

MNLM194-X REV 0BL

 Original Creation Date: 09/13/95
 Last Update Date: 12/15/98
 Last Major Revision Date: 09/13/95

SUPERMATCH PAIR
Industry Part Number

LM194

NS Part Numbers

LM194H/883*

Prime Die

LM194

Controlling Document

5962-8777701XA*

Processing

MIL-STD-883, Method 5004

Quality Conformance Inspection

MIL-STD-883, Method 5004

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

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
hFE	Current Gain	VCB = 0V, IC = 1mA			0.50		K	1
		VCB = 40V, IC = 1mA			0.50		K	1
					0.25		K	2, 3
		VCB = 0V, IC = 100uA			0.40		K	1
		VCB = 40V, IC = 100uA			0.40		K	1
		VCB = 0V, IC = 10uA			0.30		K	1
		VCB = 40V, IC = 10uA			0.30		K	1
		VCB = 0V, IC = 1uA			0.20		K	1
		VCB = 40V, IC = 1uA			0.20		K	1
hFE MATCH	Gain Match	VCB = 0V, IC = 1mA			-2	2	%	1
		VCB = 40V, IC = 1mA			-2	2	%	1
					-6	6	%	2, 3
		VCB = 0V, IC = 100uA			-2	2	%	1
		VCB = 40V, IC = 100uA			-2	2	%	1
		VCB = 0V, IC = 10uA			-2	2	%	1
		VCB = 40V, IC = 10uA			-2	2	%	1
VBE0	Emitter - Base Offset Voltage	VCB = 0V, IC = 1mA			-50	50	uV	1
		VCB = 40V, IC = 1mA			-50	50	uV	1
					-230	230	uV	2, 3
		VCB = 0V, IC = 0.3mA			-50	50	uV	1
		VCB = 0V, IC = 100uA			-50	50	uV	1
		VCB = 40V, IC = 100uA			-50	50	uV	1
					-250	250	uV	2, 3
		VCB = 0V, IC = 10uA			-50	50	uV	1
		VCB = 40V, IC = 10uA			-50	50	uV	1
		VCB = 0V, IC = 1uA			-50	50	uV	1
		VCB = 40V, IC = 1uA			-50	50	uV	1

Electrical Characteristics

DC PARAMETERS(Continued)

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
Delta VBE0	Change in Emitter - Base Offset	VCB = 0V to 40V, IC = 1mA			-25	25	uV	1
		VCB = 0V to 40V, IC = 100uA			-25	25	uV	1
		VCB = 0V to 40V, IC = 10uA			-25	25	uV	1
		VCB = 0V to 40V, IC = 1uA			-25	25	uV	1
		VCB = 0V, IC= 1uA to 300uA			-25	25	uV	1
ICCX	Collector-Collector Leakage	VCB = 40V, COLL1 to COLL2			-2	2	nA	1
		VCB = 40V, COLL2 to COLL1			-2	2	nA	1
ICBX	Collector- Base Leakage	VCB = 40V, COLL1 to Base1			-0.25	0.25	nA	1
		VCB = 40V, COLL2 to Base2			-0.25	0.25	nA	1

Graphics and Diagrams

GRAPHICS#	DESCRIPTION
H06CRD	(blank)

See attached graphics following this page.

Revision History

Rev	ECN #	Rel Date	Originator	Changes
0BL	M0001690	12/15/98	Barbara Lopez	Changed: MNLM194-X Rev. 0AL to MNLM194-X Rev. 0BL.