	<u>. </u>								REVISI	ONS										
LTR						DESCF	IPTIO	N					DA	TE (YF	R-MO-I	DA)		APPR	OVED	
A	Sheet 4, Table I, trigger current; with $V_{DD} = 15$ V, change maximum limit from ± 50 nA to ± 100 nA; with $V_{DD} = 18$ V, change maximum limit from ± 50 nA to ± 100 nA. Sheet 5, Table I, threshold current; with $V_{DD} = 15$ V, change maximum limit from ± 50 nA to ± 100 nA; with $V_{DD} = 18$ V, change maximum limit from ± 50 nA to ± 100 nA; with $V_{DD} = 18$ V, change maximum limit from ± 50 nA to ± 100 nA. Sheet 6, Table I, low level output voltage, device types 03 and 04, with $V_{DD} = 18$ V, change $I_{OL} = 20$ mA to $I_{OL} = 3.2$ mA. Sheet 7, reset current; with $V_{DD} = 15$ V, change maximum value from ± 50 nA to ± 100 nA; with $V_{DD} = 18$ V, change maximum limit from ± 50 nA to ± 100 nA. Sheet 8, figure 1, for device type 03, add case outline "P". Sheet 15, paragraph 6.6, add vendor CAGE number 44720. Changes in accordance with N.O.R. 5962-R054-92.								91-11-27					M. A.	FRYE					
В						add res D.R. 59			el test.					93-0)1-19			M. A.	FRYE	
С		device I, figur				r CAGE	27014	. Make	e chang	ges to 1	.3, 1.4	,		93-0)5-10			M. A.	FRYE	
D	volta	ge > 2/	3 (V _{DD}); char	nge RE	03, 04, SET fr D.R. 59	om "lov	v" to "h						94-0)6-24		M. A. FRYE			
Е	Redr	awn wi	th char	nges.	Techni	cal and	editoria	al chan	ges thre	oughou	it.			94-1	0-28			M. A.	FRYE	
F	Make	e chanç	ge to I _C	EX tes	t for de	vice typ	e 05 a	s speci	fied un	der tab	le I I	ro		98-0	01-06		R. MONNIN			
G		e chanç e I rr		OH and	d V _{OL} t	ests for	device	type 0	5 as sp	ecified	under		00-12-21			R. MONNIN				
Н	Draw	ving up	dated t	o reflee	wing updated to reflect current requirements rrp								04-11-01			R. MONNIN				
J	Upda	ate boil	erplate	parag	raphs t	o currei	nt MIL-F	PRF-38	3535 re	quirem	ents	ro		11-0)2-15			C. SA	FFLE	
THE ORIGINAL	<u> </u>		·		<u> </u>					<u>.</u>	ents	ro		11-0	02-15			C. SA	AFFLE	
	<u> </u>		·		<u> </u>					<u>.</u>	ents	ro		11-0	02-15			C. SA	AFFLE	
THE ORIGINAL	<u> </u>		·		<u> </u>					<u>.</u>	ents	ro		11-0)2-15			C. SA	AFFLE	
THE ORIGINAL REV	<u> </u>		·		<u> </u>					<u>.</u>	ents	ro		11-0	02-15			C. SA	AFFLE	
THE ORIGINAL REV SHEET	_ FIRST		·		<u> </u>					<u>.</u>	ents	ro		11-0	02-15			C. SA	AFFLE	
THE ORIGINAL REV SHEET REV	- FIRST		·							<u>.</u>	J	ro	J	11-0)2-15	J	J	C. SA	J	J
THE ORIGINAL REV SHEET REV SHEET	- FIRST		·				BEEN	REPL	ACED.				 			J 10	J 11			J 14
THE ORIGINAL REV SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A STAN	FIRST		·	RE ¹ RE ¹ SHI		NG HAS	BEEN	REPL	ACED.	J	J	J 6	7 DLA L DLUM		J 9 ANC OHIO	10 MAR D 432	11 RITIMI 218-39	J 12	J	-
THE ORIGINAL REV SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A	- FIRST			RE' RE' SHI PRE GA CHE CHE CH	RAWIN	D BY HN BY S E. B E D BY . A. FRY APPRO	BEEN J J 1	REPL J 2	ACED.		J 5 ROC	J 6 CC	7 DLA L DLUM http		J 9 ANE OHIO	10 MAR	11 218-39 a.mil	J 12 E 990	J 13	-
THE ORIGINAL REV SHEET REV SHEET REV STATUS OF SHEETS PMIC N/A STAN MICRO DRA THIS DRAWIN FOR US DEPAR AND AGEN DEPARTMEN	- FIRST	RD CUIT G WAILA ALL JTS OF THE DEFEN		REY SHI PRE GA CHE CH APP MIQ DRA	RAWIN RAWIN ET PAREI RY ZA ROVE CHAEL	NG HAS	SBEEN	REPL J 2	ACED.	J 4 MIC TIM	J 5 ROC	J 6 CIRCU , MO	7 DLA L DLUM http	J 8 -AND BUS, ://ww INE/ THIC	J 9 ANE OHIO	10 MAR D 432 cc.dla	11 218-39 a.mil	J 12 E 990	J 13	-

