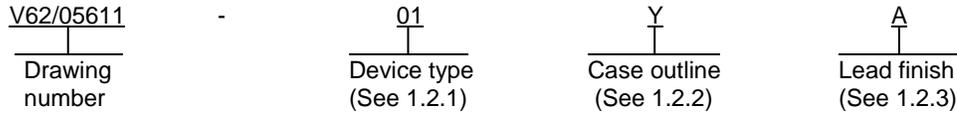


1. SCOPE

1.1 Scope. This drawing documents the general requirements of a high performance operational amplifier microcircuit, with an operating temperature range of -55°C to +125°C.

1.2 Vendor Item Drawing Administrative Control Number. The manufacturers PIN is the item of identification. The vendor item drawing establishes an administrative control number for identifying the item on the engineering documentation:



1.2.1 Device type(s).

<u>Device type</u>	<u>Generic</u>	<u>Circuit function</u>
01	TLV2374-EP	Quad operational amplifier
02	TLV2372-EP	Dual operational amplifier
03	TLV2371-EP	Single operational amplifier

1.2.2 Case outline(s). The case outline(s) are as specified herein.

<u>Outline letter</u>	<u>Number of pins</u>	<u>JEDEC PUB 95</u>	<u>Package style</u>
T	5	MO-178-AA	Plastic surface mount
U	8	MS-012-AA	Small plastic outline
X	8	MO-187-AA	Small plastic outline
Y	14	MO-012-AB	Small plastic outline
Z	14	MO-153	Small plastic outline

1.2.3 Lead finishes. The lead finishes are as specified below or other lead finishes as provided by the device manufacturer:

<u>Finish designator</u>	<u>Material</u>
A	Hot solder dip
B	Tin-lead plate
C	Gold plate
D	Palladium
E	Gold flash palladium
Z	Other

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1.3 Absolute maximum ratings. 1/

Supply voltage range (V_{DD})	16.5 V 2/
Differential input voltage (V_{ID})	$\pm V_{DD}$
Input voltage range (V_{IN})	-0.2 V to $V_{DD} + 0.2$ V 2/
Input current range (I_{IN})	± 10 mA
Output current range (I_{OUT})	± 100 mA
Maximum junction temperature range (T_J)	+150°C
Storage temperature range (T_{STG})	-65°C to +150°C
Lead temperature, 1.6 mm (1/16 inch) from case for 10 seconds	+260°C
Package thermal impedance, junction to ambient (θ_{JA}): 3/ 4/	
T package	324.1°C/W
U package	176°C/W
X package	259.96°C/W
Y package	122.3°C/W
Z package	173.6°C/W

1.4 Recommended operating conditions. 5/

Supply voltage range (V_{DD}):	
Single supply	2.7 V minimum to 16 V maximum
Split supply	± 1.35 V minimum to ± 8 V maximum
Common mode input voltage range (V_{ICR})	0 V minimum to V_{DD} maximum
Turn on voltage level (V_{ON}), relative to GND pin voltage	2 V maximum
Turn off voltage (V_{OFF}), relative to GND pin voltage	0.8 V minimum
Operating free-air temperature range (T_A)	-55°C to +125°C

-
- 1/ Stresses beyond those listed under “absolute maximum rating” may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under “recommended operating conditions” is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.
- 2/ All voltage values, except differential voltages, are with respect to GND.
- 3/ Maximum power dissipation is a function of $T_J(\max)$, θ_{JA} , and T_A . The maximum allowable power dissipation at any allowable ambient temperature is $P_D = (T_J(\max) - T_A) / \theta_{JA}$. Selecting the maximum of 150°C can affect reliability.
- 4/ The package thermal impedance is calculated in accordance with JESD 51-7.
- 5/ Use of this product beyond the manufacturers design rules or stated parameters is done at the user’s risk. The manufacturer and/or distributor maintain no responsibility or liability for product used beyond the stated limits.

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2. APPLICABLE DOCUMENTS

JEDEC Solid State Technology Association

- EIA/JEDEC 51-7 – High Effective Thermal Conductivity Test Board for Leaded Surface Mount Packages
- JEDEC PUB 95 – Registered and Standard Outlines for Semiconductor Devices

(Applications for copies should be addressed to the Electronic Industries Alliance, 2500 Wilson Boulevard, Arlington, VA 22201-3834 or online at <http://www.jedec.org>)

3. REQUIREMENTS

3.1 Marking. Parts shall be permanently and legibly marked with the manufacturer's part number as shown in 6.3 herein and as follows:

- A. Manufacturer's name, CAGE code, or logo
- B. Pin 1 identifier
- C. ESDS identification (optional)

3.2 Unit container. The unit container shall be marked with the manufacturer's part number and with items A and C (if applicable) above.

3.3 Electrical characteristics. The maximum and recommended operating conditions and electrical performance characteristics are as specified in 1.3, 1.4, and table I herein.

