

# SN54154, SN74154 4-LINE TO 16-LINE DECODERS/DEMULTIPLEXERS

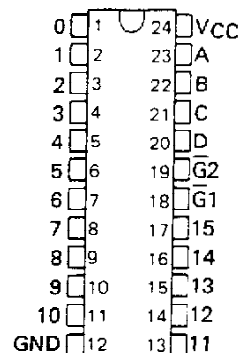
SDLS056

DECEMBER 1972 — REVISED MARCH 88

- '154 is Ideal for High-Performance Memory Decoding
- Decodes 4 Binary-Coded Inputs into One of 16 Mutually Exclusive Outputs
- Performs the Demultiplexing Function by Distributing Data From One Input Line to Any One of 16 Outputs
- Input Clamping Diodes Simplify System Design
- High Fan-Out, Low-Impedance, Totem-Pole Outputs
- Fully Compatible with Most TTL and MSI Circuits

SN54154 . . . J OR W PACKAGE  
SN74154 . . . N PACKAGE

(TOP VIEW)



TYPICAL AVERAGE PROPAGATION DELAY 3 LEVELS OF LOGIC	TYPICAL POWER DISSIPATION
23 ns	170 mW

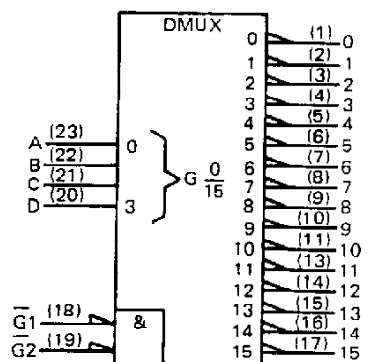
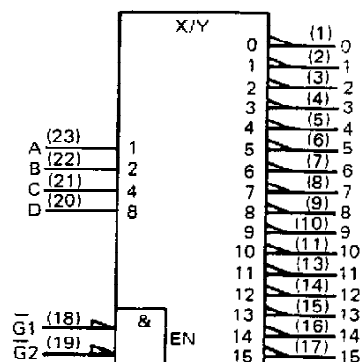
logic symbols (alternatives)<sup>†</sup>

## description

Each of these monolithic, 4-line-to-16-line decoders utilizes TTL circuitry to decode four binary-coded inputs into one of sixteen mutually exclusive outputs when both the strobe inputs,  $\overline{G1}$  and  $\overline{G2}$ , are low. The demultiplexing function is performed by using the 4 input lines to address the output line, passing data from one of the strobe inputs with the other strobe input low. When either strobe input is high, all outputs are high. These demultiplexers are ideally suited for implementing high-performance memory decoders. For ultra-high speed systems, SN54S138/SN74S138 and SN54S139/SN74S139 are recommended.

These circuits are fully compatible for use with most other TTL circuits. All inputs are buffered and input clamping diodes are provided to minimize transmission-line effects and thereby simplify system design.

The SN54154 is characterized for operation over the full military temperature range of  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$ . The SN74154 is characterized for operation from  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ .



<sup>†</sup>These symbols are in accordance with ANSI/IEEE Std. 91-1984 and IEC Publication 617-12.

PRODUCTION DATA documents contain information current as of publication date. Products conform to specifications per the terms of Texas Instruments standard warranty. Production processing does not necessarily include testing of all parameters.

