

## Features

- Supply Voltage: 3 V to 16 V
- Offset Voltage:  $\pm 2.5$  mV Maximum at 25°C
- Low Power: 1 mA per Channel
- Rail-to-Rail Input and Output
- Bandwidth: 4 MHz
- Slew Rate: 3.5 V/ $\mu$ s
- Large Output Current: 50 mA with 300 mV Drop Voltage at  $V_S = 5$  V
- Zero Crossover
  - Excellent THD+N: 0.0005%
  - CMRR: 95dB (min)

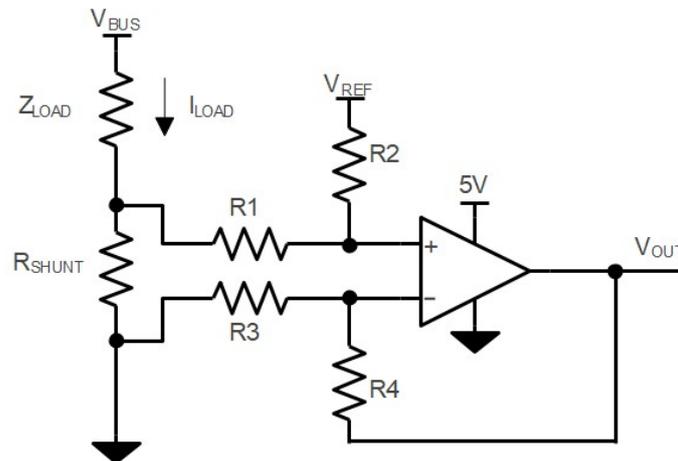
## Description

The device is an RRIO op-amp with low offset, low power, and stable high-frequency response. It incorporates leading techniques to achieve high-performance AC with 4 MHz bandwidth, a 3.5 V/ $\mu$ s slew rate, and low distortion, while drawing only 1 mA of quiescent current per amplifier. The device is suitable for audio and instrumentation applications.

## Applications

- Sensor Signal Conditioning
- Instrumentation
- Industrial Control
- High Side Current Sensing

## Typical Application Circuit



$$V_{OUT} = (I_{LOAD} \times R_{SHUNT}) \times (R_2 / R_1) + V_{REF}$$

$$\text{When } R_3 = R_1, R_2 = R_4, R_{SHUNT} \ll R_1$$

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**Revision History**

Date	Revision	Notes
2026-01-27	Rev.A.0	Initial version.

### Pin Configuration and Functions

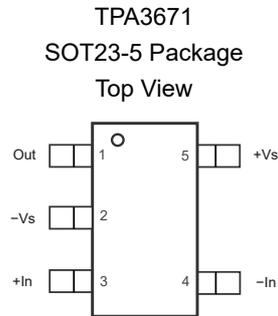
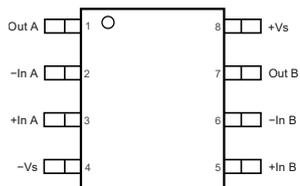


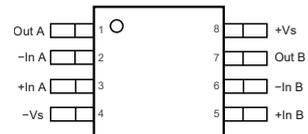
Table 1. Pin Functions: TPA3671

Pin No.	Name	I/O	Description
TPA3671			
1	Out	O	Output
2	-Vs	-	Negative power supply
3	+In	I	Noninverting input
4	-In	I	Inverting input
5	+Vs	-	Positive power supply

