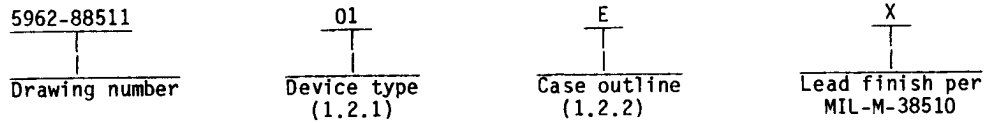




1. SCOPE

1.1 Scope. This drawing describes device requirements for class B microcircuits in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices".

1.2 Part number. The complete part number shall be as shown in the following example:



1.2.1 Device types. The device types shall identify the circuit function as follows:

<u>Device type</u>	<u>Generic number</u>	<u>Circuit function</u>
01	55116	Differential line transceivers with three-state receiver output circuitry
02	55117	Differential line transceivers with three-state receiver output circuitry
03	55118	Differential line transceivers with three-state receiver output circuitry
04	55119	Differential line transceivers with three-state receiver output circuitry

1.2.2 Case outlines. The case outlines shall be as designated in appendix C of MIL-M-38510, and as follows:

<u>Outline letter</u>	<u>Case outline</u>
E	D-2 (16-lead, .840" x .310" x .200"), dual-in-line package
P	D-4 (8-lead, .405" x .310" x .200"), dual-in-line package
2	C-2 (20-terminal .358" x .358" x .100"), square chip carrier package

1.3 Absolute maximum ratings.

Supply voltage ( $V_{CC}$ )	-----	+7 V dc
Input voltage ( $V_I$ ):		
DA, DB, DE, DI, RE, RS	-----	+5.5 V dc
RA, RB, RT (device types 01 and 03)	-----	±25 V dc
A and B (device types 02 and 04)	-----	0 V dc to 6 V dc
Off-state voltage (device types 01 and 03)	-----	12 V dc
Storage temperature range	-----	-65°C to +150°C
Maximum power dissipation $1/$		
Device types 01 and 03 (Case E)	-----	1375 mW
Device types 02 and 04 (Case P)	-----	1050 mW
Device types (All) (Case 2)	-----	1375 mW
Lead temperature (soldering, 10 seconds)	-----	300°C
Junction temperature ( $T_J$ )	-----	+150°C
Thermal resistance, junction-to-ambient ( $\theta_{JA}$ ):		
Cases E and 2	-----	91°C/W
Case P	-----	119°C/W
Thermal resistance, junction-to-case ( $\theta_{JC}$ )	-----	See MIL-M-38510, appendix C

$1/$  Must withstand the added  $P_D$  due to short circuit test, e.g.,  $I_{QS}$ . For operation above 25°C free air temperature, derate linearly at the rate of 11 mW/°C for cases E and 2, and 8.5 mW/°C for case P.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 2

1.4 Recommended operating conditions.

Ambient operating temperature range ( $T_A$ ) - - - - -  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$   
 Operating supply voltage range ( $V_{CC}$ ) - - - - - 4.5 V dc to 5.5 V dc  
 Receiver input voltage ( $V_I$ ):  
 Device types 01 and 03 - - - - -  $-15$  V dc to  $+15$  V dc  
 Device types 02 and 04 - - - - - 0 V dc to 6 V dc

2. APPLICABLE DOCUMENTS

2.1 Government specification and standard. Unless otherwise specified, the following specification and standard, of the issue listed in that issue of the Department of Defense Index of Specifications and Standards specified in the solicitation, form a part of this drawing to the extent specified herein.

SPECIFICATION

MILITARY

MIL-M-38510 - Microcircuits, General Specification for.

STANDARD

MILITARY

MIL-STD-883 - Test Methods and Procedures for Microelectronics.

(Copies of the specification and standard required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Order of precedence. In the event of a conflict between the text of this drawing and the references cited herein, the text of this drawing shall take precedence.

3. REQUIREMENTS

3.1 Item requirements. The individual item requirements shall be in accordance with 1.2.1 of MIL-STD-883, "Provisions for the use of MIL-STD-883 in conjunction with compliant non-JAN devices" and as specified herein.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-M-38510 and herein.

3.2.1 Terminal connections and truth tables. The terminal connections and truth tables shall be as specified on figure 1.

