REVISIONS			
LTR	DESCRIPTION	DATE (YR-MO-DA)	APPROVED
C	Changes in accordance with NOR 5962-R022-96.	95-12-19	K.A. Cottongim
D	Added device type 09 with cage 88739. Added device type 10 with cage 57363. Added case outlines U and Z to figure 1. Redrew entire document.	96-02-22	K.A. Cottongim

REV																			
SHEET																			
REV	D	D	D	D	D	D													
SHEET	15	16	17	18	19	20													

REV STATUS OF SHEETS	REV	D	D	D	D	D	D	D	D	D	D	D	D	D
	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14

PMIC N/A

STANDARD MICROCIRCUIT DRAWING

THIS DRAWING IS AVAILABLE FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

AMSC N/A

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DRAWING APPROVAL DATE
91-01-25

REVISION LEVEL
D

DEFENSE ELECTRONICS SUPPLY CENTER
DAYTON, OHIO 45444

MICROCIRCUIT, HYBRID, DIGITAL, DRIVER/RECEIVER, DUAL CHANNEL, 12-VOLT

SIZE	CAGE CODE	
A	67268	5962-89826

SHEET 1 OF 20

DESC FORM 193
JUL 94

5962-E295-96

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

9004708 0019158 322

1. SCOPE

1.1 Scope. This drawing describes device requirements for class H hybrid microcircuits to be processed in accordance with MIL-PRF-38534.

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

5962-89826	01	X	X
Drawing number	Device type (see 1.2.1)	Case outline (see 1.2.2)	Lead finish (see 1.2.3)

1.2.1 Device type(s). The device type(s) shall identify the circuit function as follows:

Device type	Generic number	Circuit function	1/	Coupling transformer turns ratio: transformer	direct
01	BUS-63127II, BUS-63128II	Low power, dual channel, driver-receiver		1:0.6	1:0.83
02	ARX3419	"		1:0.707	1:1
03	NHI-1502	"		1:0.7	1:1
04	NHI-1523	"		1:0.57	1:0.8
05	FC1553721	"		1:1.66	1:1.2
06	CT1589D	"		1:0.707	1:1
07	FC1553722	"	2/	1:1.66	1:1.2
08	FC1553726	"		1:0.707	1:1
09	ARX3433	"		1:0.707	1:1
10	NHI-1522	"	2/	1:0.57	1:0.8

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

Outline letter	Descriptive designator	Terminals	Package style
U	See figure 1	28	Dual-in-line
X	See figure 1	36	Dual-in-line
Y	See figure 1	36	Flat package
Z	See figure 1	28	Flat package

1.2.3 Lead finish. The lead finish shall be as specified in MIL-PRF-38534. Finish letter "X" shall not be marked on the microcircuit or its packaging. The "X" designation is for use in specifications when lead finishes A, B, and C are considered acceptable and interchangeable without preference.

1.3 Absolute maximum ratings.

Supply voltage range:	
V_{CC} (devices 02, 03, 04, 06, 09, and 10)	-0.3 V dc to +18 V dc
V_{EE} (devices 01, 02, 05, 06, 07, 08, and 09)	+0.3 V dc to -18 V dc
V_{CC1} (all devices)	-0.3 V dc to +7 V dc
Logic input voltage range	-0.3 V dc to V_{CC1}
Receiver differential voltage	40 Vp-p
Receiver common mode voltage range	-10 V dc to +10 V dc
Driver peak output current:	
(devices 01, 03, 04, 06, and 10)	200 mA
(devices 05, 07, 08, and 09)	250 mA
(device 02)	400 mA

1/ Receiver standby low, compatible with manchester encoder-decoder described in DESC drawing 78029.
2/ Receiver standby high, compatible with Smith's manchester encoder-decoder.

Power dissipation (P_D) at T_C = +125°C:	
(device 01)	3 W
(device 02)	2 W 3/ 4/ 5/
(devices 03, 04, and 10)	0.96 W 3/
(devices 05, 07, and 08)	2 W 3/
(devices 06 and 09)	3 W
Storage temperature range	-65°C to +150°C
Junction temperature (T_J):	
(devices 01, 03, 04, 05, 06, 07, 08, and 10)	+160°C
(devices 02 and 09)	+167°C
Thermal resistance, junction-to-case (Θ_{JC}):	
(device 01)	7.0°C/W
(devices 02 and 09)	88°C/W
(devices 03, 04, and 10)	8.8°C/W
(devices 05, 07, and 08)	18°C/W
(device 06)	80°C/W
Thermal resistance, junction-to-ambient (Θ_{JA}):	
(device 01)	27.0°C/W
(device 02 and 09)	108°C/W
(devices 03, 04, and 10)	28.8°C/W
(devices 05, 07, and 08)	35°C/W
(device 06)	80°C/W