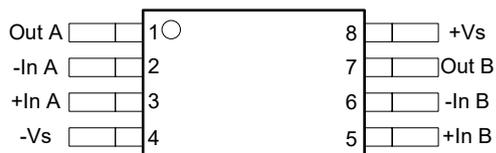
TPA3672  
SOP8 Package  
Top View



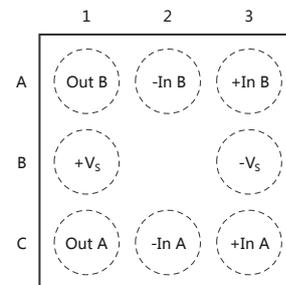
TPA3672  
MSOP8 Package  
Top View



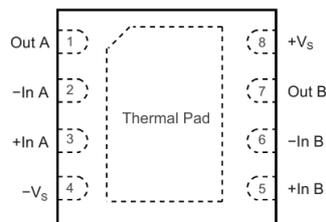
TPA3672  
TSSOP8 Package  
Top View



TPA3672  
WLCSP Package  
Top View

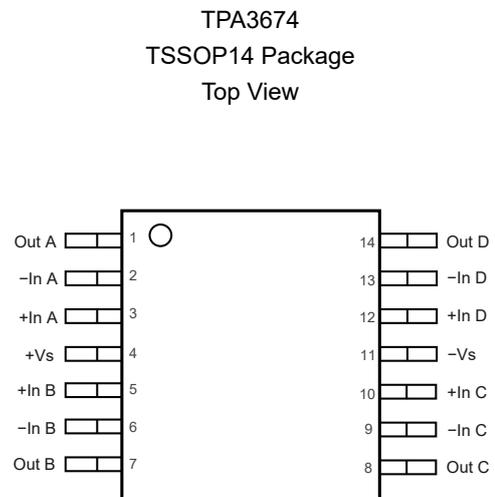
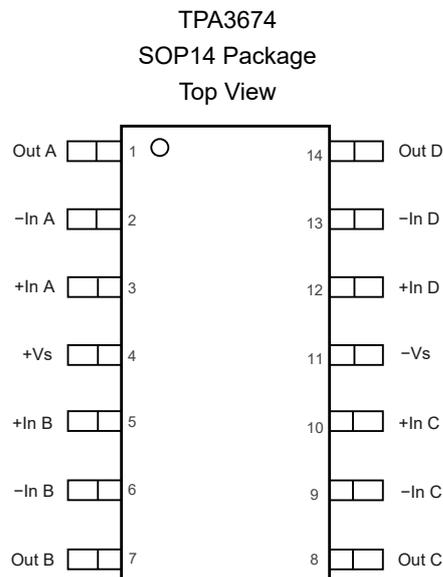


TPA3672  
DFN2X2-8 Package  
Top View



**Table 2. Pin Functions: TPA3672**

Pin No.		Name	I/O	Description
SOP8/ MSOP8/ TSSOP8/ DFN2X2-8	WLCSP			
1	C1	Out A	O	Output
2	C2	-In A	I	Inverting input
3	C3	+In A	I	Noninverting input
4	B3	-V <sub>s</sub>	-	Negative power supply
5	A3	+In B	I	Noninverting input
6	A2	-In B	I	Inverting input
7	A1	Out B	O	Output
8	B1	+V <sub>s</sub>	-	Positive power supply
-	-	Thermal Pad		The thermal pad of the DFN2X2-8 is recommended to be left float


**Table 3. Pin Functions: TPA3674**

Pin No.	Name	I/O	Description
1	Out A	O	Output
2	-In A	I	Inverting input
3	+In A	I	Noninverting input
4	+Vs	-	Positive power supply
5	+In B	I	Noninverting input
6	-In B	I	Inverting input
7	Out B	O	Output power supply
8	Out C	O	Output power supply
9	-In C	I	Inverting input
10	+In C	I	Noninverting input
11	-Vs	-	Negative power supply
12	+In D	I	Noninverting input
13	-In D	I	Inverting input
14	Out D	O	Output