1. SCOPE

1.1 <u>Scope</u>. This drawing describes device requirements for MIL-STD-883 compliant, non-JAN class level B microcircuits in accordance with MIL-PRF-38535, appendix A.

1.2 Part or Identifying Number (PIN). The complete PIN is as shown in the following example:



1.2.1 <u>Device type(s)</u>. The device type(s) identify the circuit function as follows:

Device type	Generic number	Circuit function
01	TLC555	CMOS, precision timer, single
02	TLC556	CMOS, precision timer, dual
03	7555	CMOS, low power, precision timer, single
04	7556	CMOS, low power, precision timer, dual
05	LMC555	CMOS, low voltage, precision timer, single

1.2.2 Case outline(s). The case outline(s) are as designated in MIL-STD-1835 and as follows:

Outline letter	Descriptive designator	Terminals	Package style
С	GDIP1-T14 or CDIP2-T14	14	Dual-in-line
G	MACY1-X8	8	Can
Р	GDIP1-T8 or CDIP2-T8	8	Dual-in-line
2	CQCC1-N20	20	Square leadless chip carrier

1.2.3 Lead finish. The lead finish is as specified in MIL-PRF-38535, appendix A.

1.3 Absolute maximum ratings.

Supply voltage (V _{DD}):	
Device types 01-04	18 V dc
Device type 05	15 V dc
Input voltage range	-0.3 V to V _{DD} (+0.3 V)
Output sink current:	
Device types 01 and 02	150 mA
Device types 03 and 04	20 mA
Device type 05	100 mA
Output source current:	
Device types 01 and 02	15 mA
Device types 03 and 04	0.8 mA
Device type 05	10 mA
Storage temperature range	-65°C to +150°C
Lead temperature (soldering, 10 seconds)	
Junction temperature (T _J)	+175°C

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1.3 Absolute maximum ratings - continued.

Power dissipation (P _D): (T _A = +125°C): Device types 01-04: Cases C and 2 Case G Case P Device type 05: Cases C, G, P, and 2	23 mW 420 mW
Thermal resistance, junction-to-case (θ_{JC}):	000 1111
Cases C and P Case G:	28°C/W
Device types 01-04	70°C/W
Device type 05	
Case 2	
Thermal resistance, junction-to-ambient (θ_{JA}):	
Cases C and 2	91°C/W
Device types 01-04	150°C/W
Device type 05	
Case P:	4400000
Device types 01-04	
Device type 05	125-0/00

1.4 Recommended operating conditions.

Supply voltage range (V _{DD}):	
Device types 01-02	+5.0 V dc to +15.0 V dc
Device types 03-04	+5.0 V dc to +18.0 V dc
Device type 05	+1.5 V dc to +15.0 V dc
Ambient operating temperature range (T _A)	-55°C to +125°C

2. APPLICABLE DOCUMENTS

2.1 <u>Government specification, standards, and handbooks</u>. The following specification, standards, and handbooks form a part of this drawing to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATION

MIL-PRF-38535 - Integrated Circuits, Manufacturing, General Specification for.

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-883 -	-	Test Method Standard Microcircuits.
MIL-STD-1835 -	-	Interface Standard Electronic Component Case Outlines.

DEPARTMENT OF DEFENSE HANDBOOKS

MIL-HDBK-103 - List of Standard Microcircuit Drawings. MIL-HDBK-780 - Standard Microcircuit Drawings.