1.4 Recommended operating conditions.

Supply voltage range:	
V_{CC} (devices 02, 03, 04, 06, 09, and 10)	+11.4 V dc to +12.6 V dc
V_{EE} (devices 01, 02, 05, 06, 07, 08, and 09)	-11.2 V dc to -12.6 V dc
V_{CC1} (all devices)	+4.5 V dc to +5.5 V dc
Logic input voltage range	0 V dc to +5 V dc
Receiver differential voltage:	
(devices 01, 05, 07, and 08)	30 V p-p
(devices 02, 03, 04, 06, 09, and 10)	40 V p-p
Receiver common voltage range:	
(devices 01, 02, 05, 07, and 08)	-5 V dc to +5 V dc
(devices 03, 04, 06, 09, and 10)	-10 V dc to +10 V dc
Driver peak output current:	
(devices 01, 03, 04, 05, 06, 07, 08, 09, and 10)	220 mA
(device 02)	350 mA
Serial data rate	1.0 MHz maximum
Junction temperature (T_J):	
(devices 01, 03, 04, 05, 07, 08, 09, and 10)	+150°C
(devices 02 and 06)	+160°C
Case operating temperature range (T_C)	-55°C to +125°C

3/ One channel transmitting at 100 percent duty cycle and the second channel at standby.
4/ Worst case operating junction temperature when case is held to +125°C.
5/ Maximum junction temperature rise above case temperature for the hottest device at 100 percent transmitting duty cycle shall be 42°C.

2. APPLICABLE DOCUMENTS

2.1 Government specification and standards. Unless otherwise specified, the following specification and standards 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

PERFORMANCE

MIL-PRF-38534 - Hybrid Microcircuits, General Specification for.

STANDARDS

MILITARY

MIL-STD-883 - Test Methods and Procedures for Microelectronics.
MIL-STD-973 - Configuration Management.
MIL-STD-1835 - Microcircuit Case Outlines.

(Copies of the specification and standards 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 MIL-PRF-38534 and as specified herein.

3.2 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38534 and herein.

3.2.1 Case outline(s). The case outline(s) shall be in accordance with 1.2.2 herein and figure 1.

3.2.2 Terminal connections. The terminal connections shall be as specified on figure 2.

3.2.3 Timing waveforms. The timing waveforms shall be as specified on figure 3.

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

3.4 Electrical test requirements. 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 Marking. Marking shall be in accordance with MIL-PRF-38534. The part shall be marked with the PIN listed in 1.2 herein. In addition, the manufacturer's PIN may also be marked as listed in QML-38534 (see 6.6 herein).

3.6 Manufacturer eligibility. In addition to the general requirements of MIL-PRF-38534, the manufacturer of the part described herein shall maintain the electrical test data (variables format) from the initial quality conformance inspection group A lot sample, produced on the certified line, for each device type listed herein. The data should also include a summary of all parameters manually tested, and for those which, if any, are guaranteed. This data shall be maintained under document revision level control by the manufacturer and be made available to the preparing activity (DESC-EL) upon request.

3.7 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 QML-38534 (see 6.6 herein). The certificate of compliance submitted to DESC-EL prior to listing as an approved source of supply shall affirm that the manufacturer's product meets the requirements of MIL-PRF-38534 and the requirements herein.

3.8 Certificate of conformance. A certificate of conformance as required in MIL-PRF-38534 shall be provided with each lot of microcircuits delivered to this drawing.

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
RECEIVER							
Input level	V_I	Differential input pin 15 to pin 16 2/	4,5,6	All	40		Vp-p
Input common mode voltage range	V_{ICM}	Independent of xfmr or in accordance with MIL-HDBK-1553 2/	4,5,6	01,02, 09		±5	V(pk)
				03,04, 05,06, 07,08,10		±10	
Output low voltage	V_{OL}	I_{OL} = 16 mA	1,2,3	01		0.5	V
		I_{OL} = 4 mA		02,06, 09		0.5	
		I_{OL} = 8 mA		03,04, 05,07, 08,10		0.5	
Output high voltage	V_{OH}	I_{OH} = -0.4 mA	1,2,3	All	2.4		V
TRANSMITTER							
Input low voltage	V_{IL}	6/	1,2,3	All		0.7	V
Input high voltage	V_{IH}	6/	1,2,3	All	2		V
Input low current	I_{IL}	V_{IL} = 0.4 V	1,2,3	01	-0.72		mA
				02,03, 04,09,10	-0.4		
				05,07, 08	-1.6		
				06	-1.0		
Input high curent	I_{IH}	V_{IH} = 2.7 V	1,2,3	01,02, 03,04, 05,07, 08,09,10		0.04	mA
				06		0.10	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
TRANSMITTER - Continued							
Output voltage	V_O	Across 35Ω load	1,2,3	01,02, 03,04, 05,07, 08,09,10	6	9	Vp-p
				06	6.2	8.5	
Output noise voltage	V_{ON}	Across 35Ω load	4,5,6	All		10	mVp-p
RECEIVER STROBE							
Input low voltage	V_{SIL}	6/	1,2,3	All		0.7	V
Input high voltage	V_{SIH}	6/	1,2,3	All	2		V
Input low current	I_{SIL}	V_{SIL} = 0.4 V	1,2,3	01,03, 04,10	-0.72		mA
				02,09	-0.4		
				05,07, 08	-1.6		
				06	-1.0		
Input high current	I_{SIH}	V_{SIH} = 2.7 V	1,2,3	All		0.04	mA
TRANSMITTER INHIBIT							
Input low voltage	V_{IIL}	6/	1,2,3	All		0.7	V
Input high voltage	V_{IIL}	6/	1,2,3	All	2		V
Input low current	I_{IIL}	V_{SIL} = 0.4 V	1,2,3	01	-0.72		mA
				02,03, 04,09,10	-0.4		
				05,07, 08	-1.6		
				06	-1.0		

See footnotes at end of table.