## Specifications

### Absolute Maximum Ratings <sup>(1)</sup>

Parameter		Min	Max	Unit
	Supply Voltage, (+V <sub>S</sub> ) – (–V <sub>S</sub> )		17	V
	Input Voltage	(–V <sub>S</sub> ) – 0.3	(+V <sub>S</sub> ) + 0.3	V
	Differential Input Voltage	(–V <sub>S</sub> ) – (+V <sub>S</sub> )	(+V <sub>S</sub> ) – (–V <sub>S</sub> )	V
	Input Current: +IN, –IN <sup>(2)</sup>	–10	+10	mA
	Output Voltage	(–V <sub>S</sub> ) – 0.3	(+V <sub>S</sub> ) + 0.3	V
	Output Short-Circuit Duration <sup>(3)</sup>		Infinite	
T <sub>J</sub>	Maximum Operating Junction Temperature		150	°C
T <sub>A</sub>	Operating Temperature Range	–40	125	°C
T <sub>STG</sub>	Storage Temperature Range	–65	150	°C
T <sub>L</sub>	Lead Temperature (Soldering 10 sec)		260	°C

(1) Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. Exposure to any Absolute Maximum Rating condition for extended periods may affect device reliability and lifetime.

(2) The inputs are protected by ESD protection diodes to the power supply. If the input extends more than 300 mV beyond the power supply, the input current should be limited to less than 10 mA.

(3) A heat sink may be required to keep the junction temperature below the absolute maximum. This depends on the power supply voltage and how many amplifiers are shorted. Thermal resistance varies with the amount of PC board metal connected to the package. The specified values are for short traces connected to the leads.

### ESD, Electrostatic Discharge Protection

Parameter		Condition	Minimum Level	Unit
HBM	Human Body Model ESD	ANSI/ESDA/JEDEC JS-001 <sup>(1)</sup>	2	kV
CDM	Charged Device Model ESD	ANSI/ESDA/JEDEC JS-002 <sup>(2)</sup>	1	kV

(1) JEDEC document JEP155 states that 500-V HBM allows safe manufacturing with a standard ESD control process.

(2) JEDEC document JEP157 states that 250-V CDM allows safe manufacturing with a standard ESD control process.

### Recommended Operating Conditions

Parameter		Min	Typ	Max	Unit
V <sub>S</sub>	Supply Voltage	3		16	V
T <sub>A</sub>	Operating Temperature Range	–40		125	°C

### Thermal Information

Package Type	θ <sub>JA</sub>	θ <sub>JC</sub>	Unit
SOT23-5	250	81	°C/W

**16-V, 4-MHz GBWP, RIRO, Zero-Crossover Op Amps**

Package Type	$\theta_{JA}$	$\theta_{JC}$	Unit
DFN2X2-8	75	54	°C/W
SOP8	158	43	°C/W
TSSOP8	191	44	°C/W
WLCSP8	182	29	°C/W
MSOP8	210	45	°C/W
SOP14	120	36	°C/W
TSSOP14	180	35	°C/W

**Electrical Characteristics**

 All test conditions:  $V_S = 16\text{ V}$ ,  $T_A = 25^\circ\text{C}$ ,  $R_L = 10\text{ k}\Omega$ ,  $C_L = 100\text{ pF}$ , unless otherwise noted.