3.2.2 Function diagrams. The function diagrams shall be as specified on figure 2.

3.2.3 Waveforms. The waveforms shall be as specified on figure 3.

3.2.4 Case outlines. The case outlines shall be in accordance with 1.2.2 herein.

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

3.4 Marking. Marking shall be in accordance with MIL-STD-883 (see 3.1 herein). The part shall be marked with the part number listed in 1.2 herein. In addition, the manufacturer's part number may also be marked as listed in 6.4 herein.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>		5962-88511
		REVISION LEVEL	SHEET 3

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions <sup>1/</sup> -55°C ≤ T <sub>C</sub> ≤ +125°C unless otherwise specified		Device types	Group A subgroups	Limits		Unit	
						Min	Max		
Driver section									
Input clamp voltage	V <sub>IK</sub>	V <sub>CC</sub> = 4.5 V, I <sub>I</sub> = -12 mA		A11	1, 2, 3		-1.5	V	
High level output voltage	V <sub>OH</sub>	V <sub>CC</sub> = 4.5 V, V <sub>IL</sub> = 0.8 V, V <sub>IH</sub> = 2.0 V	I <sub>OH</sub> = -10 mA	A11	1		2.4	V	
			I <sub>OH</sub> = -10 mA	A11	2, 3		2		
			I <sub>OH</sub> = -40 mA				1.8		
Low level output voltage	V <sub>OL</sub>	V <sub>CC</sub> = 4.5 V, V <sub>IH</sub> = 2.0 V V <sub>IL</sub> = 0.8 V, I <sub>OL</sub> = 40 mA		A11	1, 2, 3		0.4	V	
Output clamp voltage	V <sub>OK</sub>	V <sub>CC</sub> = 5.5 V, I <sub>O</sub> = -40 mA, DE at 0.8 V		A11	1, 2, 3		-1.5	V	
Off-state open-collector output current	I <sub>O(off)</sub>	V <sub>CC</sub> = 5.5 V, V <sub>O</sub> = 12 V	T <sub>A</sub> = +25°C	01, 03	1		10	μA	
			T <sub>A</sub> = +125°C		2		200		
Off-state (high impedance) output current	I <sub>OZ</sub>	V <sub>CC</sub> = 5.5 V, T <sub>A</sub> = +25°C V <sub>O</sub> = 0 V to V <sub>CC</sub> , DE at 0.8 V		01, 03	1		±10	μA	
			V <sub>CC</sub> = 5.5 V, DE at 0.8 V, T <sub>A</sub> = +125°C		V <sub>O</sub> = 0 V	2		-300	
					V <sub>O</sub> = 0.4 V to V <sub>CC</sub>	2		±150	
Input current at maximum input voltage	I <sub>I</sub>	V <sub>CC</sub> = 5.5 V, V <sub>I</sub> = 5.5 V					1	mA	
High level input current	I <sub>IH</sub>	V <sub>I</sub> = 2.4 V		A11	1, 2, 3		40	μA	
Low level input current	I <sub>IL</sub>	V <sub>I</sub> = 0.4 V					-1.6	mA	
Short circuit output current <sup>2/</sup>	I <sub>OS</sub>	V <sub>CC</sub> = 5.5 V, V <sub>O</sub> = 0 V		A11	1	-40	-120	mA	
				04	2, 3	-40	-130		
Supply current (driver and receiver combined)	I <sub>CC</sub>	V <sub>CC</sub> = 5.5 V		A11	1		60	mA	
				04	2, 3		70		

See footnotes at end of table.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>		5962-88511
		REVISION LEVEL	SHEET 4

