

EHA0-2510-6 Die

High Slew Rate Operational Amplifier Die

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

V_S	Supply Voltage	$\pm 20\text{V}$
V_{IN}	Differential Input Voltage	$\pm 15\text{V}$
I_{OUT}	Peak Output Current	5 mA
T_J	Maximum Junction Temperature	175°C
T_A	Operating Temperature Range	-55° to $+125^\circ\text{C}$
T_{SR}	Storage Temperature	-65°C to $+150^\circ\text{C}$

Important Note:

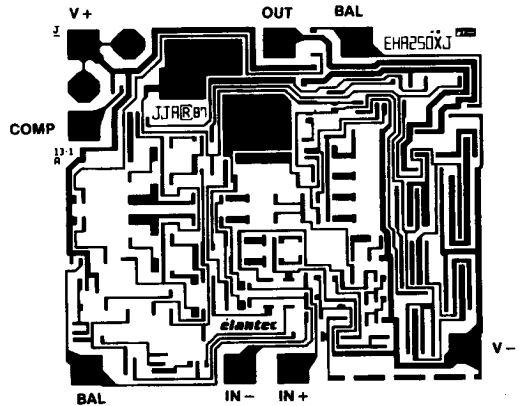
For AC electrical characteristics, refer to the typical electrical table and performance curves in the package data sheet. These characteristics are guaranteed but not tested in die form. Unless otherwise noted, all tests are pulsed tests, therefore $T_J = T_C = T_A$.

Test Level

I

Test Procedure

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



DIE SIZE: 66 x 61 MILS

DC Electrical Characteristics

$V_S = \pm 15\text{V}$, $R_S = 50\Omega$, $R_L = 100\text{ k}\Omega$, $V_{CM} = 0\text{V}$, $V_{OUT} = 0\text{V}$, $T_A = 25^\circ\text{C}$

Parameter	Description	Test Conditions	Min	Typ	Max	Test Level	Units
V_{OS}	Offset Voltage			4	8	I	mV
I_B	Bias Current			100	200	I	nA
I_{OS}	Offset Current			25	25	I	nA
V_{CMR}	Common Mode Rate		± 10			I	V
CMRR	Common Mode Rejection Ratio (Note 2)	$\Delta V_{CM} = \pm 10\text{V}$	80	90		I	dB
PSRR	Power Supply Rejection Ratio (Note 3)	$\Delta V_S = \pm 5\text{V}$	80	90		I	dB
A_{VOL}	Large Signal Voltage Gain (Note 4)	$R_L = 2\text{ k}\Omega$, $V_{OUT} = \pm 10\text{V}$	15	25		I	V/mV
V_{OUT}	Output Voltage Swing	$R_L = 2\text{ k}\Omega$	± 10	± 12		I	V
I_{OUT}	Output Current	$V_{OUT} = \pm 10\text{V}$	± 10	± 20		I	mA
I_{CC}	Supply Current (Note 5)			4	6	I	mA

Note 1: Both input currents I_{B+} and I_{B-} , are tested individually.

Note 2: For CMRR+, $V_{CM} = 0\text{V}$ to $+10\text{V}$ and for CMRR-, $V_{CM} = 0\text{V}$ to -10V .

Note 3: For PSRR+, $V_{S+} = +10\text{V}$ to $+20\text{V}$ with $V_{S-} = -15\text{V}$.

For PSRR-, $V_{S-} = -10\text{V}$ to -20V with $V_{S+} = +15\text{V}$.

Note 4: For A_{VOL+} , $V_{OUT} = 0\text{V}$ to $+10\text{V}$ and for A_{VOL-} , $V_{OUT} = 0\text{V}$ to -10V .

Note 5: Both positive and negative supply current, I_{CC+} and I_{CC-} , are tested.