TEXAS  
INSTRUMENTS

POST OFFICE BOX 655012 • DALLAS, TEXAS 75265

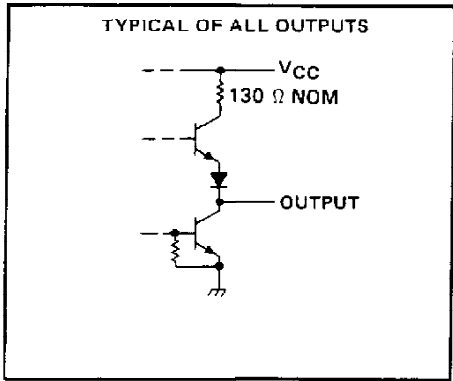
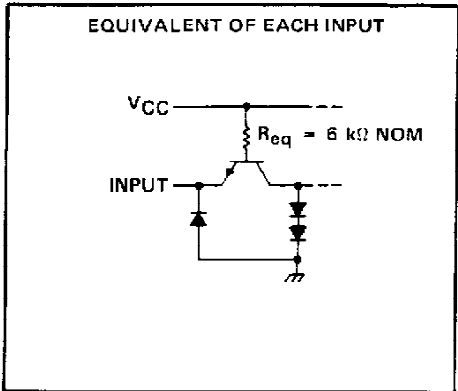
SN54154, SN74154  
4-LINE TO 16-LINE DECODERS/DEMULTIPLEXERS

FUNCTION TABLE

INPUTS					OUTPUTS																
G1	G2	D	C	B	A	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L	L	L	L	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
L	L	L	L	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	L	H	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H
L	L	L	L	H	H	H	H	L	H	H	H	H	H	H	L	H	H	H	H	H	H
L	L	L	H	L	L	H	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H
L	L	L	H	L	H	H	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H
L	L	L	H	H	L	H	H	H	H	H	L	H	H	H	H	H	H	L	H	H	H
L	L	L	H	H	H	H	H	H	H	H	L	H	L	H	H	H	H	L	H	H	H
L	L	L	H	L	L	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H
L	L	L	H	L	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H	H
L	L	L	H	H	L	H	H	H	H	H	H	H	H	L	H	H	H	H	H	H	H
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H	H	H	H
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H	H
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	H
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	H	H	H	H														

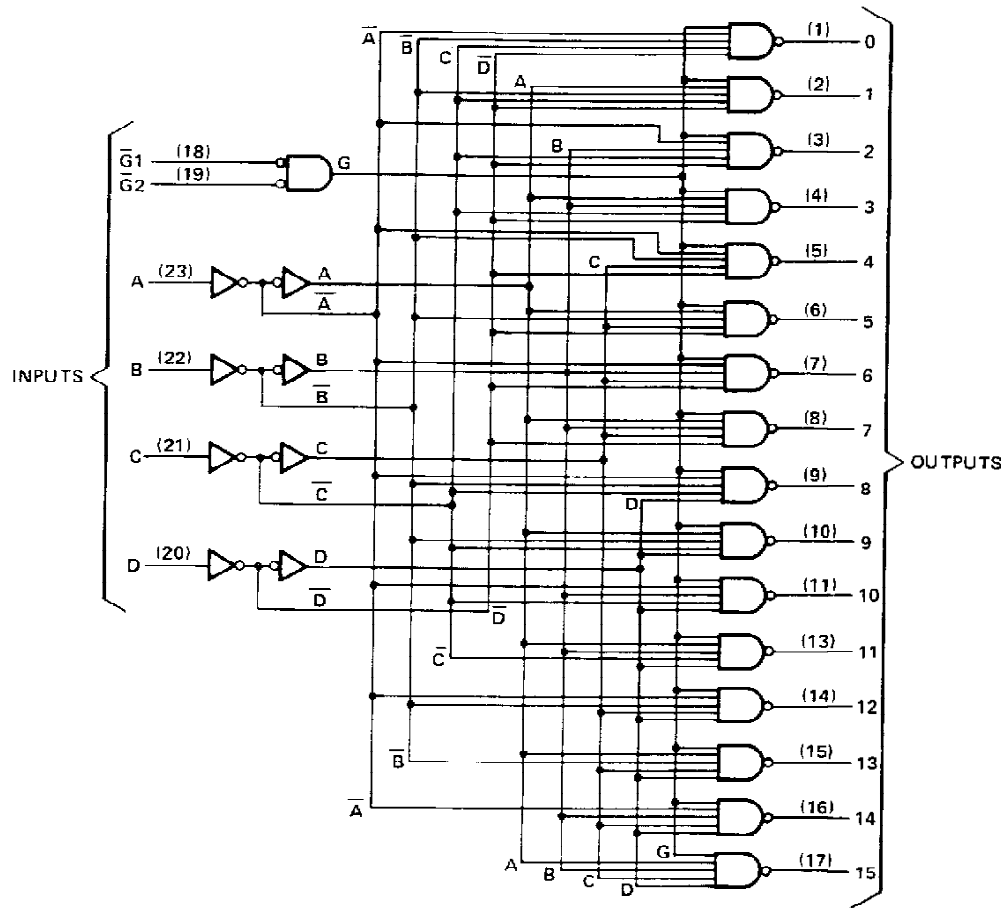
H = high level, L = low level, X = Irrelevant

