

EL2223D Die

Dual, 500 MHz, High Speed Operational Amplifier

EL2223D

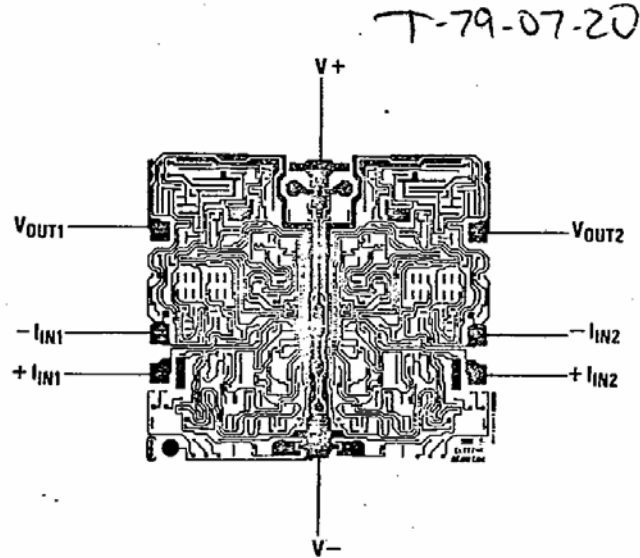
Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$)

| | | |
|-----------------|-------------------------------|-------|
| V_S | Voltage between $V+$ and $V-$ | 35V |
| ΔV_{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 71 MILS

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

| 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 | μA |
| I_{OS} | Offset Current | | 0.2 | 2 | I | μA |
| V_{CM} | Common Mode Range | ± 10 | ± 12 | | I | V |
| A_{VOL} | Large Signal Voltage Gain (Note 1) | 20k | 40k | | I | V/V |
| CMRR | Common-Mode Rejection Ratio (Note 2) | 70 | 90 | | I | dB |
| V_O | Output Voltage Swing | ± 11 | ± 12.5 | | I | V |
| I_O | Output Current | | ± 50 | ± 70 | I | mA |
| I_S | Supply Current | | 9.5 | 13 | I | mA |
| PSRR | Power Supply Rejection Ratio (Note 3) | 70 | 90 | | I | dB |

Note 1: $V_O = \pm 10\text{V}$.

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

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

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