EL2242D Die

T-79-10

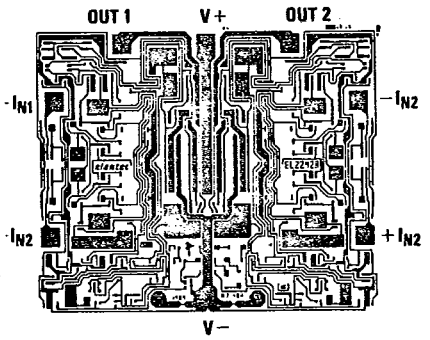
Dual Fast Single-Supply Unity Gain Stable Operational Amplifier

Absolute Maximum Ratings (T_A = 25°C)

V_S	Voltage between V+ and V−	35V
ΔV_{IN}	Differential Input Voltage	36V
	Input Voltage	V+ to V−
	Input Current	5 mA
I_{OP}	Output Current, Peak	50 mA
I_{OC}	Output Current, Continuous	30 mA
T_J	Maximum Junction Temperature	175°C

Important Note:
For AC electrical characteristics, refer to the typical electrical table and performance curves in the package data sheet. These characteristics are guaranteed but not tested in die form. Unless otherwise noted, all tests are pulsed tests, therefore $T_J = T_C = T_A$.

Test Level	Test Procedure
I	100% production tested in wafer form. See remarks under Electrical Testing in the General Die section.



DIE SIZE: 86 x 72 MILS

DC Electrical Characteristics V_S = ±15V, R_L = 1 kΩ, T_A = 25°C, unless otherwise specified

Parameter	Description	Min	Typ	Max	Test Level	Units
V_{OS}	Offset Voltage		2	5	I	mV
I_B	Bias Current		0.5	0.7	I	µA
I_{OS}	Offset Current		0.01	0.1	I	µA
V_{CM}+	Positive Common Mode Range	±12	13.3		I	V
V_{CM}−	Negative Common Mode Range	−15	−15.3		I	V
A_{VOL}	Large Signal Voltage Gain (Note 1)	150	300		I	V/mV
CMRR	Common-Mode Rejection Ratio (Note 2)	80			I	dB
V_O	Output Voltage Swing (Note 4)	±12	±13.5		I	V
		±14.98	±15		I	V
I_O	Output Current (Note 5)	±25	±50		I	mA
I_S	Supply Current (Both Amplifiers)		8.2	10	I	mA
PSRR	Power Supply Rejection Ratio (Note 3)	76	95		I	dB

Note 1: V_O = ±10V.
Note 2: Two tests are performed. V_{CM} = 0V to +12V and V_{CM} = 0V to −12V.
Note 3: Two tests are performed. V+ = +3V, and V− is changed from −2V to −27V. V− = −2V, and V+ is changed from +3V to +28V.
Note 4: R_L is connected to V−.
Note 5: The inputs are over driven by ±15V; R_L = 100Ω.