TABLE 1. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
TRANSMITTER INHIBIT - Continued							
Input high current	I_{IIH}	V_{SIH} = 2.7 V	1,2,3	01,02, 03,04, 05,07, 08,09,10		0.04	mA
				06		0.10	
POWER SUPPLY							
Total current	I_{CC}-SB	(standby mode)	1,2,3	02,09 04,10 03,06		1 25 44	mA
	I_{EE}-SB			01,05 07,08 02 06,09		30 30 16.5 70	
	I_{CC1}-SB			01,05 07,08 02 03,04,10 06,09		45 45 35 25 90	
	I_{CC}-25	Across 35Ω load	4,5,6	02,09 04,10 03,06		80 69 100	
	I_{EE}-25			01 2/ 02,09 05,06 07,08		80 21 70 70	
	I_{CC1}-25			01 2/ 05,07 08 02,09 03,04,10 06		45 45 45 35 25 90	
	I_{CC}-50	Across 35Ω load	4,5,6	02,09 04,10 03,06		160 118 155	
	I_{EE}-50			01 02,09 05,07 08 06		155 25 120 120 70	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
POWER SUPPLY - Continued							
Total current	I_{CC1}-50	Across 35Ω load	4,5,6	01,05 07,08 02,09 03,04,10 06		45 45 35 25 90	mA
	I_{CC}-100	Across 35Ω load	1,2,3	02,09 04,10 03,06		325 209 260	
	I_{EE}-100	Across 35Ω load 7/		01 02,09 05,07 08 06		255 30 270 270 70	
	I_{CC1}-100	Across 35Ω load 7/		01 02,09 03,04,10 05,07 08 06		45 35 25 55 55 90	
RECEIVER							
Input resistance	R_{IN}	1 MHz sine wave 2/	4,5,6	01 02,03 04,06,10 05,07 08,09	4 7 7 8 8		kΩ
Input capacitance	C_{IN}	1 MHz sine wave 2/	4	01,02 03,04,10 06 05,07 08,09		5 5 5 7 7	pF
Threshold voltage	V_{TH}	3/	1,2,3	01 02,09 03,04,10 06 05,07 08	0.5 0.6 0.56 0.56 0.8 0.8	1.2 1.05 1.0 1.05 1.2 1.2	Vp-p
	V_{TH}	Group C end-point 3/ electricals		01,02 03,04,10 06 05,07 08,09	0.05 0.05 0.05 0.8 0.8	1.1 1.1 1.1 1.2 1.2	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
TRANSMITTER							
Output resistance (transmitter off)	R_{OUT}	1 MHz sine wave 2/	4,5,6	All	10		kΩ
Output capcitance (transmitter off)	C_{OUT}	1 MHz sine wave 2/	4	All		5	pF
Output offset voltage	V_{OS}	2/ 4/	4,5,6	All		±90	mV(pk)
Peak amplitude variation	A_V	2/ 5/ 7/	4,5,6	All		±15	%
RECEIVER							
Delay time, input to output	t_{DR}	Delay time from differential input zero crossing to DATA or DATA (see figure 3) 2/	9,10,11	All		400	ns
Strobe delay	t_{DS}	Delay time from strobe rising or falling edge to DATA or DATA (see figure 3) 2/	9,10,11	01,03, 04,05, 06,07, 08,10		200	
				02,09		250	
TRANSMITTER							
Rise time	t_R	Device types 01,02,03,05, 07,08,09 output load = 35Ω, Device type 04 output load = 70Ω (see figure 3)	9,10,11	01-08	100	300	ns
				09	100	200	
Fall time	t_F		9,10,11	01-08	100	300	
				09	100	200	
Delay time	t_{DT}	2/ (see figure 3)	9,10,11	01,03, 04,05, 07,08,10		250	ns
				02,09		350	
				06		150	
Inhibit delay inhibiting	t_{DI-H}	2/ (see figure 3)	9,10,11	02,03, 04,09,10		200	ns
				01,05, 06,07, 08		500	

