



MICROCIRCUIT DATA SHEET

MNLF442M-X REV 0BL

Original Creation Date: 06/21/95
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DUAL LOW POWER JFET INPUT OPERATIONAL AMPLIFIER

Industry Part Number

LF442

NS Part Numbers

LF442MH/883

Prime Die

LF442

Processing

MIL-STD-883, Method 5004

Quality Conformance Inspection

MIL-STD-883, Method 5005

Subgrp	Description	Temp (°C)
1	Static tests at	+25
2	Static tests at	+125
3	Static tests at	-55
4	Dynamic tests at	+25
5	Dynamic tests at	+125
6	Dynamic tests at	-55
7	Functional tests at	+25
8A	Functional tests at	+125
8B	Functional tests at	-55
9	Switching tests at	+25
10	Switching tests at	+125
11	Switching tests at	-55

Electrical Characteristics

DC PARAMETERS:

(The following conditions apply to all the following parameters, unless otherwise specified.)

DC: $V_s = \pm 15V$, $V_{cm} = 0$, $R_s = 0$

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
I _{cc}	Supply Current					500	uA	1, 2, 3
V _{io}	Input Offset Voltage	$R_s = 10K\ \Omega$			-5	5	mV	1
					-7.5	7.5	mV	2, 3
±I _{ib}	Input Bias Current					0.1	nA	1
±I _{ib}	Input Bias Current					20	nA	2
I _{io}	Input Offset Current				-0.05	0.05	nA	1
					-10	10	nA	2
CMRR	Common Mode Rejection Ratio	$V_{cm} = \pm 11V$, $R_s = 10K$			70		dB	1, 2, 3
PSRR	Power Supply Rejection Ratio	$V_{s+} = +15V$ to $+6V$, $V_{s-} = -15V$			70		dB	1, 2, 3
		$V_{s-} = -15V$ to $-6V$, $V_{s+} = +15V$			70		dB	1, 2, 3
+AVS	Large Signal Voltage Gain	$V_o = 0V$ to $+10V$, $R_l = 10K\ \Omega$	2		25		V/mV	4
			2		15		V/mV	5, 6
-AVS	Large Signal Voltage Gain	$V_o = 0V$ to $-10V$, $R_l = 10K\ \Omega$	2		25		V/mV	4
			2		15		V/mV	5, 6
V _{o±}	Output Voltage Swing	$V_{in} = \pm 11V$, $R_l = 10K$			12	-12	V	4, 5, 6
V _{cm}	Input Common Mode Voltage Range		1		±11		V	4, 5, 6

AC PARAMETERS:

(The following conditions apply to all the following parameters, unless otherwise specified.)

AC: $V_s = \pm 15V$, $V_{cm} = 0$, $R_s = 0$

Sr+	Slew Rate	$V_{out} = -5V$ to $+5V$			0.6		V/μs	7
Sr-	Slew Rate	$V_{out} = +5V$ to $-5V$			0.6		V/μs	7
Gbw	Gain Band Width	(NO SUBGROUP)			0.6		MHz	

Note 1: Parameter tested go-no-go only, guaranteed by CMRR test.

Note 2: V/mV in units column is equivalent to K in datalog.

Graphics and Diagrams

GRAPHICS#	DESCRIPTION
H08BR	(blank)

See attached graphics following this page.