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
<b>Power Supply</b>						
$V_S$	Supply Voltage Range	$(+V_S) - (-V_S)$	3		16	V
$I_Q$	Quiescent Current per Amplifier	$V_S = 3\text{ V to }16\text{ V}$		1	1.4	mA
		$V_S = 3\text{ V to }16\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$			1.6	mA
PSRR	Power Supply Rejection Ratio	$V_S = 3\text{ V to }16\text{ V}$ , $V_{CM} = 0\text{ V}$	80	90		dB
		$V_S = 3\text{ V to }16\text{ V}$ , $V_{CM} = 0\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	75			dB
<b>Input Characteristics</b>						
$V_{OS}$	Input Offset Voltage	$V_S = 16\text{ V}$ , $V_{CM} = 0\text{ V to }16\text{ V}$	-2.5	$\pm 0.5$	2.5	mV
		$V_S = 16\text{ V}$ , $V_{CM} = 0\text{ V to }16\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	-4		4	mV
$V_{OSTC}$	Input Offset Voltage Drift	$V_S = 16\text{ V}$ , $V_{CM} = 8\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$		4		$\mu\text{V}/^\circ\text{C}$
$V_{OS}$	Input Offset Voltage	$V_S = 3\text{ V}$ , $V_{CM} = 0\text{ V to }3\text{ V}$	-2.5	$\pm 0.5$	2.5	mV
		$V_S = 3\text{ V}$ , $V_{CM} = 0\text{ V to }3\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	-4		4	mV
$I_B$	Input Bias Current	$V_{CM} = 8\text{ V}$	-75	$\pm 20$	75	nA
		$V_{CM} = 8\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	-100		100	nA
$I_{OS}$	Input Offset Current	$V_{CM} = 8\text{ V}$	-18	$\pm 1$	18	nA
		$V_{CM} = 8\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	-30		30	nA
$R_{IN}$	Input Resistance	Differential Mode		100		$\text{M}\Omega$
		Common Mode		100		$\text{M}\Omega$
$C_{IN}$	Input Capacitance <sup>(1)</sup>	Differential Mode		2		pF
		Common Mode		4		pF
$A_v$	Open-loop Voltage Gain	$V_O = 0.1\text{ V to }15.9\text{ V}$	100	110		dB
		$V_O = 0.1\text{ V to }15.9\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	95			dB
$V_{CMR}$	Common-mode Input Voltage Range <sup>(1)</sup>	$T_A = -40^\circ\text{C to }125^\circ\text{C}$	$(-V_S)$		$(+V_S) + 0.1$	V
CMRR	Common Mode Rejection Ratio	$V_{CM} = 0\text{ V to }16.1\text{ V}$	95	125		dB
		$V_{CM} = 0\text{ V to }16.1\text{ V}$ , $T_A = -40^\circ\text{C to }125^\circ\text{C}$	90			dB
EMIRR	EMI Rejection Ratio	$f = 1000\text{ MHz}$		50		dB
<b>Output Characteristics</b>						