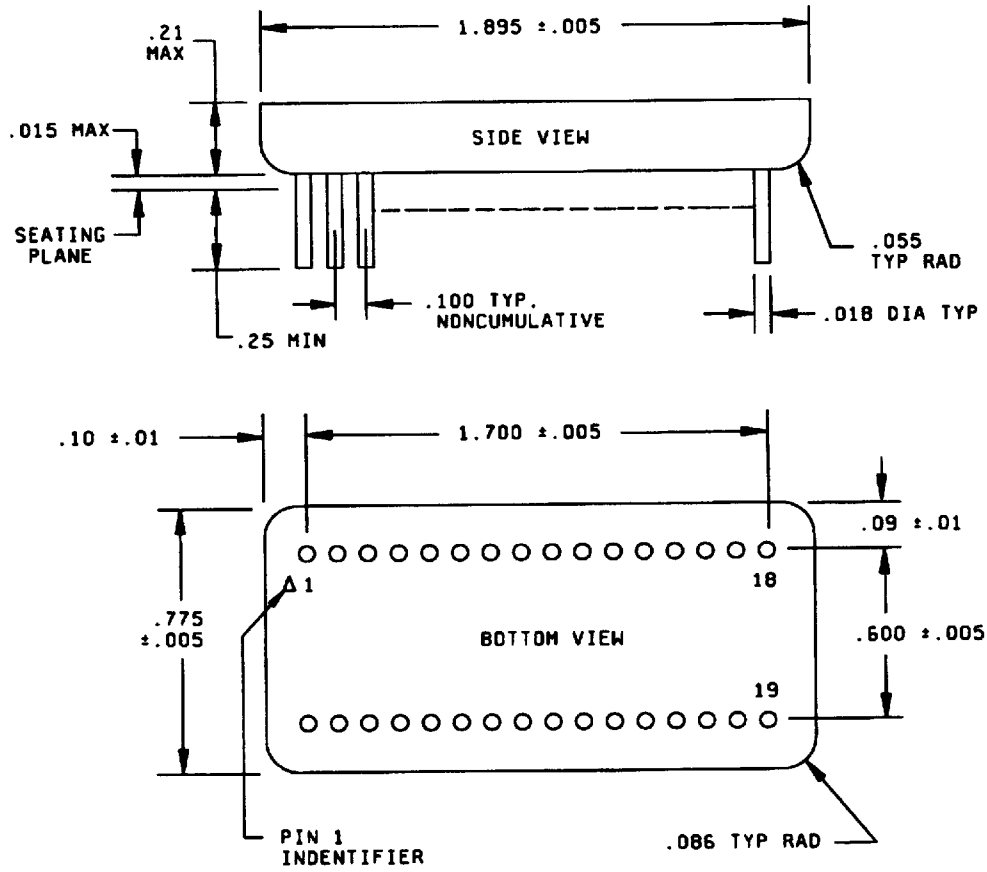
See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions 1/ $-55°C \le T_C \le +125°C$ unless otherwise specified	Group A subgroups	Device type	Limits		Unit
					Min	Max	
TRANSMITTER - Continued							
Inhibit delay active	t_{DI-L}	2/ (see figure 3)	9,10,11	01,02, 06,09		350	ns
				03,04, 05,07, 08,10		150	

1/ V_{CC} = 12 V, V_{EE} = -12 V, V_{CC1} = +5 V. All specifications and limits are for single channel with no connections made to the other channel.
2/ This parameter is tested initially and after any process or design change which might affect this parameter.
3/ Threshold is measured in the direct coupled mode including the transformer. For device types 01, 02, 03, 04, 06, 09, and 10 threshold is the maximum level on the BUS at which there are no pulses on either receiver output. For device types 05, 07, and 08 threshold is defined as the minimum signal on the BUS to maintain TTL compatible outputs on both receiver outputs. Divide by 1.4 to obtain threshold in transformer coupled mode. Add 0.14 V in direct coupled mode or 0.10 V in transformer coupled mode to obtain threshold at which no errors are observed when receiver is used with 15530 CMOS manchester encoder-decoder.
4/ Measured across 35Ω loads, 2.5 µS after parity bit mid-bit zero crossing of a 660 µS message.
5/ Measured across 35Ω loads, variation of average peak amplitude.
6/ These parameters are not directly testable. The maintenance of logic drive levels within the specified voltage window during tests guarantees conformance.
7/ For device type 01, these parameters are guaranteed by design; but not tested.