3.4 Design, construction, and physical dimension. The design, construction, and physical dimensions are as specified herein.

3.5 Diagrams.

3.5.1 Case outlines. The case outlines shall be as shown in 1.2.2 and figure 1.

3.5.2 Terminal connections. The terminal connections shall be as shown in figure 2.

<p align="center">DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p align="center">SIZE A</p>	<p align="center">CODE IDENT NO. 16236</p>	<p align="center">DWG NO. V62/05611</p>
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TABLE I. Electrical performance characteristics. 1/

Test	Symbol	Conditions $V_{DD} = 2.7\text{ V}, 5\text{ V}, \text{ and } 15\text{ V}$ unless otherwise specified	Temperature, T_A	Device type	Limits		Unit
					Min	Max	
DC performance section.							
Input offset voltage	V_{IO}	$V_{IC} = V_{DD} / 2, V_O = V_{DD} / 2,$ $R_S = 50\ \Omega$	25°C	01,02, 03		4.5	mV
			-55°C to +125°C			6	
Offset voltage drift	αV_{IO}	$V_{IC} = V_{DD} / 2, V_O = V_{DD} / 2,$ $R_S = 50\ \Omega$	25°C	01,02, 03	2 typical		$\mu\text{V}/^\circ\text{C}$
Common mode rejection ration	CMRR	$V_{DD} = 2.7\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD}$	25°C	01,02, 03	50		dB
			-55°C to +125°C		47		
		$V_{DD} = 2.7\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD} - 1.35\text{ V}$	25°C		53		
			-55°C to +125°C		50		
		$V_{DD} = 5\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD}$	25°C		55		
			-55°C to +125°C		54		
		$V_{DD} = 5\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD} - 1.35\text{ V}$	25°C		58		
			-55°C to +125°C		54		
		$V_{DD} = 15\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD}$	25°C		64		
			-55°C to +125°C		63		
$V_{DD} = 15\text{ V}, R_S = 50\ \Omega,$ $V_{IC} = 0\text{ to } V_{DD} - 1.35\text{ V}$	25°C	67					
	-55°C to +125°C	66					
Large signal differential voltage amplification	A_{VD}	$V_{DD} = 2.7\text{ V}, R_L = 10\text{ k}\Omega,$ $V_{O(PP)} = V_{DD} / 2,$	25°C	01,02, 03	95		dB
			-55°C to +125°C		60		
		$V_{DD} = 5\text{ V}, R_L = 10\text{ k}\Omega,$ $V_{O(PP)} = V_{DD} / 2,$	25°C		80		
			-55°C to +125°C		78		
		$V_{DD} = 15\text{ V}, R_L = 10\text{ k}\Omega,$ $V_{O(PP)} = V_{DD} / 2,$	25°C		77		
			-55°C to +125°C		73		

See footnotes at end of table.

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TABLE I. Electrical performance characteristics – Continued. 1/

Test	Symbol	Conditions $V_{DD} = 2.7\text{ V}, 5\text{ V}, \text{ and } 15\text{ V}$ unless otherwise specified	Temperature, T_A	Device type	Limits		Unit
					Min	Max	
Input characteristics section.							
Input offset current	I_{IO}	$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $V_O = V_{DD} / 2$	25°C	01,02,		60	pA
			+125°C	03		1000	
Input bias current	I_{IB}	$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $V_O = V_{DD} / 2$	25°C	01,02,		60	pA
			+125°C	03		1000	
Differential input resistance	$r_{i(d)}$		25°C	01,02, 03	1000 typical		$G\Omega$
Common mode input capacitance	C_{IC}	$f = 21\text{ kHz}$	25°C	01,02, 03	8 typical		pF
Output characteristics section.							
High level output voltage	V_{OH}	$V_{DD} = 2.7\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -1\text{ mA}, V_{ID} = 1\text{ V}$	25°C	01,02, 03	2.55		V
			-55°C to +125°C		2.48		
		$V_{DD} = 5\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -1\text{ mA}, V_{ID} = 1\text{ V}$	25°C		4.9		
			-55°C to +125°C		4.85		
		$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -1\text{ mA}, V_{ID} = 1\text{ V}$	25°C		14.92		
			-55°C to +125°C		14.9		
		$V_{DD} = 2.7\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -5\text{ mA}, V_{ID} = 1\text{ V}$	25°C		1.88		
			-55°C to +125°C		1.42		
		$V_{DD} = 5\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -5\text{ mA}, V_{ID} = 1\text{ V}$	25°C		4.58		
			-55°C to +125°C		4.44		
		$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OH} = -5\text{ mA}, V_{ID} = 1\text{ V}$	25°C		14.7		
			-55°C to +125°C		14.6		

See footnotes at end of table.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 16236	DWG NO. V62/05611
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TABLE I. Electrical performance characteristics – Continued. 1/