**16-V, 4-MHz GBWP, RIRO, Zero-Crossover Op Amps**

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
	Output Voltage Swing from Positive Rail or Negative Rail	$V_S = 16\text{ V}$ , $R_L = 10\text{ k}\Omega$ to $V_S/2$		3	15	mV
		$V_S = 16\text{ V}$ , $R_L = 10\text{ k}\Omega$ to $V_S/2$ , $T_A = -40^\circ\text{C}$ to $125^\circ\text{C}$			20	mV
		$V_S = 16\text{ V}$ , $R_L = 600\ \Omega$ to $V_S/2$		60	75	mV
		$V_S = 16\text{ V}$ , $R_L = 600\ \Omega$ to $V_S/2$ , $T_A = -40^\circ\text{C}$ to $125^\circ\text{C}$			100	mV
	Output Voltage Swing from Positive Rail or Negative Rail	$V_S = 3\text{ V}$ , $R_L = 10\text{ k}\Omega$ to $V_S/2$		2	5	mV
		$V_S = 3\text{ V}$ , $R_L = 10\text{ k}\Omega$ to $V_S/2$ , $T_A = -40^\circ\text{C}$ to $125^\circ\text{C}$			8	mV
		$V_S = 3\text{ V}$ , $R_L = 600\ \Omega$ to $V_S/2$		15	25	mV
		$V_S = 5\text{ V}$ , $R_L = 2\text{ k}\Omega$ to $V_S/2$ , $T_A = -40^\circ\text{C}$ to $125^\circ\text{C}$			35	mV
	Output Voltage Swing from Positive Rail or Negative Rail	$V_S = 5\text{ V}$ , $I_L = 50\text{ mA}$		240	300	mV
		$V_S = 5\text{ V}$ , $I_L = 50\text{ mA}$ , $T_A = -40^\circ\text{C}$ to $125^\circ\text{C}$			450	mV
$I_{SC}$	Output Short-Circuit Current	$V_S = 16\text{ V}$		280		mA
		$V_S = 5\text{ V}$		100		mA
<b>AC Specifications</b>						
GBW	Gain-Bandwidth Product			4		MHz
SR	Slew Rate	$G = 1, 2\text{ V step}$	2	3.5		V/ $\mu\text{s}$
$t_{OR}$	Overload Recovery			1.5		$\mu\text{s}$
$t_S$	Settling Time, 0.1%	$G = 1, 2\text{ V step}$		3		$\mu\text{s}$
PM	Phase Margin	$R_L = 10\text{ k}\Omega$ , $C_L = 100\text{ pF}$		52		$^\circ$
GM	Gain Margin	$R_L = 10\text{ k}\Omega$ , $C_L = 100\text{ pF}$		15		dB
	Channel Separation	$f = 100\text{ kHz}$		105		dB
<b>Noise Performance</b>						
$E_N$	Input Voltage Noise	$f = 0.1\text{ Hz}$ to $10\text{ Hz}$		1.5		$\mu\text{V}_{RMS}$
$e_N$	Input Voltage Noise Density	$f = 100\text{ Hz}$		60		$\text{nV}/\sqrt{\text{Hz}}$
		$f = 1\text{ kHz}$		30		$\text{nV}/\sqrt{\text{Hz}}$
$i_N$	Input Current Noise	$f = 1\text{ kHz}$		1		$\text{pA}/\sqrt{\text{Hz}}$
THD+N	Total Harmonic Distortion and Noise	$f = 1\text{ kHz}$ , $G = 1$ , $R_L = 10\text{ k}\Omega$ , $V_{OUT} = 1\text{ V}_{RMS}$		0.0005		%