Case X

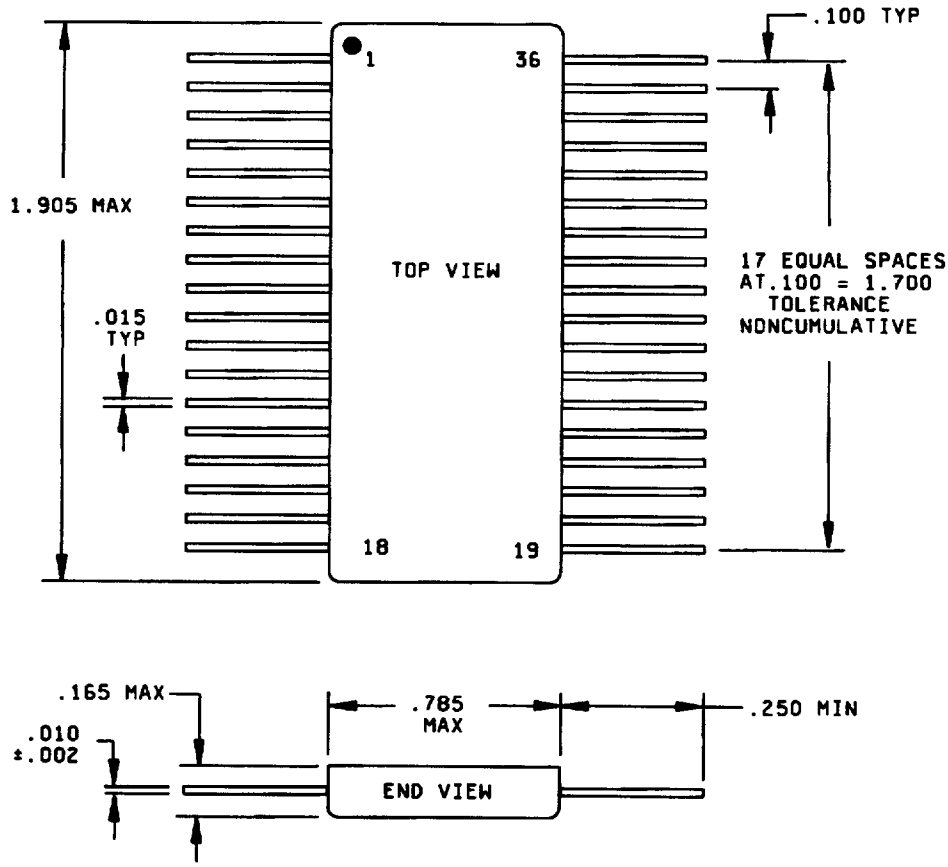


Inches	mm
.005	0.13
.01	0.3
.015	0.38
.018	0.46
.055	1.40
.086	2.18
.09	2.3
.10	2.5
.100	2.54
.600	15.24
.775	19.68
1.700	43.18
1.895	48.13

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Lead identification numbers are for reference only.
4. Lead spacing dimensions apply only at seating plane.

FIGURE 1. Case outlines.

Case Y

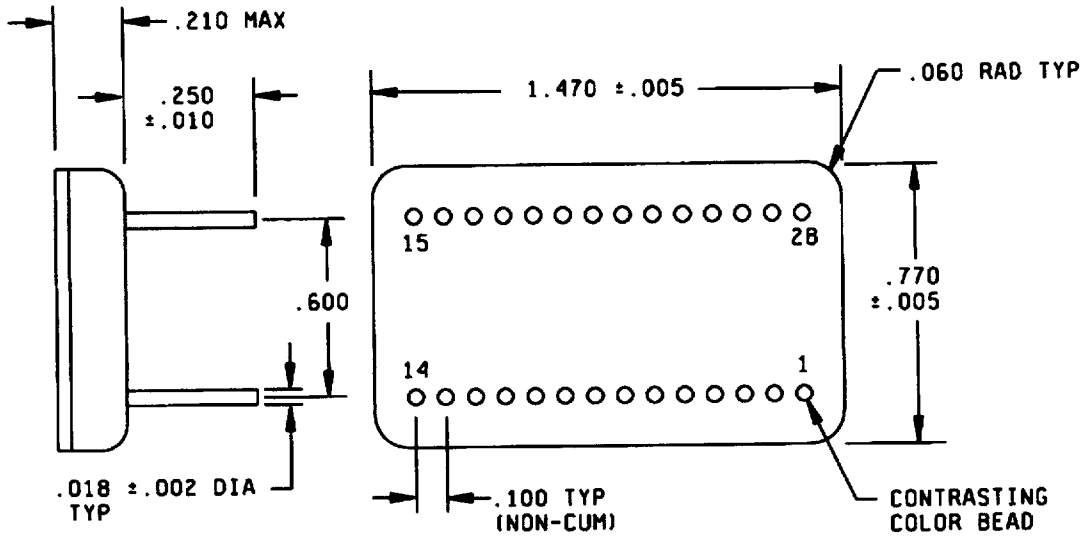


Inches	mm
.002	0.05
.010	0.25
.015	0.38
.100	2.54
.165	4.19
.250	6.35
.785	19.94
1.700	43.18
1.905	48.39

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Lead indentification numbers are for reference only.
4. Lead spacing dimensions apply only at seating plane.

FIGURE 1. Case outlines - Continued.