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ -55°C < T <sub>C</sub> < +125°C unless otherwise specified	Device types	Group A subgroups	Limits		Unit
					Min	Max	
Receiver section							
Differential input high-threshold voltage 3/	V <sub>TH</sub>	V <sub>CC</sub> = 4.5 V 4/	V <sub>O</sub> = 0.4 V, I <sub>OL</sub> = 15 mA 6/	A11	1, 2, 3	0.5	V
		V <sub>CC</sub> = 5 V 5/				1	
Differential input low-threshold voltage 3/	V <sub>TL</sub>	V <sub>CC</sub> = 4.5 V 4/	V <sub>O</sub> = 2.4 V, I <sub>OL</sub> = -5 mA 6/ 7/	A11	1, 2, 3	-0.5	V
		V <sub>CC</sub> = 5 V 5/				-1	
Input voltage range 8/	V <sub>I</sub>	V <sub>CC</sub> = 5 V, V <sub>ID</sub> = -1 V or 1 V 6/	01,03	1, 2, 3	15 to -15	V	
			02,04		6 to 0		
High level output voltage	V <sub>OH</sub>	I <sub>OH</sub> = -5 mA 6/	V <sub>CC</sub> = 4.5 V, V <sub>ID</sub> = -0.5 V 4/	A11	1, 2, 3	2.4	V
			V <sub>CC</sub> = 5.0 V, V <sub>ID</sub> = -1.0 V 5/				
Low level output voltage	V <sub>OL</sub>	I <sub>OL</sub> = 15 mA 6/	V <sub>CC</sub> = 4.5 V, V <sub>ID</sub> = 0.5 V 4/	A11	1, 2, 3	0.4	V
			V <sub>CC</sub> = 5.0 V, V <sub>ID</sub> = 1.0 V 5/				
Receiver input current	I <sub>I(rec)</sub>	V <sub>CC</sub> = 5.5 V 6/	V <sub>I</sub> = 0 V, other input at 0 V	01,03	1, 2, 3	-0.9	mA
				02,04		-1	
			V <sub>I</sub> = 0.4 V, other input at 2.4 V	01,03		-0.7	
				02,04		-0.8	
			V <sub>I</sub> = 2.4 V, other input at 0.4 V	01,03		0.3	
				02,04		0.4	
Input current at maximum input voltage	Strobe	I <sub>I</sub>	V <sub>CC</sub> = 4.5 V, V <sub>ID</sub> = -0.5 V V <sub>strobe</sub> = 4.5 V	01,02	1, 2, 3	5	μA
	Enable		V <sub>CC</sub> = 5.5 V, V <sub>I</sub> = 5.5 V	03,04		1	mA
High level input current	Enable	I <sub>IH</sub>	V <sub>CC</sub> = 5.5 V, V <sub>I</sub> = 2.4 V	03,04	1, 2, 3	40	μA

See footnotes at end of table.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 5

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions <sup>1/</sup> -55°C < T <sub>C</sub> < +125°C unless otherwise specified	Device types	Group A subgroups	Limits		Unit	
					Min	Max		
Receiver section								
Low level current input	Strobe	I <sub>IL</sub>	V <sub>CC</sub> = 5.5 V, V <sub>ID</sub> = 0.5 V, V <sub>strobe</sub> = 0.4 V <sup>4/</sup>	01,02	1, 2, 3		-2.4	mA
	Enable		V <sub>CC</sub> = 5.5 V, V <sub>I</sub> = 0.4 V	03,04			-1.6	
Response-time-control current (RTC)	I <sub>(RC)</sub>	V <sub>CC</sub> = 5.5 V, V <sub>ID</sub> = 0.5 V, T <sub>A</sub> = +25°C <sup>4/</sup> , RC at 0 V	01,03	1		-1.2		mA
Off-state open-collector output current	I <sub>O(off)</sub>	V <sub>CC</sub> = 5.5 V, V <sub>O</sub> = 12 V, V <sub>ID</sub> = -1 V	T <sub>A</sub> = +25°C	01,03	1		10	μA
					2		200	
Off-state (high impedance) output current	I <sub>OZ</sub>	V <sub>CC</sub> = 5.5 V, V <sub>O</sub> = 0 V to V <sub>CC</sub> , RE at 0.4 V	T <sub>A</sub> = +25°C	03,04	1		±10	μA
					2		±150	
Line terminating resistance	R <sub>T</sub>	V <sub>CC</sub> = 5 V, T <sub>A</sub> = +25°C	01,03	1		77	167	Ω
Short circuit output current <sup>2/</sup>	I <sub>OS</sub>	V <sub>CC</sub> = 5.5 V, V <sub>O</sub> = 0 V, V <sub>ID</sub> = -1 V <sup>4/</sup>	A11	1		-15	-80	mA
				04	2,3		-1	
Supply current (driver and receiver combined)	I <sub>CC</sub>	V <sub>CC</sub> = 5.5 V, V <sub>ID</sub> = 0.5 V <sup>4/</sup>	A11	1			60	mA
				04	2,3			
Propagation delay time low to high level output	t <sub>PLH</sub>	V <sub>CC</sub> = 5 V, C <sub>L</sub> = 30 pF, See figure 3, T <sub>A</sub> = +25°C	R <sub>L</sub> = 400Ω	A11	9		75	ns
Propagation delay time high to low level output	t <sub>PHL</sub>						75	
Output enable time to high level	t <sub>pZH</sub>						20	
Output enable time to low level	t <sub>pZL</sub>						35	
Output disable time from high level	t <sub>PHZ</sub>						30	
Output disable time from low level	t <sub>PLZ</sub>						35	

See footnotes at end of table.