(1) Provided by design simulation.

Typical Performance Characteristics

All test conditions:  $V_S = 5\text{ V}$ ,  $T_A = +25^\circ\text{C}$ , unless otherwise noted.

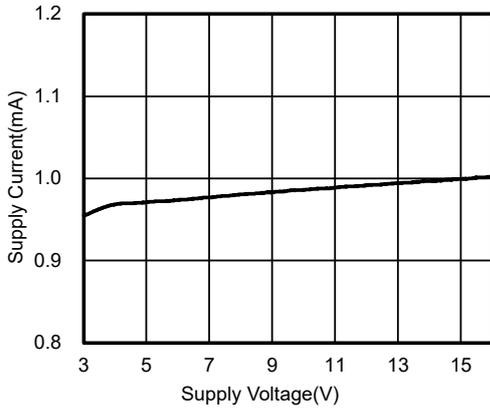


Figure 1. Supply Current vs. Supply Voltage, TPA3672

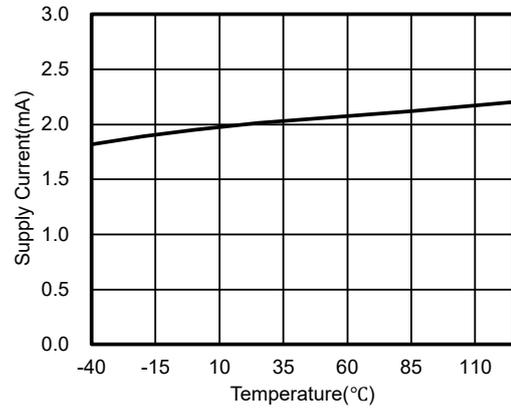


Figure 2. Supply Current vs. Temperature, TPA3672

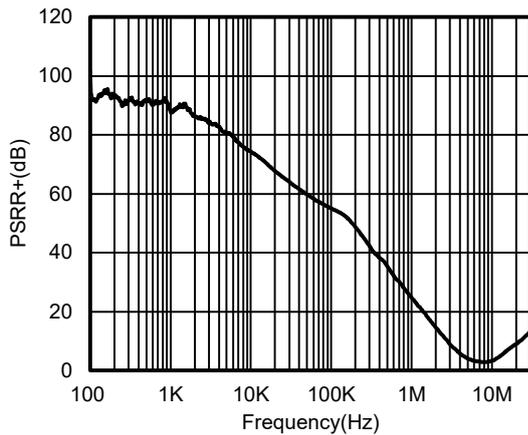


Figure 3. PSRR+ vs. Frequency,  $V_S = 16\text{ V}$

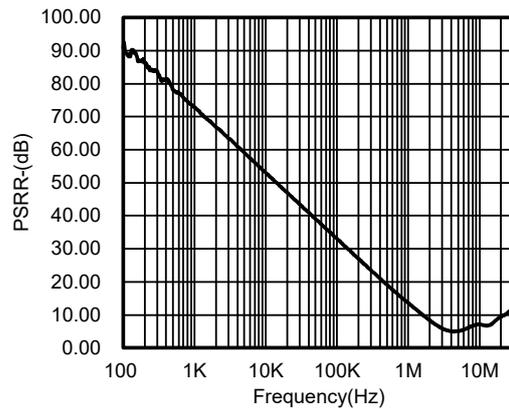


Figure 4. PSRR- vs. Frequency,  $V_S = 16\text{ V}$

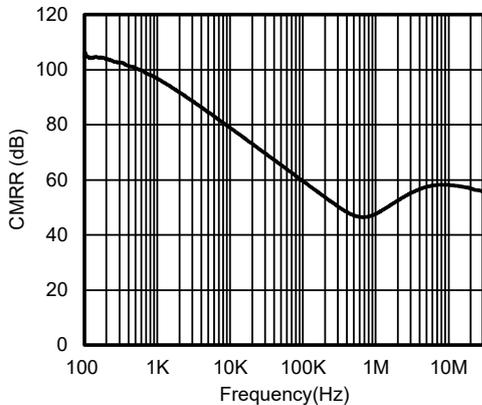


Figure 5. CMRR vs. Frequency,  $V_S = 16\text{ V}$

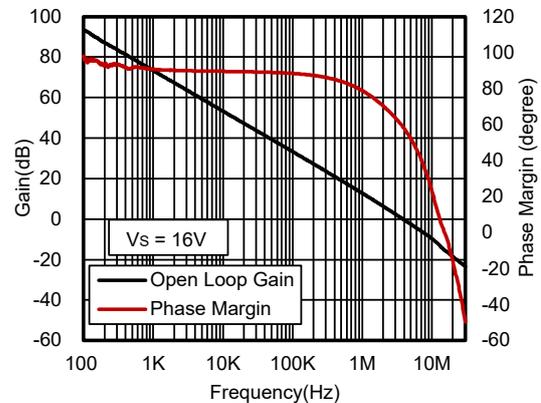


Figure 6. Open Loop Gain and Phase Margin vs. Frequency,  $R_L = 10\text{ k}\Omega$ ,  $C_L = 100\text{ pF}$ ,  $V_S = \pm 8\text{ V}$