(Copies of these documents are available online at https://assist.daps.dla.mil/quicksearch/ or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

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2.2 <u>Order of precedence</u>. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 <u>Item requirements</u>. The individual item requirements shall be in accordance with MIL-PRF-38535, appendix A for non-JAN class level B devices and as specified herein. Product built to this drawing that is produced by a Qualified Manufacturer Listing (QML) certified and qualified manufacturer or a manufacturer who has been granted transitional certification to MIL-PRF-38535 may be processed as QML product in accordance with the manufacturers approved program plan and qualifying activity approval in accordance with MIL-PRF-38535. This QML flow as documented in the Quality Management (QM) plan may make modifications to the requirements herein. These modifications shall not affect form, fit, or function of the device. These modifications shall not affect the PIN as described herein. A "Q" or "QML" certification mark in accordance with MIL-PRF-38535 is required to identify when the QML flow option is used.

3.2 <u>Design, construction, and physical dimensions</u>. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535, appendix A and herein.

3.2.1 <u>Case outlines</u>. The case outlines shall be in accordance with 1.2.2 herein.

3.2.2 <u>Terminal connections</u>. The terminal connections shall be as specified on figure 1.

3.2.3 <u>Block diagram and circuit operation table</u>. The block diagram and circuit operation table shall be as specified on figure 2.

3.3 <u>Electrical performance characteristics</u>. Unless otherwise specified herein, the electrical performance characteristics are as specified in table I and shall apply over the full ambient operating temperature range.

3.4 <u>Electrical test requirements</u>. The electrical test requirements shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table I.

3.5 <u>Marking</u>. Marking shall be in accordance with MIL-PRF-38535, appendix A. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked. For packages where marking of the entire SMD PIN number is not feasible due to space limitations, the manufacturer has the option of not marking the "5962-" on the device.

3.5.1 <u>Certification/compliance mark</u>. A compliance indicator "C" shall be marked on all non-JAN devices built in compliance to MIL-PRF-38535, appendix A. The compliance indicator "C" shall be replaced with a "Q" or "QML" certification mark in accordance with MIL-PRF-38535 to identify when the QML flow option is used.

3.6 <u>Certificate of compliance</u>. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in MIL-HDBK-103 (see 6.6 herein). The certificate of compliance submitted to DLA Land and Maritime -VA prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38535, appendix A and the requirements herein.

3.7 <u>Certificate of conformance</u>. A certificate of conformance as required in MIL-PRF-38535, appendix A shall be provided with each lot of microcircuits delivered to this drawing.

3.8 <u>Notification of change</u>. Notification of change to DLA Land and Maritime -VA shall be required for any change that affects this drawing.

3.9 <u>Verification and review</u>. DLA Land and Maritime, DLA Land and Maritime 's agent, and the acquiring activity retain the option to review the manufacturer's facility and applicable required documentation. Offshore documentation shall be made available onshore at the option of the reviewer.

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Test	Symbol	$\begin{array}{l} \mbox{Conditions} \underline{1}/\\ -55^{\circ}\mbox{C} \leq T_{A} \leq +125^{\circ}\mbox{C} \end{array}$	Group A subgroups	Device type		its <u>2</u> /	Unit
		unless otherwise specified			Min	Max	
Power supply <u>3</u> /	IDD	V _{DD} = 1.5 V	1,2,3	05	<u> </u>	200	μA
		V _{DD} = 5.0 V		01		700	<u> </u>
				02		1.4	mA
				03		300	μA
				04		400	_
			_	05		300	-
		V _{DD} = 12 V	_	05		400	_
		V _{DD} = 15 V		01		1000	
				02		2.0	mA
				03		300	μA
				04		600	
			_	05		600	4
		V _{DD} = 18 V		03		350	
			_	04		700	<u> </u>
Trigger voltage	V _{TR}	V _{DD} = 1.5 V	1,2,3	05	0.4	0.6	V
		V _{DD} = 5.0 V		01-04	1.26	2.06	
				05	1.30	2.00	
		V _{DD} = 12.0 V		05	3.70	4.30	
		V _{DD} = 15.0 V	1	01-04	4.05	5.50	1
		V _{DD} = 18.0 V	1	03-04	4.70	6.85	1
Reset voltage level	VRESET		1	01	0.4	1.5	V
			2,3		0.3	1.8	1
See footnotes at end of ta	able.						