Test	Symbol	Conditions $V_{DD} = 2.7\text{ V}, 5\text{ V}, \text{ and } 15\text{ V}$ unless otherwise specified	Temperature, T_A	Device type	Limits		Unit
					Min	Max	
Output characteristics section – continued.							
Low level output voltage	V_{OL}	$V_{DD} = 2.7\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 1\text{ mA}, V_{ID} = 1\text{ V}$	25°C	01,02, 03		0.15	V
			-55°C to +125°C			0.22	
		$V_{DD} = 5\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 1\text{ mA}, V_{ID} = 1\text{ V}$	25°C			0.1	
			-55°C to +125°C			0.15	
		$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 1\text{ mA}, V_{ID} = 1\text{ V}$	25°C			0.08	
			-55°C to +125°C			0.1	
		$V_{DD} = 2.7\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 5\text{ mA}, V_{ID} = 1\text{ V}$	25°C			0.7	
			-55°C to +125°C			1.15	
		$V_{DD} = 5\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 5\text{ mA}, V_{ID} = 1\text{ V}$	25°C			0.4	
			-55°C to +125°C			0.54	
$V_{DD} = 15\text{ V}, V_{IC} = V_{DD} / 2,$ $I_{OL} = 5\text{ mA}, V_{ID} = 1\text{ V}$	25°C		0.3				
	-55°C to +125°C		0.35				
Power supply section.							
Supply current (per channel)	I_{DD}	$V_{DD} = 2.7\text{ V}, V_O = V_{DD} / 2$	25°C	01,02, 03		560	μA
			25°C			660	
			25°C			900	
		-55°C to +125°C			1200		
Supply voltage rejection ratio ($\Delta V_{DD} / \Delta V_{IO}$)	PSRR	$V_{DD} = 2.7\text{ V to } 15\text{ V}, \text{ no load},$ $V_{IC} = V_{DD} / 2$	25°C	01,02, 03	70		dB
			-55°C to +125°C			65	

See footnote at end of table.

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TABLE I. Electrical performance characteristics – Continued. 1/

Test	Symbol	Conditions $V_{DD} = 2.7\text{ V}, 5\text{ V}, \text{ and } 15\text{ V}$ unless otherwise specified	Temperature, T_A	Device type	Limits		Unit
					Min	Max	
Dynamic performance section.							
Unity gain bandwidth	UGBW	$V_{DD} = 2.7\text{ V},$ $R_L = 2\text{ k}\Omega, C_L = 10\text{ pF}$	25°C	01,02, 03	2.4 typical		MHz
		$V_{DD} = 5\text{ V to } 15\text{ V},$ $R_L = 2\text{ k}\Omega, C_L = 10\text{ pF}$	25°C		3 typical		
Slew rate at unity gain	SR	$V_{DD} = 2.7\text{ V}, V_{O(PP)} = V_{DD} / 2,$ $R_L = 10\text{ k}\Omega, C_L = 50\text{ pF}$	25°C	01,02, 03	1.4		V/ μ s
			-55°C to +125°C		1		
		$V_{DD} = 5\text{ V}, V_{O(PP)} = V_{DD} / 2,$ $R_L = 10\text{ k}\Omega, C_L = 50\text{ pF}$	25°C		1.4		
			-55°C to +125°C		1.1		
		$V_{DD} = 15\text{ V}, V_{O(PP)} = V_{DD} / 2,$ $R_L = 10\text{ k}\Omega, C_L = 50\text{ pF}$	25°C		1.9		
-55°C to +125°C	1.2						
Phase margin	ϕ_m	$R_L = 2\text{ k}\Omega, C_L = 100\text{ pF}$	25°C	01,02, 03	65° typical		
Gain margin	gm	$R_L = 2\text{ k}\Omega, C_L = 10\text{ pF}$	25°C	01,02, 03	18 typical		dB
Settling time	t_s	At 0.1 %, $V_{DD} = 2.7\text{ V},$ $V_{(STEP)PP} = 1\text{ V}, A_V = -1,$ $R_L = 2\text{ k}\Omega, C_L = 10\text{ pF}$	25°C	01,02, 03	2.9 typical		μ s
		At 0.1 %, $V_{DD} = 5\text{ V}, 15\text{ V},$ $V_{(STEP)PP} = 1\text{ V}, A_V = -1,$ $R_L = 2\text{ k}\Omega, C_L = 47\text{ pF}$			2 typical		

See footnotes at end table.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 16236	DWG NO. V62/05611
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TABLE I. Electrical performance characteristics – Continued. 1/