schematics of inputs and outputs



SN54154, SN74154  
4-LINE TO 16-LINE DECODERS/DEMULTEPLEXERS

logic diagram (positive logic)



TEXAS  
INSTRUMENTS

POST OFFICE BOX 6550 • DALLAS, TEXAS 75265

# SN54154, SN74154

## 4-LINE TO 16-LINE DECODERS/DEMULTIPLEXERS

absolute maximum ratings over operating free-air temperature range (unless otherwise noted)

Supply voltage, $V_{CC}$ (see Note 1)	7 V
Input voltage	5.5 V
Operating free-air temperature range: SN54154 Circuits	-55°C to 125°C
SN74154 Circuits	0°C to 70°C
Storage temperature range	-65°C to 150°C

NOTE 1: Voltage values are with respect to network ground terminal.

recommended operating conditions

	SN54154			SN74154			UNIT
	MIN	NOM	MAX	MIN	NOM	MAX	
Supply voltage, $V_{CC}$	4.5	5	5.5	4.75	5	5.25	V
High-level output current, $I_{OH}$			-800			-800	$\mu$ A
Low-level output current, $I_{OL}$			16			16	mA
Operating free-air temperature, $T_A$	-55		125	0		70	C

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	SN54154			SN74154			UNIT
		MIN	TYP	MAX	MIN	TYP‡	MAX	
$V_{IH}$ High-level input voltage		2			2			V
$V_{IL}$ Low-level input voltage				0.8			0.8	V
$V_{IK}$ Input clamp voltage	$V_{CC} = \text{MIN}, I_I = -12 \text{ mA}$			-1.5			-1.5	V
$V_{OH}$ High-level output voltage	$V_{CC} = \text{MIN}, V_{IH} = 2 \text{ V},$ $V_{IL} = 0.8 \text{ V}, I_{OH} = -800 \mu\text{A}$	2.4	3.4		2.4	3.4		V
$V_{OL}$ Low-level output voltage	$V_{CC} = \text{MIN}, V_{IH} = 2 \text{ V},$ $V_{IL} = 0.8 \text{ V}, I_{OL} = 16 \text{ mA}$		0.2	0.4		0.2	0.4	V
$I_I$ Input current at maximum input voltage	$V_{CC} = \text{MAX}, V_I = 5.5 \text{ V}$			1			1	mA
$I_{IH}$ High-level input current	$V_{CC} = \text{MAX}, V_I = 2.4 \text{ V}$			40			40	$\mu$ A
$I_{IL}$ Low-level input current	$V_{CC} = \text{MAX}, V_I = 0.4 \text{ V}$			-1.6			-1.6	mA
$I_{OS}$ Short-circuit output current§	$V_{CC} = \text{MAX}$	-20		-55	-18		-57	mA
$I_{CC}$ Supply current	$V_{CC} = \text{MAX}$ , See Note 2		34	49		34	56	mA

† For conditions shown as MIN or MAX, use the appropriate value specified under recommended operating conditions for the applicable type.

‡ All typical values are at  $V_{CC} = 5 \text{ V}, T_A = 25^\circ\text{C}$ .

§ Not more than one output should be shorted at a time.