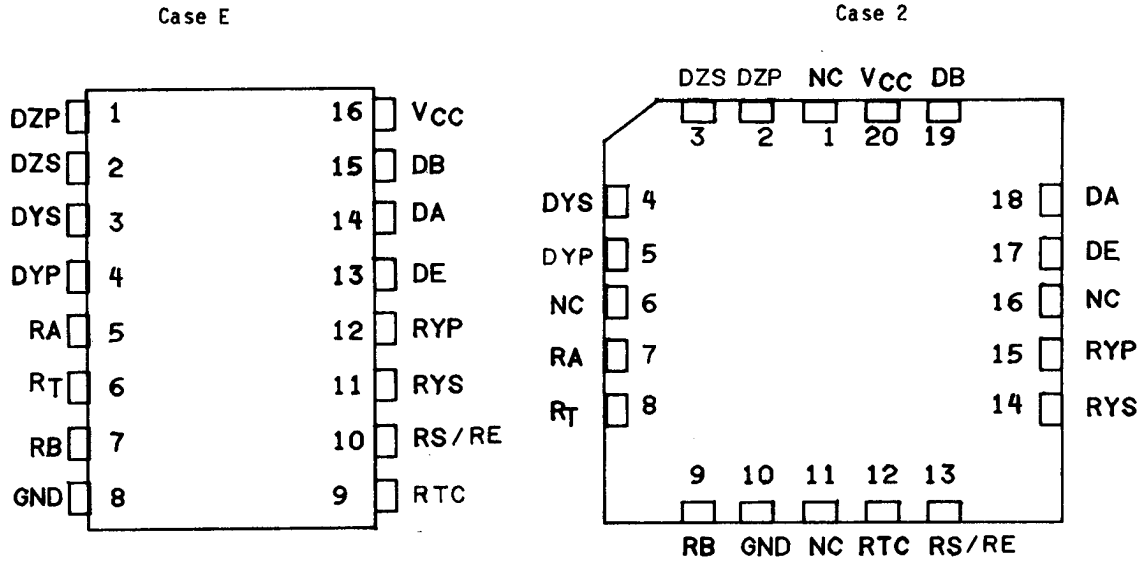
<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 6

DESC FORM 193A  
SEP 87

☆ U.S. GOVERNMENT PRINTING OFFICE: 1987-549-096

TABLE I. Electrical performance characteristics - Continued.								
Test	Symbol	Conditions 1/ -55°C < T <sub>C</sub> < +125°C unless otherwise specified	Device types	Group A subgroups	Limits		Unit	
					Min	Max		
Driver section								
Propagation delay time low to high level output	tPLH	V <sub>CC</sub> = 5 V, C <sub>L</sub> = 30 pF, See figure 3, T <sub>A</sub> = +25°C	All	9		30	ns	
Propagation delay time high to low level output	tPHL					30	ns	
Output enable time to high level	tpZH				R <sub>L</sub> = 180Ω		20	ns
Output enable time to low level	tpZL				R <sub>L</sub> = 250Ω		40	ns
Output disable time from high level	tPHZ				R <sub>L</sub> = 180Ω		30	ns
Output disable time from low level	tPLZ				R <sub>L</sub> = 250Ω		35	ns
<p>1/ Unless otherwise noted, V<sub>strobe</sub> = 2.4 V. All parameters with the exception of off-state open-collector output current are measured with the active pull-up connected to the sink output.</p> <p>2/ Not more than one output should be shorted at a time and, duration of the short circuit should not exceed 1 second.</p> <p>3/ Differential voltages are at the B input terminal with respect to the A input terminal. Neither receiver input of device types 02 or 04 should be taken negative with respect to GND.</p> <p>4/ This applies with the less positive receiver input grounded.</p> <p>5/ For device types 01 and 03, this applies with the more positive receiver input at 15 V or the more negative receiver input at -15 V. For device types 02 and 04, this applies with the more positive receiver input at 6 V.</p> <p>6/ Measurement of the characteristics on device types 02 and 04 requires the driver to be disabled with the driver enable at 0.8 V.</p> <p>7/ The algebraic convention, where the less positive (more negative) limit is designated as minimum, is used in this drawing for threshold voltages only.</p> <p>8/ Input voltage range is the voltage range that, if exceeded at either input, will cause the receiver to cease functioning properly.</p> <p>3.5 Certificate of compliance. A certificate of compliance shall be required from a manufacturer in order to be listed as an approved source of supply in 6.4. The certificate of compliance submitted to DESC-ECS prior to listing as an approved source of supply shall state that the manufacturer's product meets the requirements of MIL-STD-883 (see 3.1 herein) and the requirements herein.</p> <p>3.6 Certificate of conformance. A certificate of conformance as required in MIL-STD-883 (see 3.1 herein) shall be provided with each lot of microcircuits delivered to this drawing.</p> <p>3.7 Notification of change. Notification of change to DESC-ECS shall be required in accordance with MIL-STD-883 (see 3.1 herein).</p>								
<b>STANDARDIZED MILITARY DRAWING</b>			SIZE <b>A</b>	5962-88511				
DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444			REVISION LEVEL		SHEET 7			