Test	Symbol	Conditions $V_{DD} = 2.7\text{ V}, 5\text{ V}, \text{ and } 15\text{ V}$ unless otherwise specified		Temperature, T_A	Device type	Limits		Unit
						Min	Max	
Noise / distortion performance section.								
Total harmonic distortion plus noise	THD+N	$V_{DD} = 2.7\text{ V},$ $V_{O(PP)} = V_{DD} / 2\text{ V},$ $R_L = 2\text{ k}\Omega, f = 10\text{ kHz}$	$A_V = 1$	25°C	01,02, 03	0.02 % typical		
			$A_V = 10$	25°C		0.05 % typical		
			$A_V = 100$	25°C		0.18 % typical		
		$V_{DD} = 5\text{ V}, 15\text{ V}$ $V_{O(PP)} = V_{DD} / 2\text{ V},$ $R_L = 2\text{ k}\Omega, f = 10\text{ kHz}$	$A_V = 1$	25°C		0.02 % typical		
			$A_V = 10$	25°C		0.09 % typical		
			$A_V = 100$	25°C		0.5 % typical		
Equivalent input noise voltage	V_n	$f = 1\text{ kHz}$		25°C	01,02, 03	39 typical		$\text{nV} / \sqrt{\text{Hz}}$
		$f = 10\text{ kHz}$				25°C	35 typical	
Equivalent input noise current	I_n	$f = 1\text{ kHz}$		25°C	01,02, 03	0.6 typical		$\text{fA} / \sqrt{\text{Hz}}$

1/ Testing and other quality control techniques are used to the extent deemed necessary to assure product performance over the specified temperature range. Product may not necessarily be tested across the full temperature range and all parameters may not necessarily be tested. In the absence of specific parametric testing, product performance is assured by characterization and/or design.

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Case T

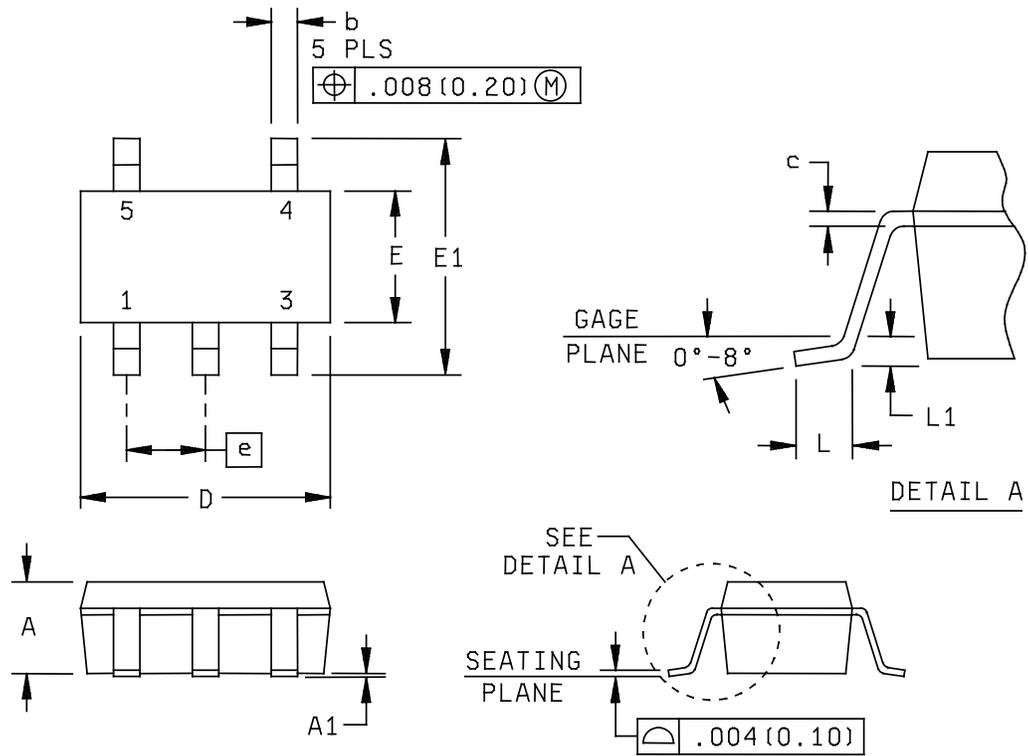


FIGURE 1. Case outlines.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 16236</p>	<p>DWG NO. V62/05611</p>
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Case T

Symbol	Dimensions			
	Inch		Millimeters	
	Min	Max	Min	Max
A	---	.057	---	1.45
A1	.000	.006	0.00	0.15
b	.011	.019	0.30	0.50
c	.003	.008	0.08	0.22
D	.108	.120	2.75	3.05
E	.057	.068	1.45	1.75
E1	.102	.118	2.60	3.00
e	.037 BSC		0.95 BSC	
L	.011	.022	0.30	0.55
L1	.009	---	0.25	---
n	5 leads		5 leads	

NOTES:

1. Controlling dimensions are millimeter, inch dimensions are given for reference only.
2. Body dimensions do not include mold flash or protrusion. Mold flash and protrusion shall not exceed 0.15 mm (0.006 inch) per side.
3. Falls with JEDEC MO-178-AA.

FIGURE 1. Case outlines – Continued.