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Test	Symbol	$\begin{array}{l} Conditions \ \underline{1}/\\ -55^{\circ}C \leq T_A \leq +125^{\circ}C \end{array}$	Group A subgroups	Device type	Limi	iits <u>2</u> /	Unit
		unless otherwise specified	_	!	Min	Max	
Trigger current <u>3</u> /	I _{TR}	V _{DD} = 1.5 V, T _A = +25°C, +125°C	1,2	05		±50	nA
		V _{DD} = 5.0 V, T _A = +25°C, +125°C		03-05		±50	
		V _{DD} = 12.0 V, T _A = +25°C, +125°C		05		±50	
		V _{DD} = 15.0 V, T _A = +25°C, +125°C		03,04		±100	
		V _{DD} = 18.0 V, T _A = +25°C, +125°C		03,04		±100	
Threshold voltage	V _{TH}	V _{DD} = 1.5 V	1,2,3	05	0.70	1.90	V
		V _{DD} = 5.0 V		All	2.70	3.90	
		V _{DD} = 12.0 V		05	7.30	8.70	
		V _{DD} = 15 V		01-04	9.15	10.80	
		V _{DD} = 18 V		03-04	10.90	13.15	
Threshold current <u>3</u> /	ITH	V _{DD} = 1.5 V, T _A = +25°C, +125°C	1,2	05		±50	nA
		V _{DD} = 5.0 V, T _A = +25°C, +125°C		03-05		±50	
		V _{DD} = 12.0 V, T _A = +25°C, +125°C		05		±50	
		V _{DD} = 15.0 V, T _A = +25°C, +125°C		03,04		±100	
		V _{DD} = 18.0 V, T _A = +25°C, +125°C		03,04		±100	
See footnotes at end of table.							

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			•	1			
Test	Symbol	$\begin{array}{c c} Conditions \ \underline{1}/ & Group \ A \\ -55^\circ C \leq T_A \leq +125^\circ C & subgroups & type \end{array} Limit$		ts <u>2</u> /	Unit		
		unless otherwise specified			Min	Max	
High level output voltage	VOH	V _{DD} = 5.0 V, I _{OH} = -1 mA	1,2,3	01,02	4.10		V
		V _{DD} = 15.0 V, I _{OH} = -10 mA	_		12.50		_
		V _{DD} = 15.0 V, I _{OH} = -5 mA	_		13.50		_
		V _{DD} = 15.0 V, I _{OH} = -1 mA	_		14.20		_
		V _{DD} = 5.0 V, I _{OH} = -0.8 mA	_	03,04	3.80		_
		V _{DD} = 15.0 V, I _{OH} = -0.8 mA	_		14.20		
		V _{DD} = 18.0 V, I _{OH} = -0.8 mA	_		17.30		
		V _{DD} = 1.5 V, I _{OH} = -0.25 mA	_	05	1.00	1.50	
		V _{DD} = 5.0 V, I _{OH} = -1.0 mA	-		4.20	5.00	
		V _{DD} = 12.0 V, I _{OH} = -10 mA	-		10.25	12.00	
		V _{DD} = 12.0 V, I _{OH} = -5 mA	-		10.70	12.00	
		V _{DD} = 12.0 V, I _{OH} = -1 mA			11.0	12.0	
Monostable timing accuracy	t _{MON}	5.0 V \leq V _{DD} \leq 15 V,	9	03,04	908	1110	μS
		$R_T = 10 \text{ k}\Omega$, $C_T = 0.1 \mu$ F, see figures 3 and 5	10,11		858	1161	
		1.5 V \leq V _{DD} \leq 12 V, R _T = 10 k Ω , C _T = 0.1 μ F, see figures 3 and 5	9,10,11	05	900	1250	

TABLE I. <u>Electrical performance characteristics</u> - Continued.

See footnotes at end of table.