NOTE 2:  $I_{CC}$  is measured with all inputs grounded and all outputs open.

switching characteristics,  $V_{CC} = 5 \text{ V}, T_A = 25^\circ\text{C}$

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$t_{PLH}$ Propagation delay time, low-to-high-level output, from A, B, C, or D inputs through 3 levels of logic	$C_L = 15 \text{ pF}, R_L = 400 \Omega,$ See Note 3		24	36	ns
$t_{PHL}$ Propagation delay time, high-to-low-level output, from A, B, C, or D inputs through 3 levels of logic			22	33	ns
$t_{PLH}$ Propagation delay time, low-to-high-level output, from either strobe input			20	30	ns
$t_{PHL}$ Propagation delay time, high-to-low-level output, from either strobe input			18	27	ns

NOTE 3: Load circuits and voltage waveforms are shown in Section 1.

TEXAS  
INSTRUMENTS

POST OFFICE BOX 655012 • DALLAS, TEXAS 75265

**PACKAGING INFORMATION**

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)	Samples
5962-9558101QJA	ACTIVE	CDIP	J	24	1	TBD	Call TI	N / A for Pkg Type	-55 to 125	5962-9558101QJ A SNJ54154J	<a href="#">Samples</a>
5962-9558101QKA	ACTIVE	CFP	W	24	1	TBD	A42	N / A for Pkg Type	-55 to 125	5962-9558101QK A SNJ54154W	<a href="#">Samples</a>
5962-9558101QKA	ACTIVE	CFP	W	24	1	TBD	A42	N / A for Pkg Type	-55 to 125	5962-9558101QK A SNJ54154W	<a href="#">Samples</a>
SN54154J	ACTIVE	CDIP	J	24	1	TBD	Call TI	N / A for Pkg Type	-55 to 125	SN54154J	<a href="#">Samples</a>
SN54154J	ACTIVE	CDIP	J	24	1	TBD	Call TI	N / A for Pkg Type	-55 to 125	SN54154J	<a href="#">Samples</a>
SN74154DW	OBSOLETE	SOIC	DW	24		TBD	Call TI	Call TI	0 to 70		
SN74154DW	OBSOLETE	SOIC	DW	24		TBD	Call TI	Call TI	0 to 70		
SN74154N	LIFEBUY	PDIP	N	24	15	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	0 to 70	SN74154N	
SN74154N	LIFEBUY	PDIP	N	24	15	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	0 to 70	SN74154N	
SN74154N3	OBSOLETE	PDIP	N	24		TBD	Call TI	Call TI	0 to 70		
SN74154N3	OBSOLETE	PDIP	N	24		TBD	Call TI	Call TI	0 to 70		
SNJ54154J	ACTIVE	CDIP	J	24	1	TBD	Call TI	N / A for Pkg Type	-55 to 125	5962-9558101QJ A SNJ54154J	<a href="#">Samples</a>
SNJ54154J	ACTIVE	CDIP	J	24	1	TBD	Call TI	N / A for Pkg Type	-55 to 125	5962-9558101QJ A SNJ54154J	<a href="#">Samples</a>
SNJ54154W	ACTIVE	CFP	W	24	1	TBD	A42	N / A for Pkg Type	-55 to 125	5962-9558101QK A SNJ54154W	<a href="#">Samples</a>
SNJ54154W	ACTIVE	CFP	W	24	1	TBD	A42	N / A for Pkg Type	-55 to 125	5962-9558101QK A SNJ54154W	<a href="#">Samples</a>

(1) The marketing status values are defined as follows:  
**ACTIVE:** Product device recommended for new designs.

**LIFEBUY:** TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

**NRND:** Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

**PREVIEW:** Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

<sup>(2)</sup> Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check <http://www.ti.com/productcontent> for the latest availability information and additional product content details.

**TBD:** The Pb-Free/Green conversion plan has not been defined.

**Pb-Free (RoHS):** TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

**Pb-Free (RoHS Exempt):** This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

**Green (RoHS & no Sb/Br):** TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

<sup>(3)</sup> MSL, Peak Temp. - The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

<sup>(4)</sup> There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

<sup>(5)</sup> Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

<sup>(6)</sup> Lead/Ball Finish - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead/Ball Finish values may wrap to two lines if the finish value exceeds the maximum column width.

