National Semiconductor

MICROCIRCUIT DATA SHEET

MNLM556-X REV 0BL

Original Creation Date: 08/02/95
Last Update Date: 11/12/98
Last Major Revision Date: 08/02/95

DUAL TIMER

Industry Part Number

LM556

NS Part Numbers

LM556J-MIL

Prime Die

LMJ556

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: Vcc = 15V

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
Icc	Supply Current	Vcc = 5V, Rl = Infinity				10	mA	1
						15	mA	2, 3
		Rl = Infinity				22	mA	1
						30	mA	2, 3
		Vcc = 18V, Rl = Infinity				26	mA	1
						35	mA	2, 3
Il	Leakage Output High Pin 1, 13	Vcc = 18V				100	nA	1
Vsat	Pin 1, 13 Sat	Il = 15mA				240	mV	1
						500	mV	2, 3
		Vcc = 4.5V, Il = 4.5mA				80	mV	1
						200	mV	2, 3
Vcont1	Control Voltage Level	Vcc = 5V			2.9	3.8	V	1, 2, 3
Vcont2	Control Voltage Level				9.6	10.4	V	1, 2, 3
Vol1	Output Voltage Drop (Low)	Isink = 10mA				150	mV	1, 2, 3
Vol2	Output Voltage Drop (Low)	Isink = 50mA				500	mV	1, 2, 3
Vol3	Output Voltage Drop (Low)	Isink = 100mA				2.25	V	1, 2, 3
Vol4	Output Voltage Drop (Low)	Vcc = 5V, Isink = 8mA				250	mV	1, 2, 3
Voh1	Output Voltage Drop (High)	Vcc = 5V, Isource = 100mA			3		V	1
					2.75		V	2, 3
Voh2	Output Voltage Drop (High)	Isource = 100mA			13		V	1
					12.75		V	2, 3
Ith	Threshold Current					100	nA	1
						300	nA	2, 3
Vtrig	Trigger Voltage				4.8	5.2	V	1, 2, 3
		Vcc = 5V	1		1.45	1.9	V	1
	Trigger Current					500	nA	1, 2, 3

Electrical Characteristics

DC PARAMETERS(Continued)

(The following conditions apply to all the following parameters, unless otherwise specified.)
DC: Vcc = 15V

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
Vreset	Reset Voltage High	Vreset = 1V	2		10		V	1, 2, 3
Vreset	Reset Voltage Low				0.4	1	V	1
					0.18	1	V	2, 3
Reset	Reset Current					0.4	mA	1
						0.15	mA	2, 3
Vth	Threshold Voltage	Vcc = 15V			9.5	10.5	V	1
					9	11	V	2, 3

Note 1: Guaranteed parameter not tested.
Note 2: Limit tested go-no-go, datalog reading is device output.

Revision History

Rev	ECN #	Rel Date	Originator	Changes
0BL	M0001696	11/12/98	Barbara Lopez	Changed: MNLM556-X Rev. 0AL to MNLM556-X Rev. 0BL.