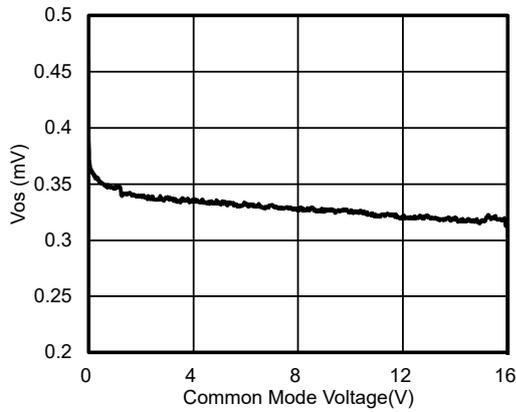


Figure 7.  $V_{OS}$  vs.  $V_{CM}$ ,  $V_S = 16\text{ V}$

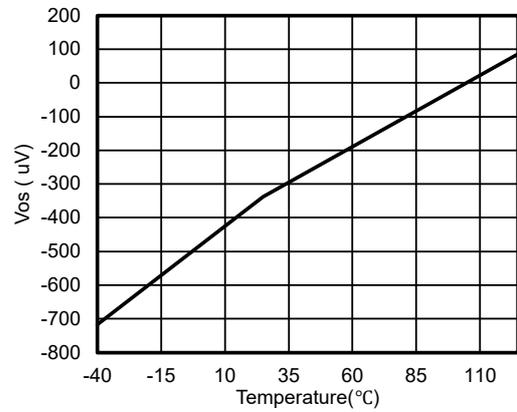


Figure 8.  $V_{OS}$  vs. Temperature,  $V_S = \pm 8\text{ V}$

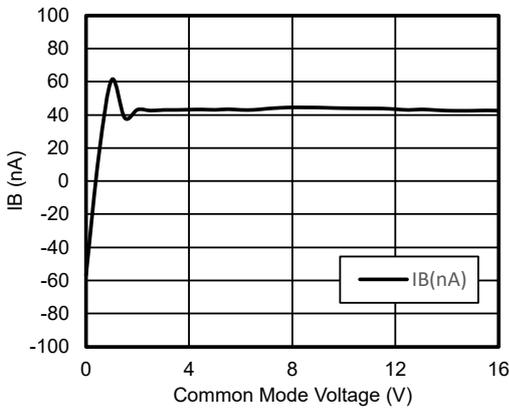


Figure 9.  $I_B$  vs. Common Voltage,  $V_S = 16\text{ V}$

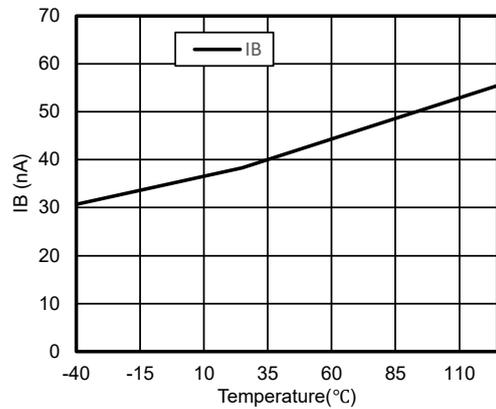


Figure 10.  $I_B$  vs. Temperature,  $V_S = 16\text{ V}$ ,  $V_{CM} = 8\text{ V}$

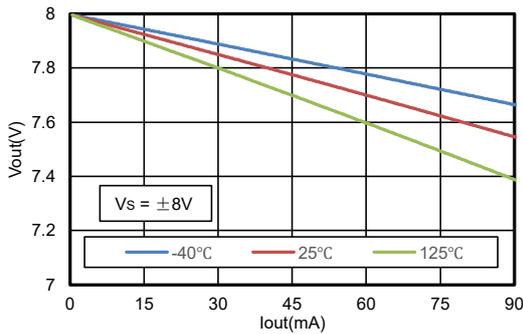


Figure 11. Output Voltage vs. Output Current, Source,  $(-V_S) = -8\text{ V}$ ,  $(+V_S) = 8\text{ V}$

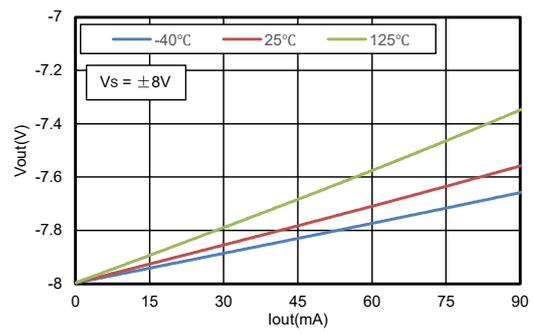


Figure 12. Output Voltage vs. Output Current, Sink,  $(-V_S) = -8\text{ V}$ ,  $(+V_S) = 8\text{ V}$