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Case U

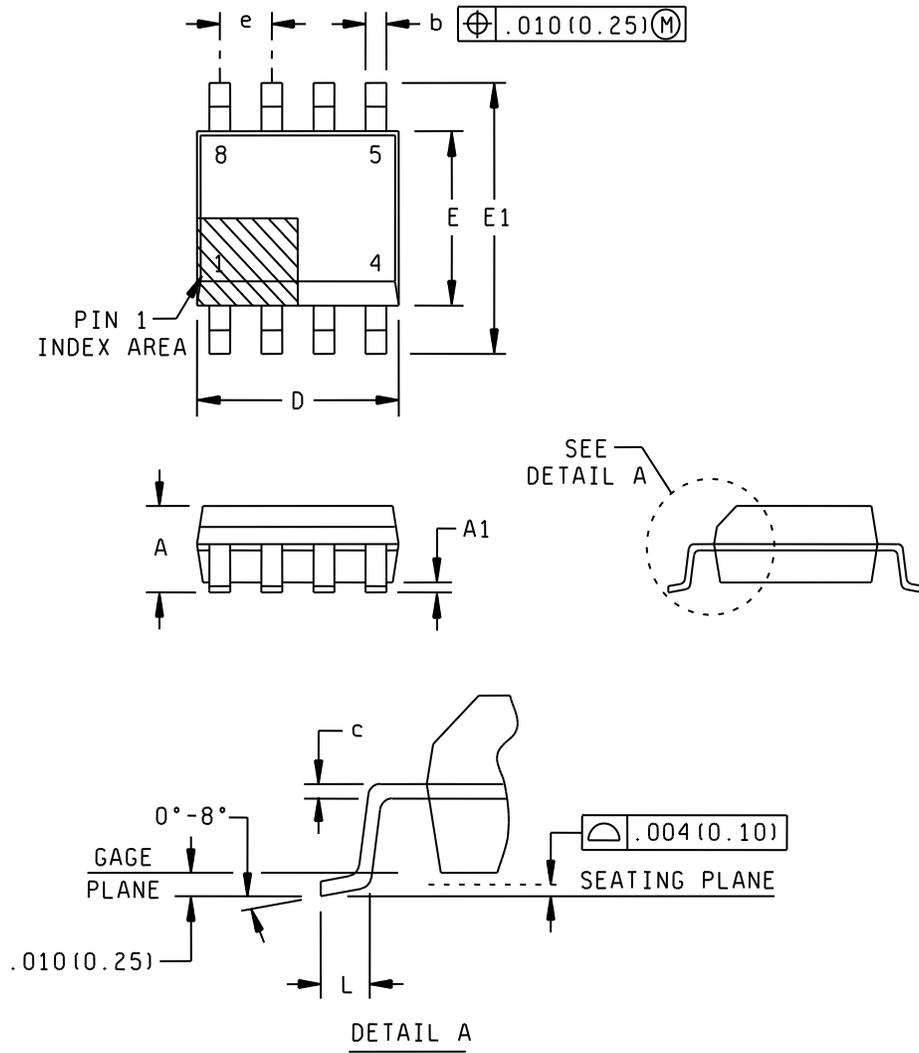


FIGURE 1. Case outlines.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 16236</p>	<p>DWG NO. V62/05611</p>
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Case U

Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.069	---	1.75
A1	0.004	0.010	0.10	0.25
b	0.012	0.020	0.31	0.51
c	0.007	0.010	0.17	0.25
D	0.189	0.197	4.80	5.00
E	0.150	0.157	3.80	4.00
E1	0.228	0.244	5.80	6.20
e	0.050 BSC		1.27 BSC	
L	0.016	0.050	0.40	1.27
n	8		8	

NOTES:

1. Controlling dimensions are inch, millimeter dimensions are given for reference only.
2. For dimension D, body length does not include mold flash, protrusion, or gate burrs. Mold flash, protrusion, or gate burrs shall not exceed 0.006 inch (0.15 mm) per end.
3. For dimension E, body width does not include interlead flash. Interlead flash shall not exceed 0.017 inch (0.43 mm) per side.
4. Falls with JEDEC MS-012-AA.

FIGURE 1. Case outlines – Continued.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 16236	DWG NO. V62/05611
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Case X