**Important Information and Disclaimer:** The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

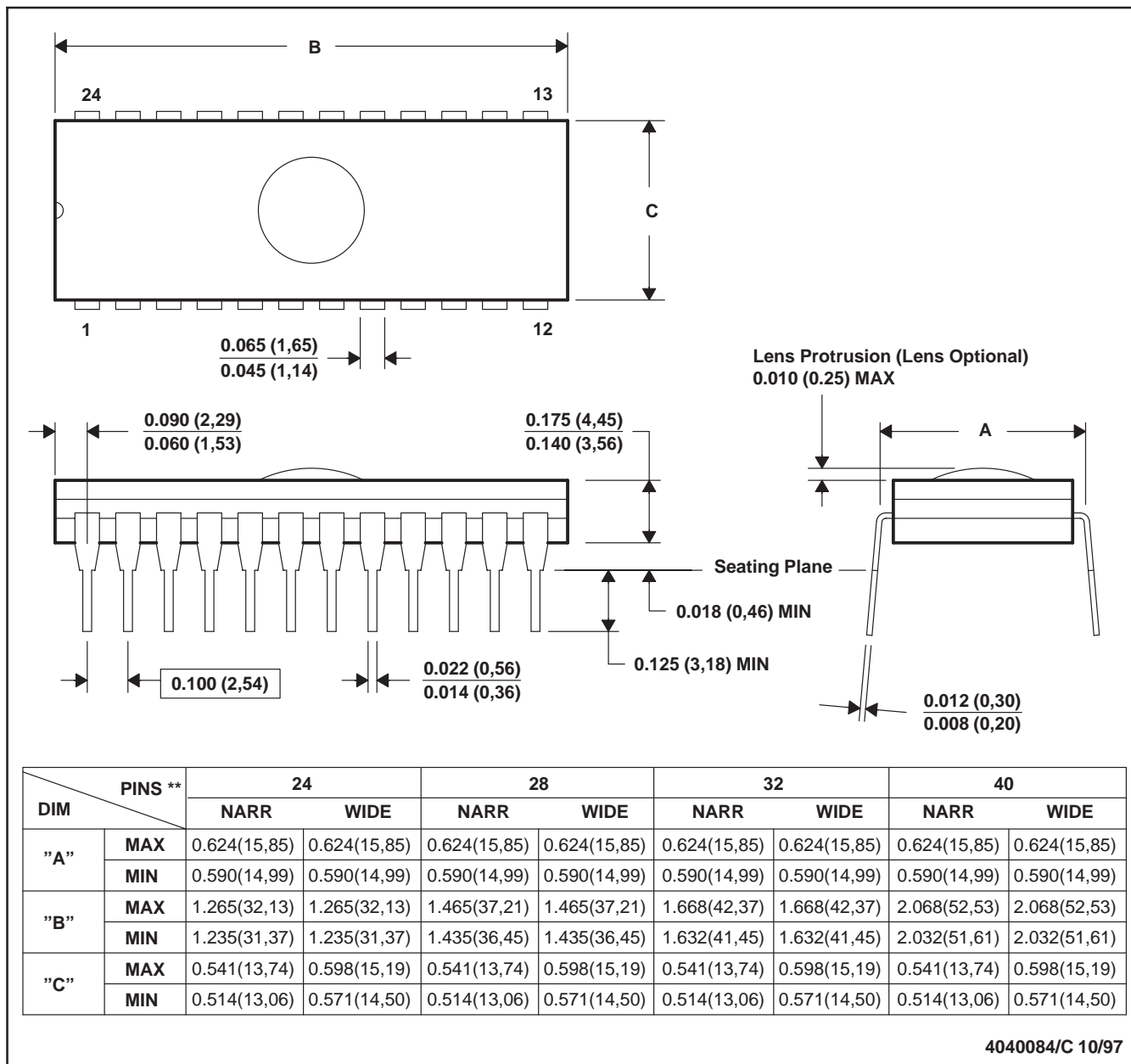
**OTHER QUALIFIED VERSIONS OF SN54154, SN74154 :**