Device types 01 and 03



Truth table of driver

Inputs			Outputs	
DE	DA	DB	DY	DZ
L	X	X	Z	Z
H	L	X	L	H
H	X	L	L	H
H	H	H	H	L

Truth table of receiver

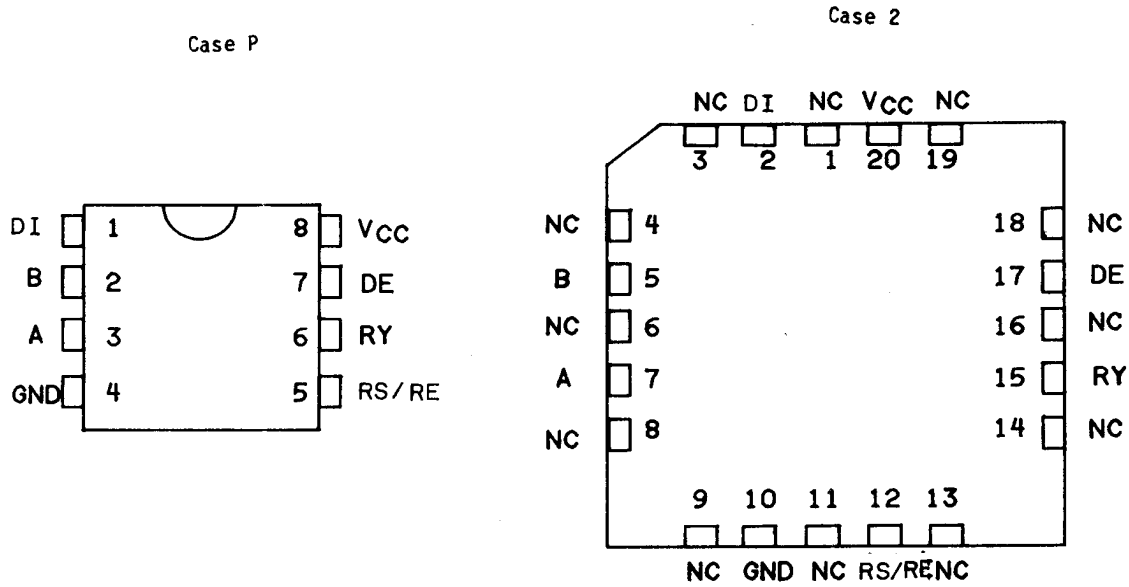
RS/RE	Diff Input	Output RY	
		01	03
L	X	H	Z
H	L	H	H
H	H	L	L

FIGURE 1. Terminal connections and truth tables.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 8