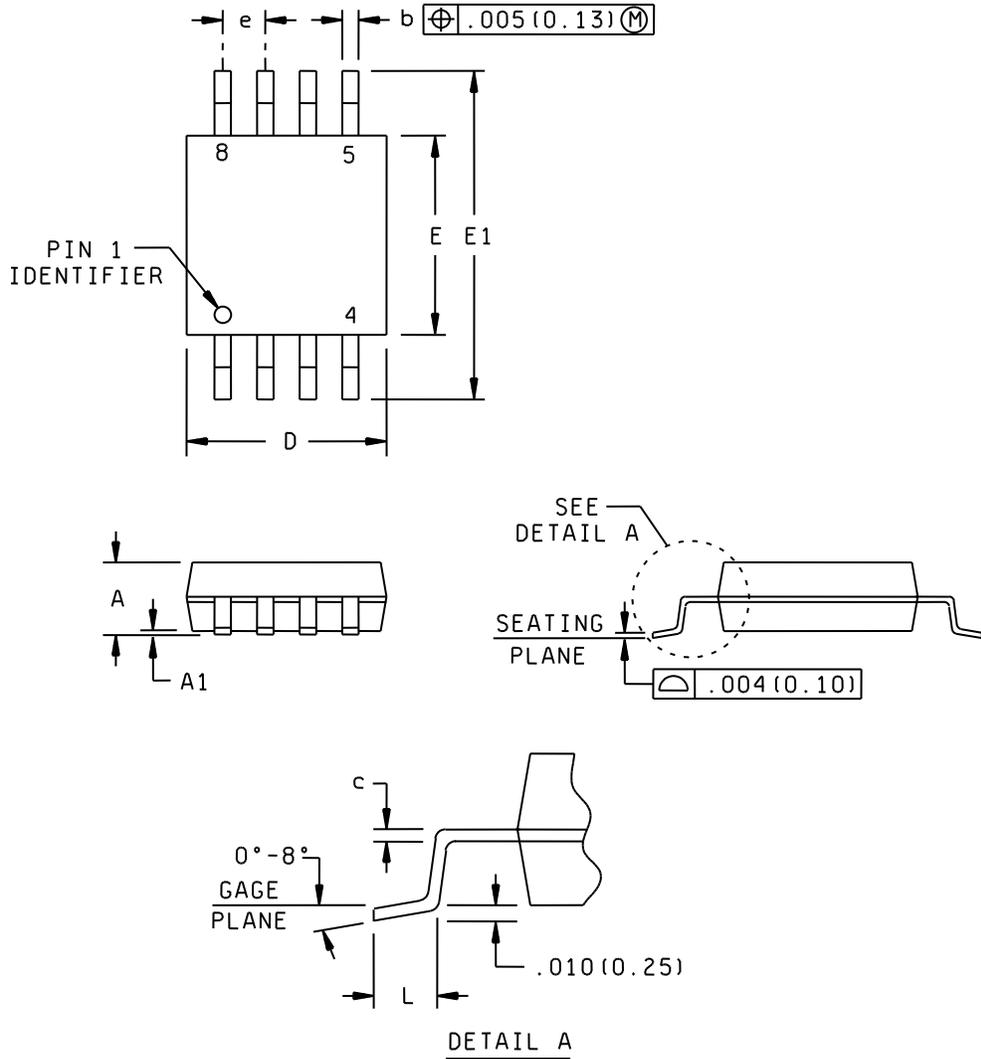


FIGURE 1. Case outlines – Continued.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 16236</p>	<p>DWG NO. V62/05611</p>
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Case X

Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.043	---	1.10
A1	0.001	0.006	0.05	0.15
b	0.010	0.014	0.25	0.38
c	0.005	0.009	0.13	0.23
D	0.114	0.122	2.90	3.10
E	0.114	0.122	2.90	3.10
E1	0.187	0.199	4.75	5.05
e	0.026 BSC		0.65 BSC	
L	0.015	0.027	0.40	0.70

NOTES:

1. Controlling dimensions are millimeter, inch dimensions are given for reference only.
2. For dimension D, body length does not include mold flash, protrusion, or gate burrs. Mold flash, protrusion, or gate burrs shall not exceed 0.15 mm (0.006 inch) per end.
3. For dimension E, body width does not include interlead flash. Interlead flash shall not exceed 0.50 mm (0.019 inch) per side.
4. Falls with JEDEC MO-187-AA, except interlead flash.

FIGURE 1. Case outlines - Continued.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 16236	DWG NO. V62/05611
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Case Y