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			<u> </u>				
Test	Symbol	$Conditions \ \underline{1}/ \\ -55^{\circ}C \leq T_A \leq +125^{\circ}C$	Group A subgroups	Device type	Limi	its <u>2</u> /	Unit
		unless otherwise specified			Min	Max	
Low level output voltage	VOL	V _{DD} = 5.0 V, I _{OL} = 8.0 mA	1,2,3	01,02,		0.60	V
		V _{DD} = 5.0 V, I _{OL} = 5.0 mA		05		0.45	_
		V _{DD} = 5.0 V, I _{OL} = 3.2 mA		!	ļ '	0.40	_
		V _{DD} = 15.0 V, I _{OL} = 100 mA		01,02		3.80	
		V _{DD} = 15.0 V, I _{OL} = 50 mA		!		1.50	
		V _{DD} = 15.0 V, I _{OL} = 10 mA		!	ļ '	0.45	_
		V _{DD} = 5.0 V, I _{OL} = 3.2 mA		03,04		0.50	
		V _{DD} = 15.0 V, I _{OL} = 20.0 mA		!		1.25	
		V _{DD} = 18.0 V, I _{OL} = 3.2 mA		!	ļ	0.50	
		V _{DD} = 1.5 V, I _{OL} = 1.0 mA		05		0.40	_
		V _{DD} = 12.0 V, I _{OL} = 75 mA				3.50	_
		V _{DD} = 12.0 V, I _{OL} = 50 mA				2.25	_
		V _{DD} = 12.0 V, I _{OL} = 10 mA		<u> </u>		1.00	
Astable timing accuracy	^t AST	5.0 V \leq V_{DD} \leq 15 V, R_{TA} = 10 k\Omega, R_{TB} = 10 k\Omega,	9	03,04	1818	2222	μS
		$C_T = 0.1 \ \mu F$, see figures 4 and 6	10,11		1717	2323	
		V_{DD} = 12 V, R_{TA} = 1 k Ω , R_{TB} = 1 k Ω , C_T = 0.1 μ F, see figures 4 and 6	9,10,11	05	178	250	
Discharge transistor leakage current	ICEX	V _{DD} = 5.0 V, T _A = +25°C, +125°C	1,2	03,04		300	nA
		V _{DD} = 15.0 V, T _A = +25°C, +125°C				300	
		V _{DD} = 18.0 V, T _A = +25°C, +125°C				300	

TABLE I. Electrical performance characteristics - Continued.

See footnotes at end of table.

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				,			
Test	Symbol	Conditions <u>1</u> / -55°C \leq T _A \leq +125°C	Group A subgroups	Device type	Limit	ts <u>2</u> /	Unit
		unless otherwise specified			Min	Max	
Discharge transistor	ICEX	V _{DD} = 1.5 V,	1	05		100	nA
leakage current		T _A = +25°C, +125°C	2			1000	
		V _{DD} = 5.0 V,	1			100	
		T _A = +25°C, +125°C	2			1000	
		V _{DD} = 12.0 V,	1			100	
		T _A = +25°C, +125°C	2			1000	
Reset current <u>3</u> /	I _R	V _{DD} = 5.0 V, T _A = +25°C, +125°C	1,2	All		±50	nA
		V _{DD} = 15.0 V, T _A = +25°C, +125°C		01-04		±100	
		V _{DD} = 18.0 V, T _A = +25°C, +125°C		03-04		±100	
		V _{DD} = 1.5 V and 5.0 V, T _A = +25°C, +125°C		05		±50	
		V _{DD} = 12.0 V, T _A = +25°C, +125°C				±50	
Discharge transistor	VSAT	V _{DD} = 5.0 V, I _{OL} = 10 mA	1,2,3	01,02		0.60	V
saturation voltage		V _{DD} = 15.0 V, I _{OL} = 100 mA				1.80	
		V _{DD} = 5.0 V, I _{OL} = 10 mA		03,04		0.60	
		V _{DD} = 15.0 V, I _{OL} = 10 mA				0.60	
		V _{DD} = 18.0 V, I _{OL} = 10 mA				0.60	
		V _{DD} = 1.5 V, I _{OL} = 1.0 mA		05		150	mV
		V _{DD} = 5.0 V, I _{OL} = 10 mA				0.30	V
		V _{DD} = 12.0 V, I _{OL} = 25 mA				2.00	

TABLE I. Electrical performance characteristics - Continued.

<u>1</u>/ Each side of device types 02 and 04 are tested separately.
<u>2</u>/ The limiting terms "min" (minimum) and "max" (maximum) shall be considered to apply to magnitudes only. Negative current shall be defined as conventional current flow out of a device terminal.

