTICS (At ambient temperature = 25°C, $V_{CC} = +18V$, $V_{EE} = -18V$)

Input Offset Voltage	V_{IO}	2.86	mV
Input Offset Current	I_{IO}	9	nA
Input Bias Current	I_I	103	nA
Input Offset Voltage Sensitivity:			
Positive	$\Delta V_{IO}/\Delta V_{CC}$	0.2	mV/V
Negative	$\Delta V_{IO}/\Delta V_{EE}$	0.2	mV/V
Device Dissipation	P_T	290	mW
Open-Loop Differential Voltage Gain ($f = 1$ kHz)	A_{OL}	91	dB

TYPICAL CHARACTERISTICS (continued)

Open-Loop -3 -dB Bandwidth	BW_{OL}	110	kHz
Common-Mode Rejection Ratio ($f = 1$ kHz)	CMR	103	dB
Common-Mode Input-Voltage Range ($f = 1$ kHz)	V_{CMR}	+7, -12	V
Input Impedance ($f = 1$ kHz)	Z_{in}	1	M Ω
Output Current ($R_L = 500\Omega$, $f = 1$ kHz)	I_o	64	mA _{p-p}
Maximum Output-Voltage Swing ($f = 1$ kHz)	$V_o(P-P)$	32	V _{p-p}
Slew Rate	SR	10	V/ μ S
Power Output ($R_L = 500\Omega$, $f = 1$ kHz)	P_o	255	mW