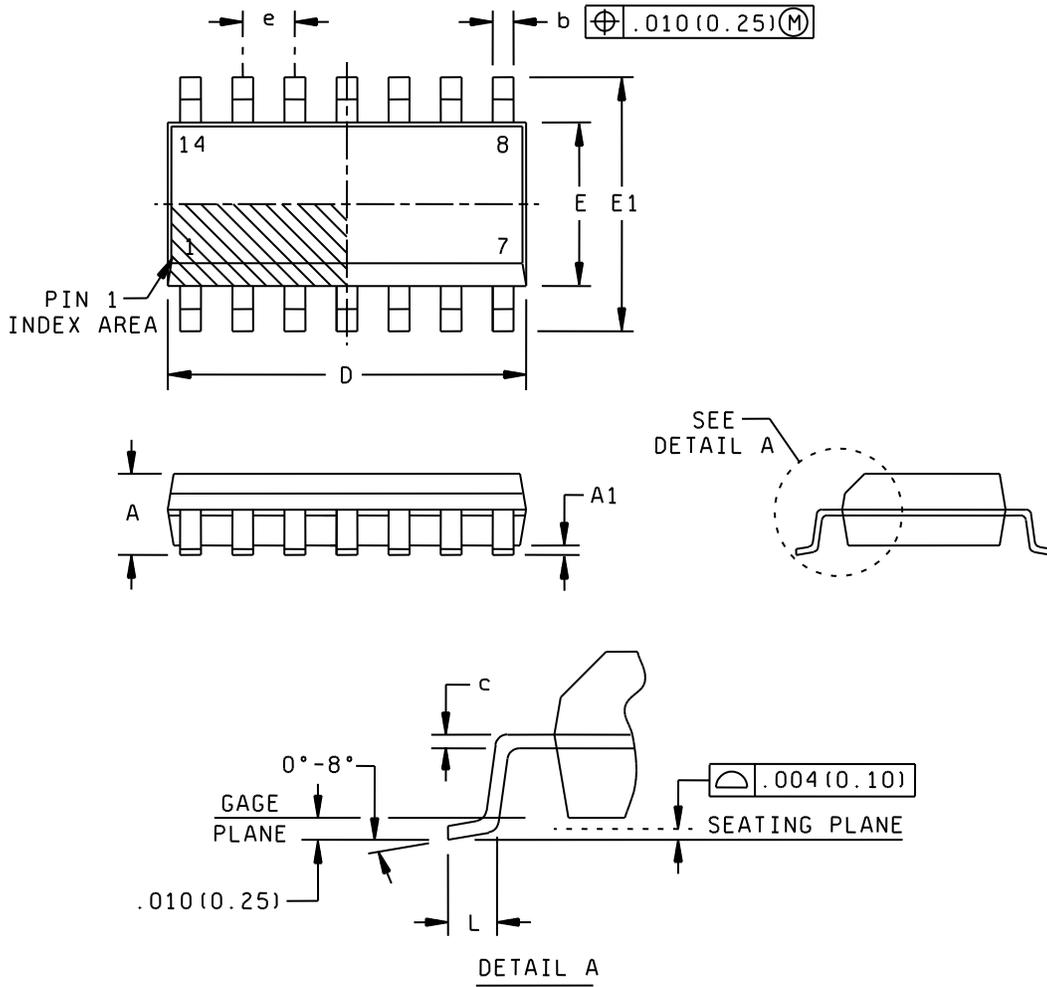


FIGURE 1. Case outlines – Continued.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 16236</p>	<p>DWG NO. V62/05611</p>
		<p>REV C</p>	<p>PAGE 16</p>

Case Y

Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	.069	---	1.75
A1	.004	.010	0.10	0.25
b	.012	.020	0.31	0.51
c	.007	.010	0.17	0.25
D	.337	.344	8.55	8.75
e	.050 BSC		1.27 BSC	
E	.150	.157	3.80	4.00
E1	.228	.244	5.80	6.20
L	.016	.050	0.40	1.27
n	14 leads		14 leads	

NOTES:

1. Controlling dimensions are inch, millimeter dimensions are given for reference only.
2. For dimension D, body length does not include mold flash, protrusion, or gate burrs. Mold flash, protrusion, or gate burrs shall not exceed 0.006 inch (0.15 mm) per end.
3. For dimension E, body width does not include interlead flash. Interlead flash shall not exceed 0.017 inch (0.43 mm) per side.
4. Falls with JEDEC MO-012-AB.

FIGURE 1. Case outlines - Continued.

DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO	SIZE A	CODE IDENT NO. 16236	DWG NO. V62/05611
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Case Z