 $\underline{3}/ \ 1/3 \ V_{DD} \leq V_{IN} \leq 2/3 \ V_{DD}.$

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Device types	01	01	02 and 04 see note 1	02	03 and 05
Case outlines	Р	2	С	2	G and P see note 2
Terminal number			Terminal symbol		
1	GND	NC	DSCH1	NC	GND
2	TRIG	GND	THRES1	DSCH1	TRIG
3	OUT	NC	CONT1	THRES1	OUT
4	RESET	NC	RESET1	CONT1	RESET
5	CONT	TRIG	OUT1	NC	CONT
6	THRES	NC	TRIG1	RESET1	THRES
7	DSCH	OUT	GND	NC	DSCH
8	V _{DD}	NC	TRIG2	OUT1	V _{DD}
9		NC	OUT2	TRIG1	
10		RESET	RESET2	GND	
11		NC	CONT2	NC	
12		CONT	THRES2	TRIG2	
13		NC	DSCH2	OUT2	
14		NC	V _{DD}	RESET2	
15		THRES		NC	
16		NC		CONT2	
17		DSCH		NC	
18		NC		THRES2	
19		NC		DSCH2	
20		V _{DD}		V _{DD}	

NOTES:

1. $V_{\mbox{DD}}$ and GND are common to both sides.

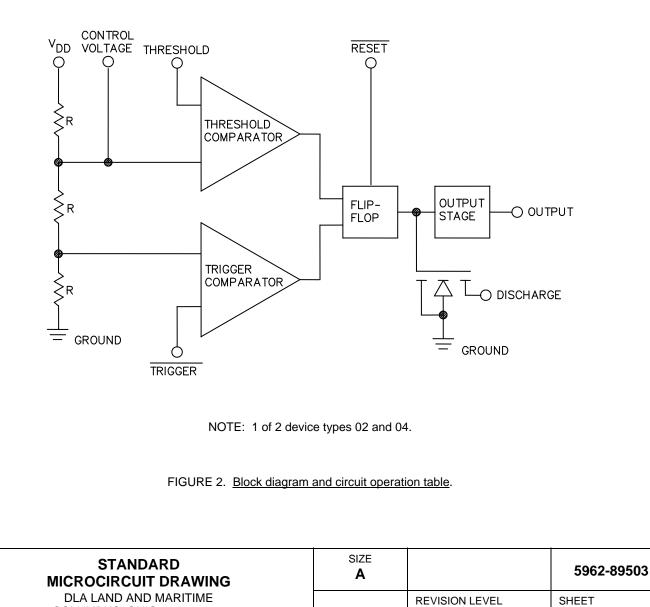
2. $V_{\mbox{\scriptsize DD}}$ and case are connected.

FIGURE 1. Terminal connections.

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Device types 01 - 05

Threshold voltage	Trigger voltage	RESET	Output	Discharge switch
Don't care	Don't care	Low	Low	On
> 2/3 (V _{DD})	> 1/3 (V _{DD})	High	Low	On
< 2/3 (V _{DD})	> 1/3 (V _{DD})	High	Stable	Stable
Don't care	< 1/3 (V _{DD})	High	High	Off