Case U

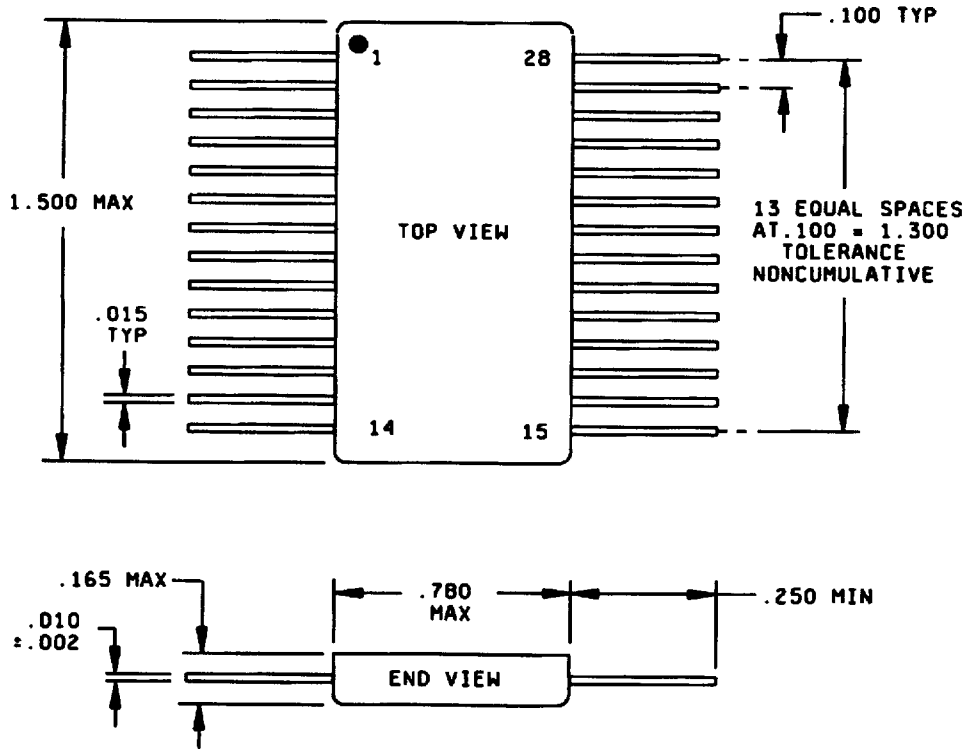


Inches	mm
.002	0.05
.005	0.13
.010	0.25
.018	0.46
.060	1.52
.100	2.54
.210	5.33
.250	6.35
.600	15.24
.770	19.56
1.470	37.34

NOTES:
1. Dimensions are inches.
2. Metric equivalents are given for general information only.
3. Lead identification numbers are for reference only.
4. Lead spacing dimensions only apply at seating plane.

FIGURE 1. Case outlines - Continued.

Case Z



Inches	mm
.002	0.05
.010	0.25
.015	0.38
.100	2.54
.165	4.19
.250	6.35
.780	19.81
1.300	33.02
1.500	38.10

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general infromation only.
3. Lead indentification numbers are for reference only.
4. Lead spacing dimensions apply only at seating plane.

FIGURE 1. Case outlines - Continued.

Cases X and Y

Pin	Function	Channel
1	TX data out	One
2	TX data out	One
3	GND	One
4	NC	
5	RX data out	One
6	Strobe	One
7	GND	One
8	RX data out	One
9	GND	One
10	TX data out	Two
11	TX data out	Two
12	GND	Two
13	NC	
14	RX data out	Two
15	Strobe	Two
16	GND	Two
17	RX data out	Two
18	NC	
19	V_{CC}, or NC	Two
20	RX data in	Two
21	RX data in	Two
22	GND	Two
23	V_{EE}	Two
24	V_{CC1}	Two
25	Inhibit	Two
26	TX data in	Two
27	TX data in	Two
28	V_{CC}, or NC	One
29	RX data in	One
30	RX data in	One
31	GND	One
32	V_{EE}	One
33	V_{CC1}	One
34	Inhibit	One
35	TX data in	One
36	TX data in	One

NOTE: GND pins should all be connected externally. Pins 19 and 28 are +12 V dc for device types 02, 03, 04, 06, and 10 only, no connect (NC) for device types 01, 05, 07, and 08. Device types 05, 07, and 08 pins 3, 12, 22, and 31 are no connect (NC).

FIGURE 2. Terminal connections.