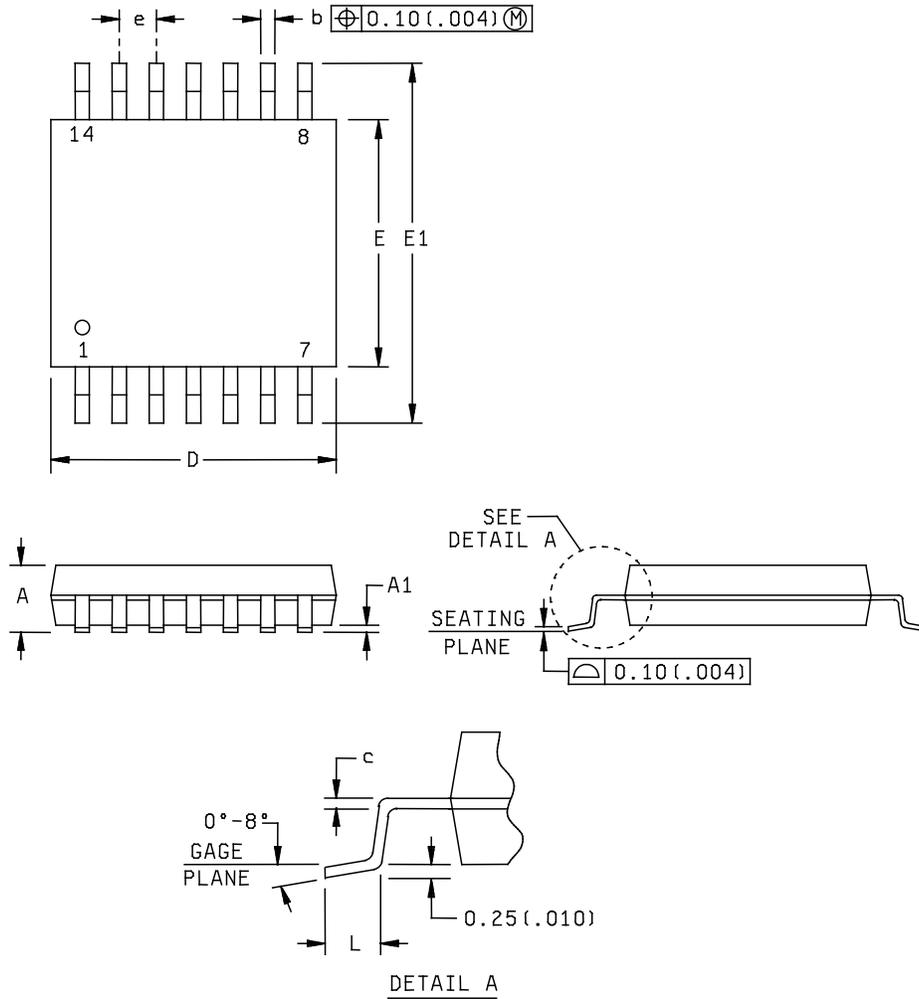


FIGURE 1. Case outlines – Continued.

<p>DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO</p>	<p>SIZE A</p>	<p>CODE IDENT NO. 16236</p>	<p>DWG NO. V62/05611</p>
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Case Z

Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	---	0.047	---	1.20
A1	0.002	0.006	0.05	0.15
b	0.007	0.012	0.19	0.30
c	0.005 NOM		0.15 NOM	
D	0.193	0.201	4.90	5.10
e	0.025 BSC		0.65 BSC	
E	0.169	0.177	4.30	4.50
E1	0.244	0.259	6.20	6.60
L	0.019	0.029	0.50	0.75
n	14 leads		14 leads	

NOTES:

1. Controlling dimensions are millimeters, inch dimensions are given for reference only.
2. For dimension D, body length does not include mold flash, protrusion, or gate burrs. Mold flash, protrusion, or gate burrs shall not exceed 0.15 mm (0.006 inch) per end.
3. For dimension E, body width does not include interlead flash. Interlead flash shall not exceed 0.25 mm (0.009 inch) each side.
4. Falls with JEDEC MO-153.

FIGURE 1. Case outlines - Continued.

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Device types	01	02	03	03
Case outlines	Y and Z	U and X	T	U
Terminal number	Terminal symbol			
1	1 OUT	1 OUT	OUT	NC
2	1 IN-	1 IN-	GND	IN-
3	1 IN+	1 IN+	IN+	IN+
4	V _{DD}	GND	IN-	GND
5	2 IN+	2 IN+	V _{DD}	NC
6	2 IN-	2 IN-	---	OUT
7	2 OUT	2 OUT	---	V _{DD}
8	3 OUT	V _{DD}	---	NC
9	3 IN-	---	---	---
10	3 IN+	---	---	---
11	GND	---	---	---
12	4 IN+	---	---	---
13	4 IN-	---	---	---
14	4 OUT	---	---	---

NC = No connection

FIGURE 2. Terminal connections.

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4. VERIFICATION

4.1 Product assurance requirements. The manufacturer is responsible for performing all inspection and test requirements as indicated in their internal documentation. Such procedures should include proper handling of electrostatic sensitive devices, classification, packaging, and labeling of moisture sensitive devices, as applicable.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Preservation, packaging, labeling, and marking shall be in accordance with the manufacturer's standard commercial practices for electrostatic discharge sensitive devices.

6. NOTES

6.1 ESDS. Devices are electrostatic discharge sensitive and are classified as ESDS class 1 minimum.

6.2 Configuration control. The data contained herein is based on the salient characteristics of the device manufacturer's data book. The device manufacturer reserves the right to make changes without notice. This drawing will be modified as changes are provided.

6.3 Suggested source(s) of supply. Identification of the suggested source(s) of supply herein is not to be construed as a guarantee of present or continued availability as a source of supply for the item.

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Vendor item drawing administrative control number <u>1/</u>	Device manufacturer CAGE code	Vendor part number
V62/05611-01YE	01295	TLV2374MDREP
V62/05611-01ZA	<u>2/</u>	TLV2374MPWREP
V62/05611-02UA	<u>2/</u>	TLV2372MDREP
V62/05611-02XA	<u>2/</u>	TLV2372MDGKREP
V62/05611-03TE	01295	TLV2371MDBVREP
V62/05611-03UA	<u>2/</u>	TLV2371MDREP

1/ The vendor item drawing establishes an administrative control number for identifying the item on the engineering documentation.

2/ Not currently available from approved source.

CAGE code

01295

Source of supply

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

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