

# EL2224D Die

## Dual, 60 MHz, Unity Gain Stable Operational Amplifier

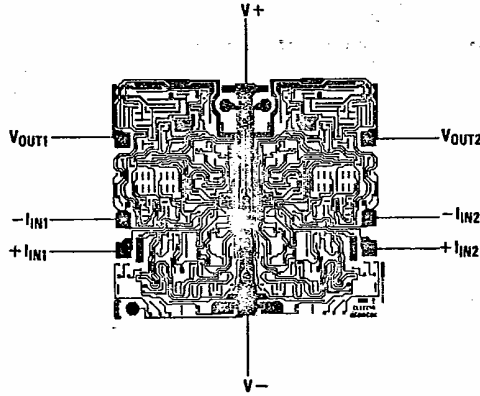
T-79-25

### Absolute Maximum Ratings ( $T_A = 25^\circ\text{C}$ )

$V_S$	Voltage between $V+$ and $V-$	35V
$\Delta V_{IN}$	Differential Input Voltage	6V
$I_{OP}$	Output Current, Peak	50 mA
$I_{OC}$	Output Current, Continuous	25 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: 85 x 77 MILS

### DC Electrical Characteristics $V_S = \pm 15V, R_L = 2\text{ k}\Omega, T_A = 25^\circ\text{C}$

Parameter	Description	Min	Typ	Max	Test Level	Units
$V_{OS}$	Offset Voltage		0.5	5	I	mV
$I_B$	Bias Current		1.5	4	I	$\mu\text{A}$
$I_{OS}$	Offset Current		0.2	2.0	I	$\mu\text{A}$
$V_{CM}$	Common Mode Range	$\pm 10$	$\pm 12$		I	V
$A_{VOL}$	Large Signal Voltage Gain (Note 1)	4k	6k		I	V/V
CMRR	Common-Mode Rejection Ratio (Note 2)	70	80		I	dB
$V_O$	Output Voltage Swing	$\pm 11$	$\pm 12.5$		I	V
$I_O$	Output Current		$\pm 50$	$\pm 70$	I	mA
$I_S$	Supply Current		9.5	13	I	mA
PSRR	Power Supply Rejection Ratio (Note 3)	60	75		I	dB

Note 1:  $V_O = \pm 10V$ .

Note 2: Two tests are performed.  $V_{CM} = 0V$  to  $+10V$  and  $V_{CM} = 0V$  to  $-10V$ .

Note 3: Two tests are performed.  $V+ = +15V$ , and  $V-$  is changed from  $-5V$  to  $-15V$ .  $V- = -15V$ , and  $V+$  is changed from  $+5V$  to  $+15V$ .