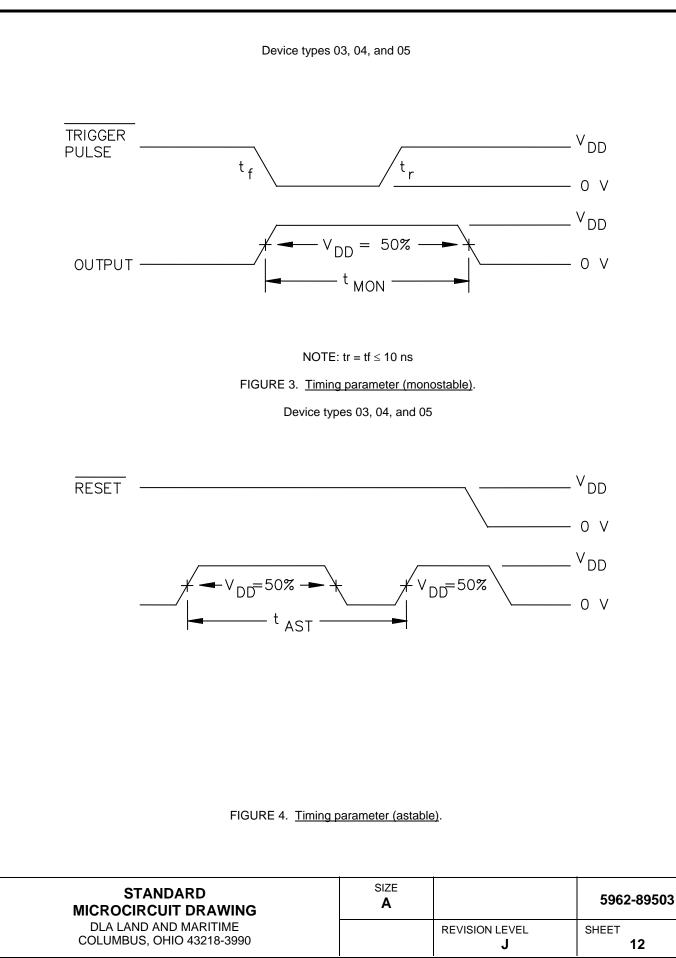


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Device types 03, 04, and 05

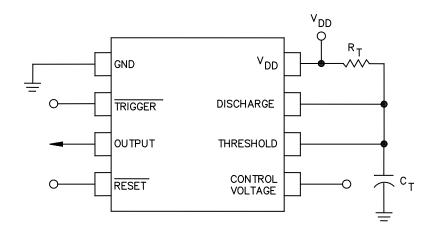
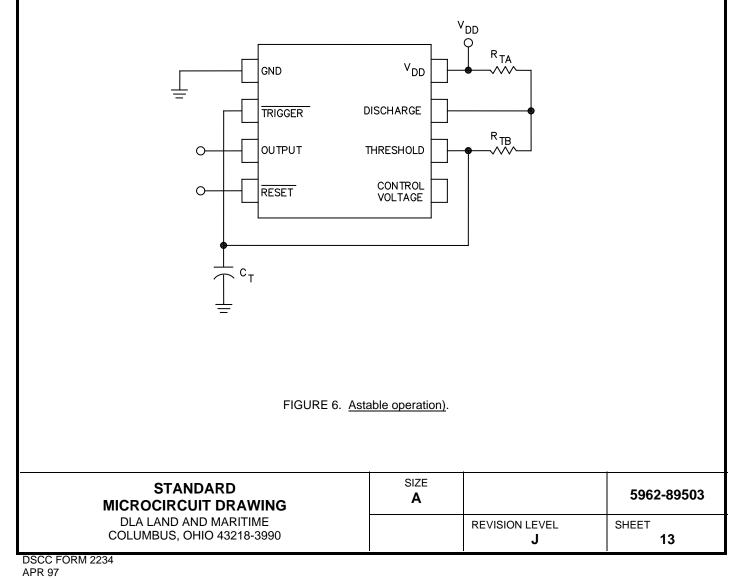


FIGURE 5. Monostable operation.

Device types 03, 04, and 05



4. VERIFICATION

4.1 <u>Sampling and inspection</u>. Sampling and inspection procedures shall be in accordance with MIL-PRF-38535, appendix A.

4.2 <u>Screening</u>. Screening shall be in accordance with method 5004 of MIL-STD-883, and shall be conducted on all devices prior to quality conformance inspection. The following additional criteria shall apply:

- a. Burn-in test, method 1015 of MIL-STD-883.
 - (1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or acquiring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1015 of MIL-STD-883.
 - (2) $T_A = +125^{\circ}C$, minimum.
- b. Interim and final electrical test parameters shall be as specified in table II herein, except interim electrical parameter tests prior to burn-in are optional at the discretion of the manufacturer.

4.3 <u>Quality conformance inspection</u>. Quality conformance inspection shall be in accordance with method 5005 of MIL-STD-883 including groups A, B, C, and D inspections. The following additional criteria shall apply.

4.3.1 Group A inspection.

- a. Tests shall be as specified in table II herein.
- b. Subgroups 4, 5, 6, 7, and 8 in table I, method 5005 of MIL-STD-883 shall be omitted.