Device types 02 and 04



Truth table of driver

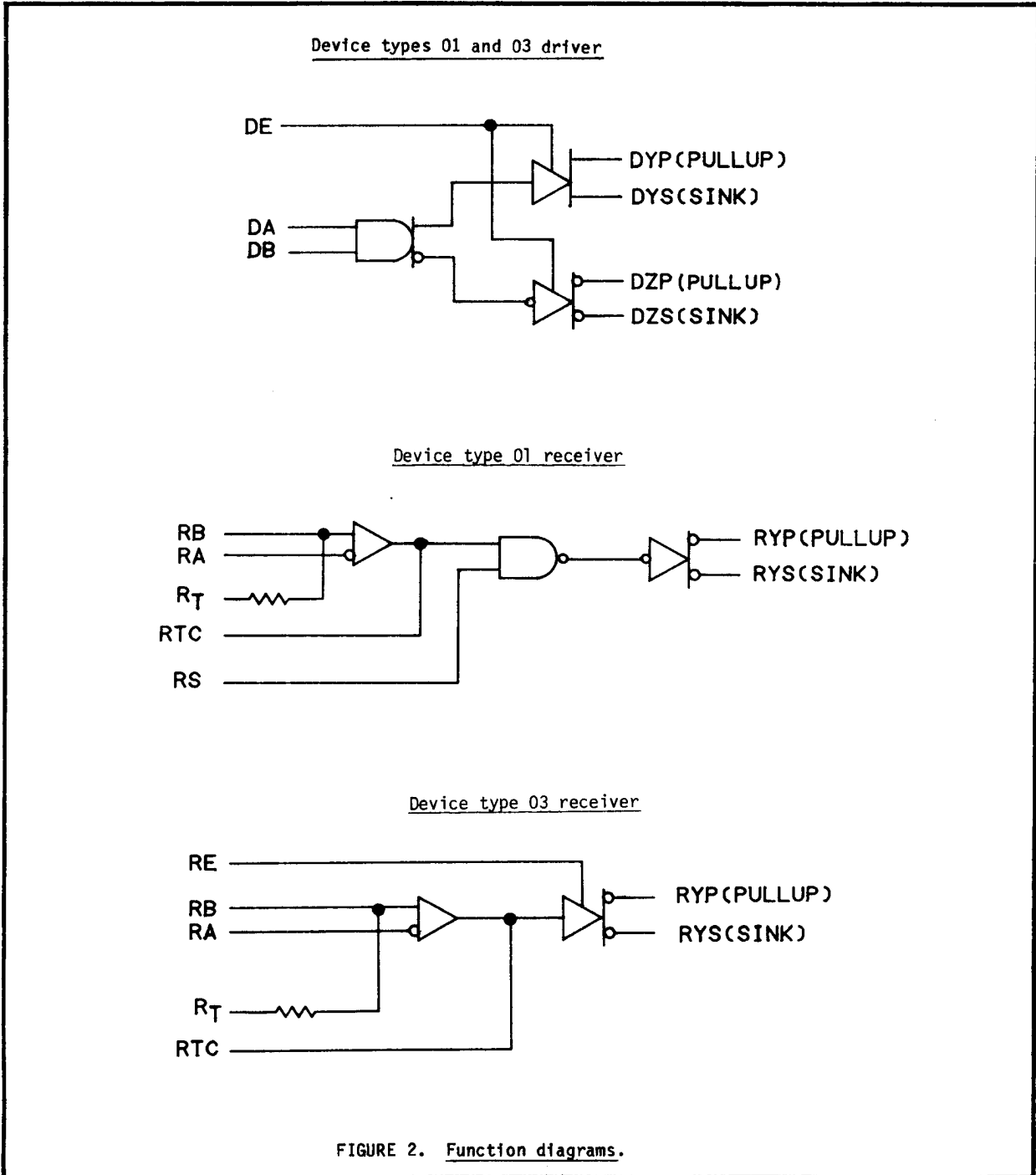
Inputs		Outputs	
DI	DE	A	B
H	H	H	L
L	H	L	H
X	L	Z	Z

Truth table of receiver

Inputs			Output RY	
A	B	RS/RE	02	04
H	L	H	H	H
L	H	H	L	L
X	X	L	H	Z

FIGURE 1. Terminal connection and truth tables - Continued.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 9