Cases U and Z

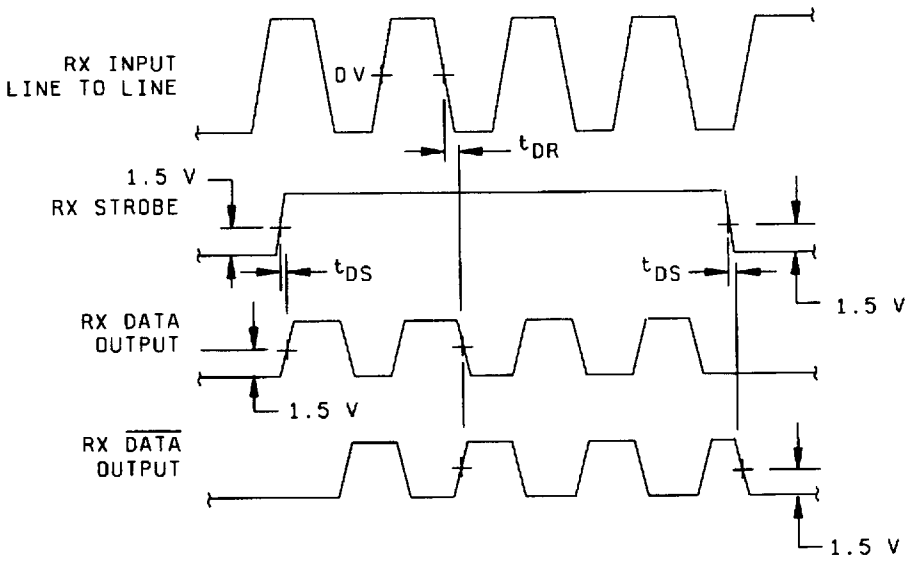
Pin	Function	Channel
1	TX data out/ RX data in	One
2	TX $\overline{\text{data}}$ out/RX $\overline{\text{data}}$ in	One
3	Gnd	One
4	RX strobe	One
5	RX $\overline{\text{data}}$ out	One
6	RX data out	One
7	Case	
8	TX data out/RX data in	Two
9	TX $\overline{\text{data}}$ out/RX $\overline{\text{data}}$ in	Two
10	Gnd	Two
11	RX strobe	Two
12	RX $\overline{\text{data}}$ out	Two
13	RX data out	Two
14	No connection	
15	Gnd	Two
16	V_{EE}	Two
17	V_{CC1}	Two
18	TX inhibit	Two
19	TX $\overline{\text{data}}$ in	Two
20	TX data in	Two
21	V_{CC}	Two
22	Gnd	One
23	V_{EE}	One
24	V_{CC1}	One
25	Inhibit	One
26	TX $\overline{\text{data}}$ in	One
27	TX data in	One
28	V_{CC}	One

NOTE: GND pins should all be connected externally. Pins 14 is a no connect. Connect pin 7 to external ground.

FIGURE 2. Terminal connections - Continued.

Device types 01-06, 08, and 10

Receiver timing



Transmitter timing

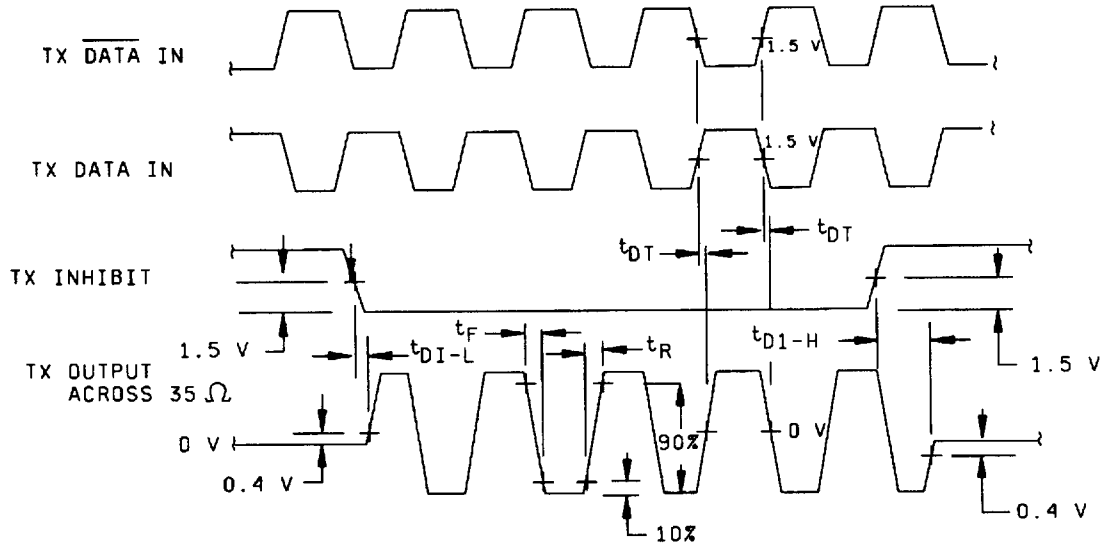
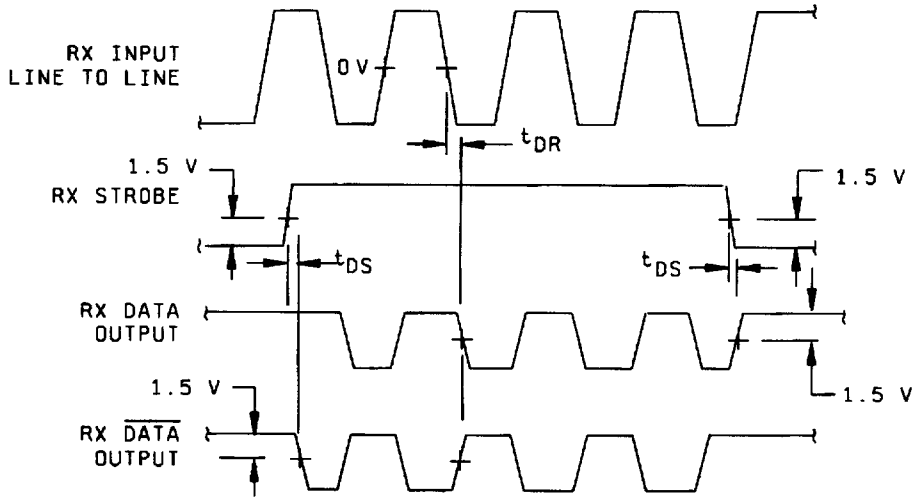


FIGURE 3. Timing waveforms.