4.3.2 Groups C and D inspections.

- a. End-point electrical parameters shall be as specified in table II herein.
- b. Steady-state life test conditions, method 1005 of MIL-STD-883.
 - (1) Test condition A, B, C, or D. The test circuit shall be maintained by the manufacturer under document revision level control and shall be made available to the preparing or acquiring activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in method 1005 of MIL-STD-883.
 - (2) $T_A = +125^{\circ}C$, minimum.
 - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

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TABLE II. Electrical test requirements.

MIL-STD-883 test requirements	Subgroups
	(in accordance with
	MIL-STD-883, method 5005,
	table I)
Interim electrical parameters	
(method 5004)	
Final electrical test parameters	1*,2,3,9
(method 5004)	
Group A test requirements	1,2,3,9,10,11
(method 5005)	
Groups C and D end-point	1
electrical parameters	
(method 5005)	

* PDA applies to subgroup 1.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38535, appendix A.

6. NOTES

6.1 <u>Intended use</u>. Microcircuits conforming to this drawing are intended for use for Government microcircuit applications (original equipment), design applications, and logistics purposes.

6.2 <u>Replaceability</u>. Microcircuits covered by this drawing will replace the same generic device covered by a contractorprepared specification or drawing.

6.3 <u>Configuration control of SMD's</u>. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished using DD Form 1692, Engineering Change Proposal.

6.4 <u>Record of users</u>. Military and industrial users shall inform DLA Land and Maritime when a system application requires configuration control and the applicable SMD to that system. DLA Land and Maritime will maintain a record of users and this list will be used for coordination and distribution of changes to the drawings. Users of drawings covering microelectronics devices (FSC 5962) should contact DLA Land and Maritime -VA, telephone (614) 692-0547.

6.5 <u>Comments</u>. Comments on this drawing should be directed to DLA Land and Maritime -VA, Columbus, Ohio 43218-3990, or telephone (614) 692-0540.

6.6 <u>Approved sources of supply</u>. Approved sources of supply are listed in MIL-HDBK-103. The vendors listed in MIL-HDBK-103 have agreed to this drawing and a certificate of compliance (see 3.6 herein) has been submitted to and accepted by DLA Land and Maritime -VA.

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STANDARD MICROCIRCUIT DRAWING BULLETIN

DATE: 11-02-15

Approved sources of supply for SMD 5962-89503 are listed below for immediate acquisition information only and shall be added to MIL-HDBK-103 and QML-38535 during the next revision. MIL-HDBK-103 and QML-38535 will be revised to include the addition or deletion of sources. The vendors listed below have agreed to this drawing and a certificate of compliance has been submitted to and accepted by DLA Land and Maritime -VA. This information bulletin is superseded by the next dated revision of MIL-HDBK-103 and QML-38535. DLA Land and Maritime maintains an online database of all current sources of supply at http://www.dscc.dla.mil/Programs/Smcr/.

Vendor	Vendor
CAGE	similar
number	PIN <u>2</u> /
01295	TLC555MJGB
01295	TLC555MFKB
01295	TLC556MJB
01295	TLC556MFKB
3V146	ICM7555MTV/883
3V146	ICM7555MTV/883
<u>3</u> /	ICM7555MTV/883B
<u>3</u> /	HI-7555CM-02
<u>3</u> /	ICM7556MJD/883B
<u>3</u> /	LMC555H/883
<u>3</u> /	LMC555H/883
<u>3</u> /	LMC555J/883C
	CAGE number 01295 01295 01295 01295 3V146 3V146 <u>3/</u> <u>3/</u> <u>3/</u> <u>3/</u> <u>3/</u> <u>3/</u>

- <u>1</u>/ The lead finish shown for each PIN representing a hermetic package is the most readily available from the manufacturer listed for that part. If the desired lead finish is not listed contact the vendor to determine its availability.
- <u>2</u>/ <u>Caution</u>. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.
- $\underline{3}/$ Not available from an approved source of supply.

Vendor CAGE Vendor name number and address 01295 Texas Instruments, Inc. Semiconductor Group 8505 Forest Lane P.O. Box 660199 Dallas, TX 75243 Point of contact: U.S. Highway 75 South P.O. Box 84, M/S 853 Sherman, TX 75090-9493 3V146 Rochester Electronics Inc. 16 Malcolm Hoyt Drive Newburyport, MA 01950

The information contained herein is disseminated for convenience only and the Government assumes no liability whatsoever for any inaccuracies in the information bulletin.