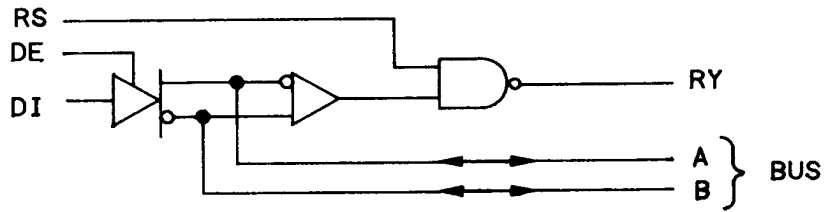


<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 10

DESC FORM 193A  
SEP 87

☆ U.S. GOVERNMENT PRINTING OFFICE: 1987-549-096

Device types 02 driver and receiver



Device types 04 driver and receiver

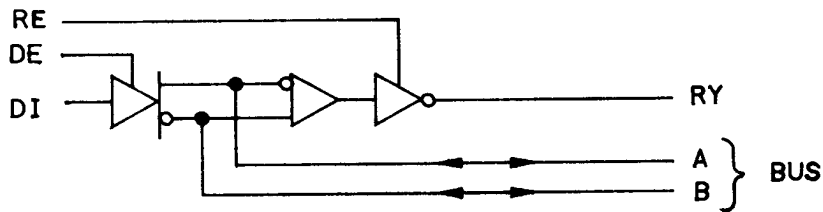
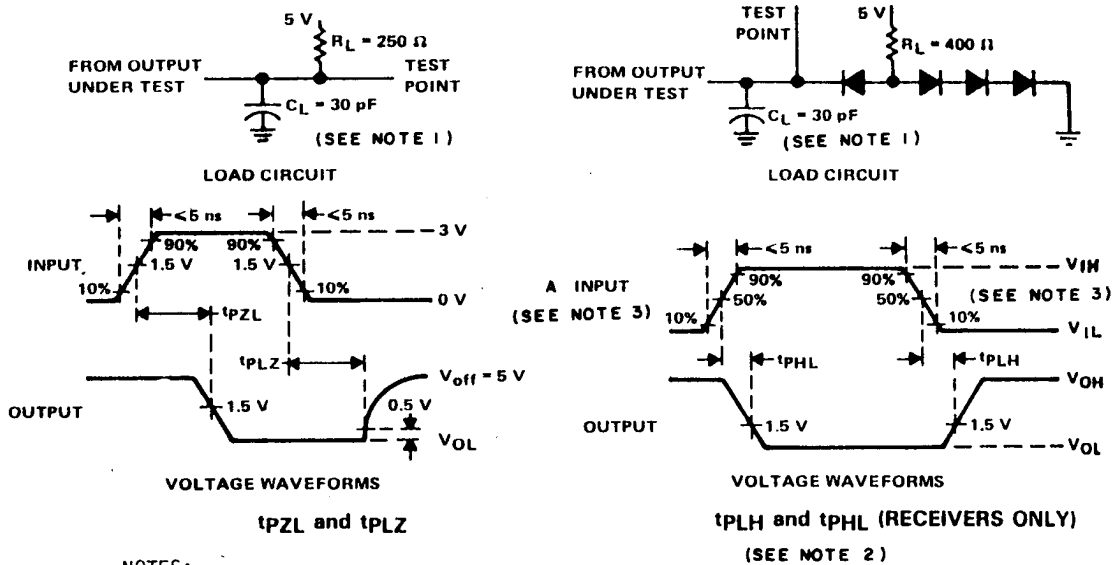
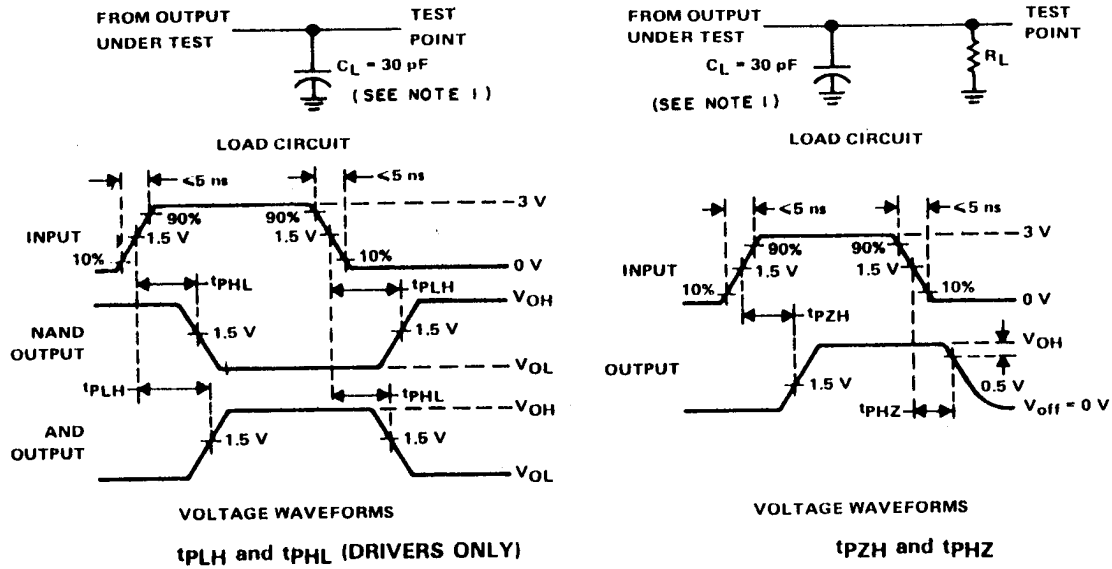


