

MNLM102-X REV 0BL

 Original Creation Date: 06/22/95
 Last Update Date: 03/17/97
 Last Major Revision Date: 06/22/95

VOLTAGE FOLLOWER
Industry Part Number

LM102

NS Part Numbers

LM102H/883

Prime Die

LM110

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: $V_s = \pm 15V$, $R_s = 3K\ \Omega$, $V_{in} = 0V$

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
Vio	Input Offset Voltage					5	mV	1
						7.5	mV	2, 3
		$V_{cc} = \pm 18V$				5	mV	1
		$V_{cc} = \pm 18V$				7.5	mV	2, 3
		$V_{cc} = \pm 5V$				5	mV	1
		$V_{cc} = \pm 5V$				7.5	mV	2, 3
Iib	Input Bias Current	$V_{in} = +10V$				10	nA	1, 2
						20	nA	3
		$V_{in} = -10V$				10	nA	1, 2
						20	nA	3
		$V_{cc} = \pm 18V$, $V_{in} = +10V$				10	nA	1, 2
		$V_{cc} = \pm 18V$, $V_{in} = +10V$				20	nA	3
		$V_{cc} = \pm 18V$, $V_{in} = -10V$				10	nA	1, 2
		$V_{cc} = \pm 18V$, $V_{in} = -10V$				20	nA	3
		$V_{cc} = \pm 5V$, $V_{in} = +2V$				10	nA	1, 2
		$V_{cc} = \pm 5V$, $V_{in} = +2V$				20	nA	3
		$V_{cc} = \pm 5V$, $V_{in} = -2V$				10	nA	1, 2
		$V_{cc} = \pm 5V$, $V_{in} = -2V$				20	nA	3
Avs	Large Signal Gain Voltage	$V_{out} = \pm 10V$, $R_L = 8K\ \Omega$			0.999		V/V	1
		$V_{out} = \pm 10V$, $R_L = 10K\ \Omega$				0.999	V/V	2, 3
PSRR	Power Supply Rejection Ratio	$\pm 18V$, $\geq V_{cc} \geq \pm 5V$			60		dB	1, 2, 3
+Vout	Output Voltage Swing	$R_L = 10K\ \Omega$, $V_{in} = +15V$			10		V	1, 2, 3
-Vout	Output Voltage Swing	$R_L = 10K\ \Omega$, $V_{in} = -15V$				-10	V	1, 2, 3
Icc	Power Supply Current	$V_{cc} = \pm 18V$				5.5	mA	1
		$V_{cc} = \pm 18V$				4	mA	2
Rout	Output Resistance	$R_L = 8K\ \Omega$	1			2.5	Ω	1
Rin	Input Resistance		1		10		G Ω	1

Note 1: Parameter tested go-no-go only.

Graphics and Diagrams

GRAPHICS#	DESCRIPTION
09384HN or 09557HN	(blank)
MKT-H08CRE	(blank)

See attached graphics following this page.