● Catalog: [SN74154](#)

● Military: [SN54154](#)

NOTE: Qualified Version Definitions:

- 
- Catalog - TI's standard catalog product
  - Military - QML certified for Military and Defense Applications

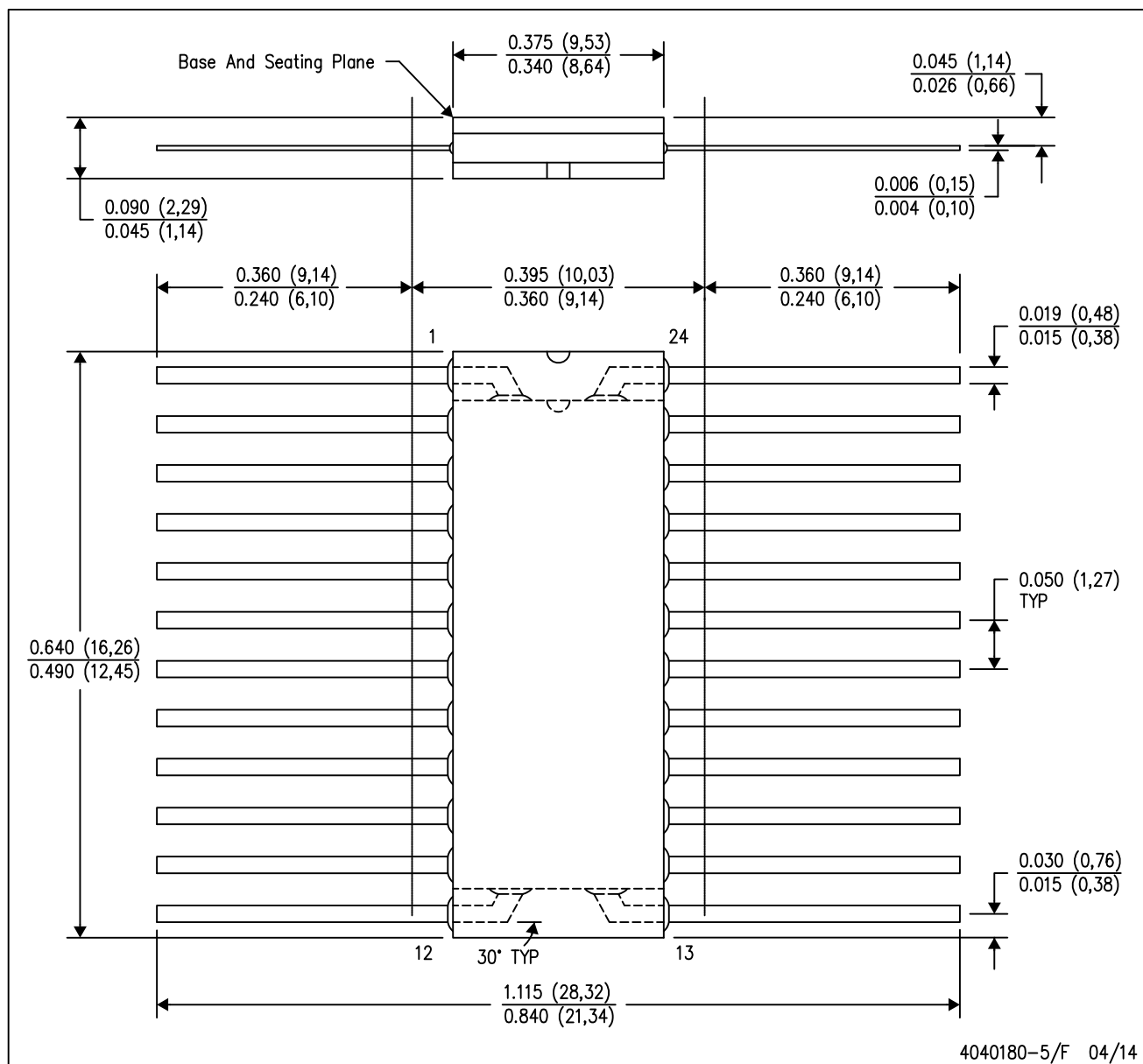
**J (R-GDIP-T\*\*)****CERAMIC DUAL-IN-LINE PACKAGE****24 PINS SHOWN**

- NOTES: A. All linear dimensions are in inches (millimeters).  