Device types 07 and 09

Receiver timing



Transmitter timing

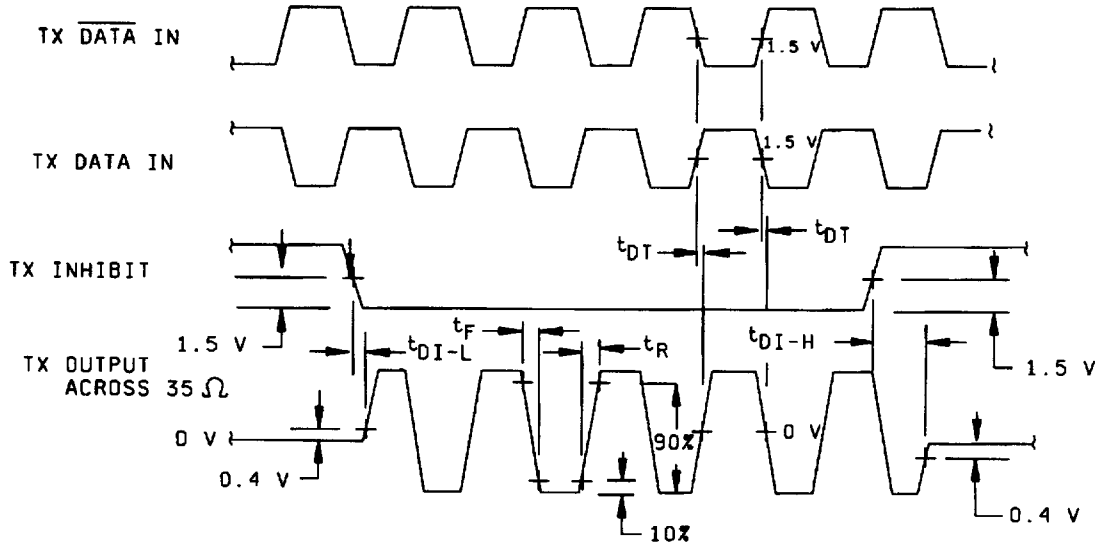


FIGURE 3. Timing waveforms - Continued.

4. QUALITY ASSURANCE PROVISIONS

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38534.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38534. 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 either DESC-EL or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1015 of MIL-STD-883.

(2) T_C as specified in accordance with table I of method 1015 of MIL-STD-883.

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-PRF-38534 test requirements	Subgroups (in accordance with MIL-PRF-38534, group A test table)
Interim electrical parameters	- - -
Final electrical test parameters	1*, 2, 3, 4, 5, 6, 9, 10, 11
Group A test requirements	1, 2, 3, 4, 5, 6, 9, 10, 11
Group C end-point electrical parameters	1, 2, 3

* PDA applies to subgroup 1.

4.3 Quality conformance inspection. Quality conformance inspection shall be in accordance with MIL-PRF-38534 and as specified herein.

4.3.1 Group A inspection. Group A inspection shall be in accordance with MIL-PRF-38534 and as follows:

a. Tests shall be as specified in table II herein.

b. Subgroups 7 and 8 shall be omitted.

4.3.2 Group B inspection. Group B inspection shall be in accordance with MIL-PRF-38534.

4.3.3 Group C inspection. Group C inspection shall be in accordance with MIL-PRF-38534 and as follows:

a. End-point electrical parameters shall be as specified in table II herein.

b. Steady-state life test, 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 either DESC-EL or the acquiring activity upon request. Also, the test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1005 of MIL-STD-883.

(2) T_C as specified in accordance with table I of method 1005 of MIL-STD-883.

(3) Test duration: 1,000 hours, except as permitted by method 1005 of MIL-STD-883.

4.3.4 Group D inspection. Group D inspection shall be in accordance with MIL-PRF-38534.

5. PACKAGING

5.1 Packaging requirements. The requirements for packaging shall be in accordance with MIL-PRF-38534.

6. NOTES

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

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

6.3 Configuration control of SMD's. All proposed changes to existing SMD's will be coordinated with the users of record for the individual documents. This coordination will be accomplished in accordance with MIL-STD-973 using DD Form 1692, Engineering Change Proposal.

6.4 Record of users. Military and industrial users shall inform Defense Electronics Supply Center when a system application requires configuration control and the applicable SMD. DESC 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 DESC-EL, telephone (513) 296-6047.

6.5 Comments. Comments on this drawing should be directed to DESC-EL, Dayton, Ohio 45444, or telephone (513) 296-5373.

6.6 Approved sources of supply. Approved sources of supply are listed in QML-38534. Additional sources will be added to QML-38534 as they become available. The vendors listed in QML-38534 have agreed to this drawing and a certificate of compliance (see 3.7 herein) has been submitted to and accepted by DESC-EL.