FIGURE 2. Function diagrams - Continued.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 11

DESC FORM 193A  
SEP 87

☆ U.S. GOVERNMENT PRINTING OFFICE: 1987-549-096



**NOTES:**

1.  $C_L$  includes probe and jig capacitance.
2. When testing device 01 and device 02 receiver sections, the response-time control and the termination resistor pins are left open.
3. For devices 01 and 03,  $V_{IH} = 3 \text{ V}$ ,  $V_{IL} = -3 \text{ V}$ , the A input is at 0 V.  
 For devices 02 and 04,  $V_{IH} = 3 \text{ V}$ ,  $V_{IL} = 0 \text{ V}$ , the A input is at 1.5 V.

FIGURE 3. Waveforms.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 12

3.8 Verification and review. DESC, DESC'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.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with section 4 of MIL-M-38510 to the extent specified in MIL-STD-883 (see 3.1 herein).

4.2 Screening. 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 B or D using the circuit submitted with the certificate of compliance (see 3.5 herein).
  - (2)  $T_A = +125^{\circ}\text{C}$ , 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.

TABLE II. Electrical test requirements.

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

\* PDA applies to subgroup 1.

4.3 Quality conformance inspection. 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, 8, 10, and 11 in table I, method 5005 of MIL-STD-883 shall be omitted.
- c. The truth table is verified in the course of testing group A subgroups 1, 2, and 3. In addition, every possible input to output combination shall be tested.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 13

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 B or D using the circuit submitted with the certificate of compliance (see 3.5 herein).
  - (2)  $T_A = +125^{\circ}\text{C}$ , minimum.
  - (3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-M-38510.

6. NOTES

6.1 Intended use. Microcircuits conforming to this drawing are intended for use when military specifications do not exist and qualified military devices that will perform the required function are not available for OEM application. When a military specification exists and the product covered by this drawing has been qualified for listing on QPL-38510, the device specified herein will be inactivated and will not be used for new design. The QPL-38510 product shall be the preferred item for all applications.

6.2 Replaceability. Microcircuits covered by this drawing will replace the same generic device covered by a contractor-prepared specification or drawing.

6.3 Comments. Comments on this drawing should be directed to DESC-ECS, Dayton, Ohio 45444, or telephone 513-296-5375.

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511
	REVISION LEVEL	SHEET 14

[查询"5962-88511012A"供应商](#)

6.4 Approved source of supply. An approved source of supply is listed herein. Additional sources will be added as they become available. The vendor listed herein has agreed to this drawing and a certificate of compliance (see 3.5 herein) has been submitted to DESC-ECS.

Military drawing part number	Vendor CAGE number	Vendor similar part number <u>1/</u>
5962-8851101EX 5962-88511012X	01295 01295	SNJ55116J SNJ55116FK
5962-8851102PX 5962-88511022X	01295 01295	SNJ55117JG SNJ55117FK
5962-8851103EX 5962-88511032X	01295 01295	SNJ55118J SNJ55118FK
5962-8851104PX 5962-88511042X	01295 01295	SNJ55119JG SNJ55119FK

1/ Caution. Do not use this number for item acquisition. Items acquired to this number may not satisfy the performance requirements of this drawing.

Vendor CAGE number

01295

Vendor name and address

Texas Instruments, Incorporated  
P.O. Box 6448  
Midland, TX 79711

<b>STANDARDIZED MILITARY DRAWING</b> DEFENSE ELECTRONICS SUPPLY CENTER DAYTON, OHIO 45444	SIZE <b>A</b>	5962-88511	
		REVISION LEVEL	SHEET 15

DESC FORM 193A  
SEP 87

☆ U.S. GOVERNMENT PRINTING OFFICE: 1987-549-096