 B. This drawing is subject to change without notice.  
 C. Window (lens) added to this group of packages (24-, 28-, 32-, 40-pin).  
 D. This package can be hermetically sealed with a ceramic lid using glass frit.  
 E. Index point is provided on cap for terminal identification.



W (R-GDFP-F24)

CERAMIC DUAL FLATPACK



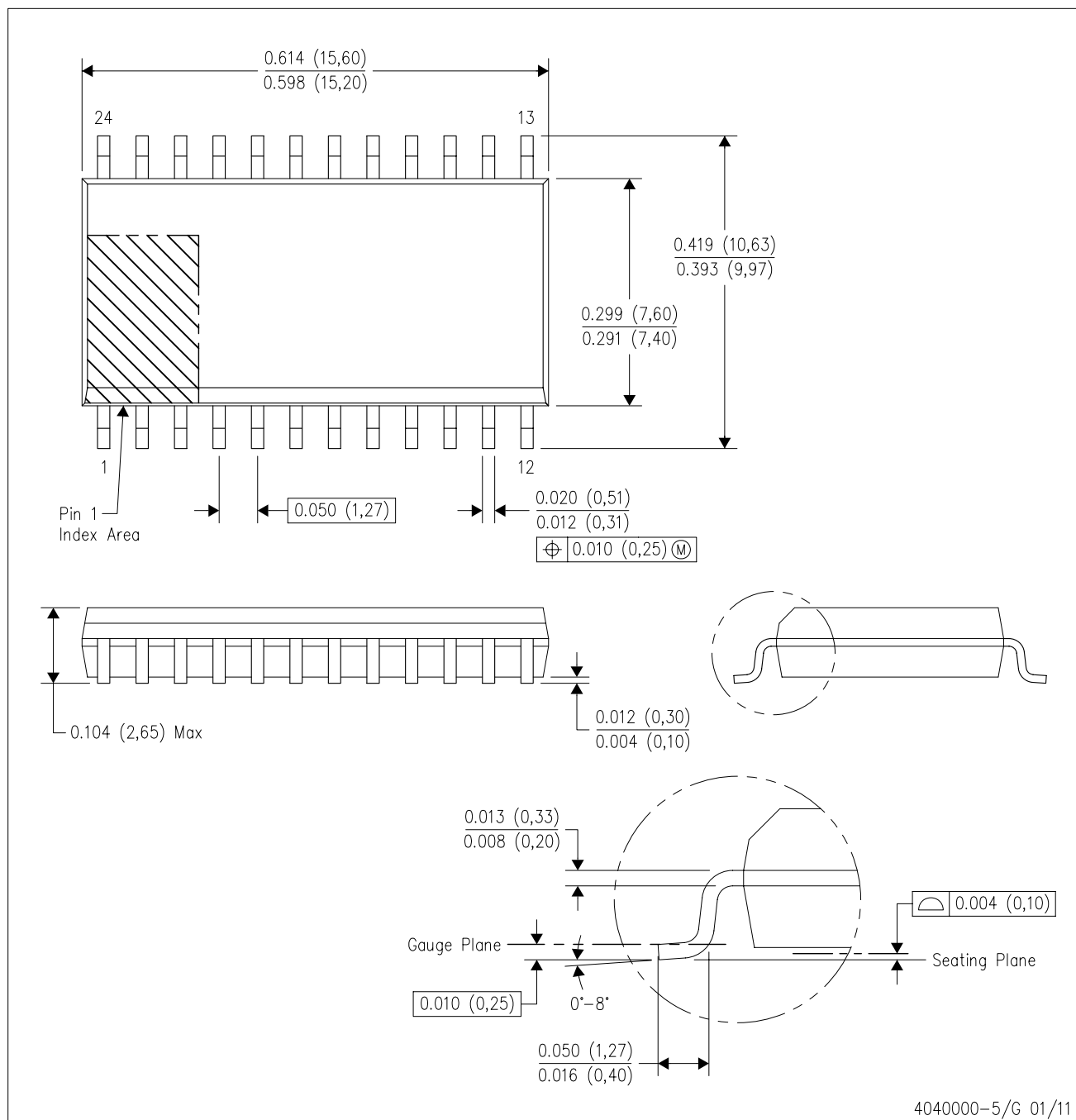
## NOTES:

- All linear dimensions are in inches (millimeters).
- This drawing is subject to change without notice.
- This package can be hermetically sealed with a ceramic lid using glass frit.
- Index point is provided on cap for terminal identification only.
- Falls within Mil-Std 1835 GDFP2-F20



DW (R-PDSO-G24)

PLASTIC SMALL OUTLINE



- NOTES:
- A. All linear dimensions are in inches (millimeters). Dimensioning and tolerancing per ASME Y14.5M-1994.
  - B. This drawing is subject to change without notice.
  - C. Body dimensions do not include mold flash or protrusion not to exceed 0.006 (0,15).
  - D. Falls within JEDEC MS-013 variation AD.

## IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products (also referred to herein as "components") are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of significant portions of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards which anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed a special agreement specifically governing such use.

Only those TI components which TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components which have **not** been so designated is solely at the Buyer's risk, and that Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.

### Products

Audio	<a href="http://www.ti.com/audio">www.ti.com/audio</a>
Amplifiers	<a href="http://amplifier.ti.com">amplifier.ti.com</a>
Data Converters	<a href="http://dataconverter.ti.com">dataconverter.ti.com</a>
DLP® Products	<a href="http://www.dlp.com">www.dlp.com</a>
DSP	<a href="http://dsp.ti.com">dsp.ti.com</a>
Clocks and Timers	<a href="http://www.ti.com/clocks">www.ti.com/clocks</a>
Interface	<a href="http://interface.ti.com">interface.ti.com</a>
Logic	<a href="http://logic.ti.com">logic.ti.com</a>
Power Mgmt	<a href="http://power.ti.com">power.ti.com</a>
Microcontrollers	<a href="http://microcontroller.ti.com">microcontroller.ti.com</a>
RFID	<a href="http://www.ti-rfid.com">www.ti-rfid.com</a>
OMAP Applications Processors	<a href="http://www.ti.com/omap">www.ti.com/omap</a>
Wireless Connectivity	<a href="http://www.ti.com/wirelessconnectivity">www.ti.com/wirelessconnectivity</a>

### Applications

Automotive and Transportation	<a href="http://www.ti.com/automotive">www.ti.com/automotive</a>
Communications and Telecom	<a href="http://www.ti.com/communications">www.ti.com/communications</a>
Computers and Peripherals	<a href="http://www.ti.com/computers">www.ti.com/computers</a>
Consumer Electronics	<a href="http://www.ti.com/consumer-apps">www.ti.com/consumer-apps</a>
Energy and Lighting	<a href="http://www.ti.com/energy">www.ti.com/energy</a>
Industrial	<a href="http://www.ti.com/industrial">www.ti.com/industrial</a>
Medical	<a href="http://www.ti.com/medical">www.ti.com/medical</a>
Security	<a href="http://www.ti.com/security">www.ti.com/security</a>
Space, Avionics and Defense	<a href="http://www.ti.com/space-avionics-defense">www.ti.com/space-avionics-defense</a>
Video and Imaging	<a href="http://www.ti.com/video">www.ti.com/video</a>

### TI E2E Community

[e2e.ti.com](http://e2e.ti.com)