OPERATIONAL AMPLIFIER CA3033

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} = +12V, V_{EE} = −12V)

Input Offset Voltage	V_{IO}	2.6	mV
Input Offset Current	I_{IO}	5	nA
Input Bias Current	I_I	83	nA
Input Offset Voltage Sensitivity:			
Positive	$\Delta V_{IO}/\Delta V_{CC}$	0.3	mV/V
Negative	$\Delta V_{IO}/\Delta V_{EE}$	0.3	mV/V
Device Dissipation	P_T	120	mW
Open-Loop Differential Voltage Gain (f = 1 kHz)	A_{OL}	84	dB
Open-Loop −3-dB Bandwidth	BW_{OL}	100	kHz
Common-Mode Rejection Ratio	CMR	94	dB
Common-Mode Input-Voltage Range (f = 1 kHz)	V_{CMR}	+5, −9	V
Input Impedance (f = 1 kHz)	Z_{in}	1.5	MΩ
Output Current (R_L = 500Ω, f = 1 kHz)	I_O	44	mA_{p-p}
Maximum Output-Voltage Swing (f = 1 kHz)	V_O(P-P)	21	V_{p-p}
Slew Rate	SR	6	V/μs
Power Output (R_L = 500Ω, f = 1 kHz)	P_O	122	mW