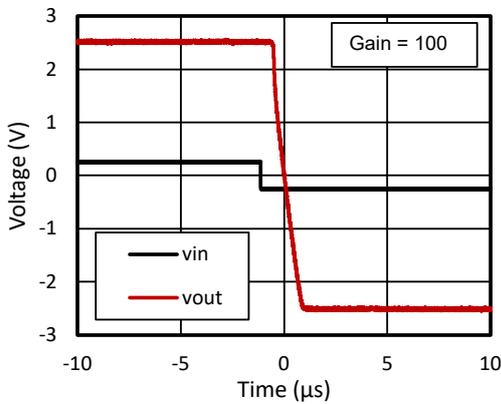


Figure 13. Overload Recovery at Negative Rail

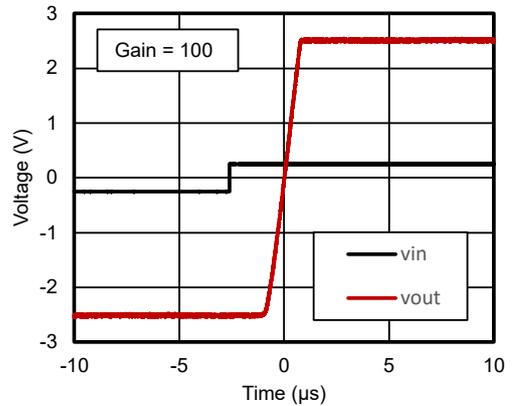


Figure 14. Overload Recovery at Positive Rail

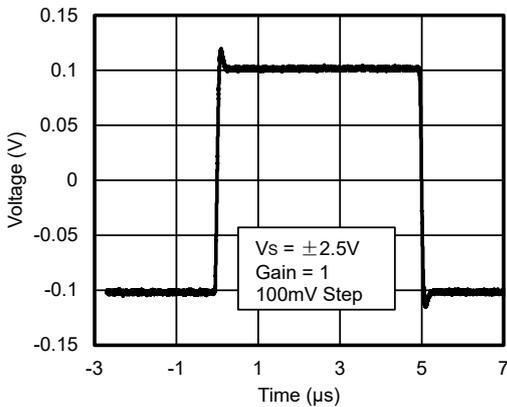


Figure 15. 100-mV Small Signal Step Response

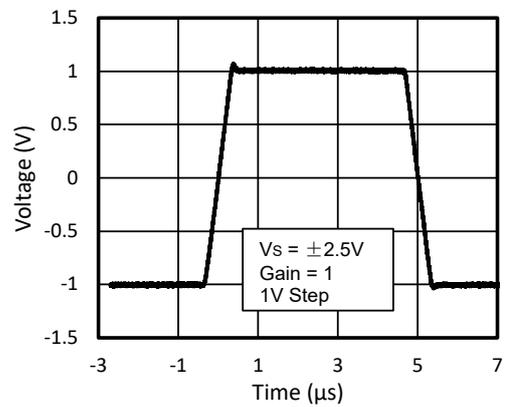


Figure 16. 1-V Large Signal Step Response

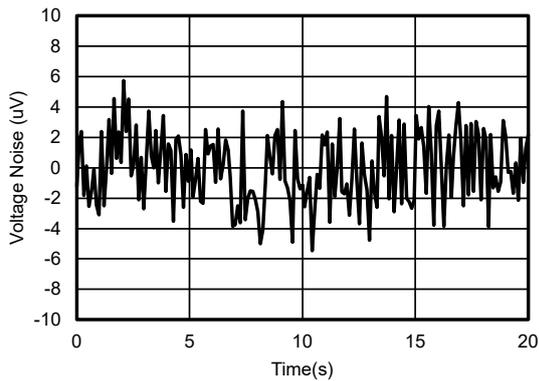


Figure 17. 0.1-Hz to 10-Hz Voltage Noise

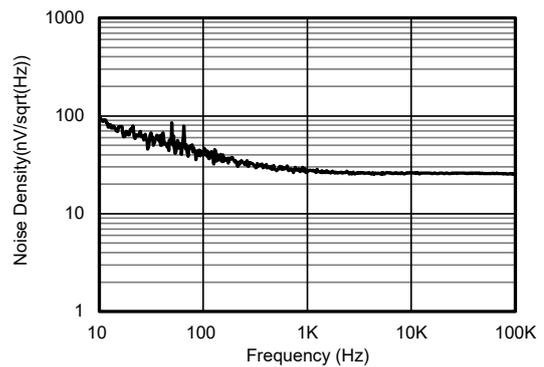
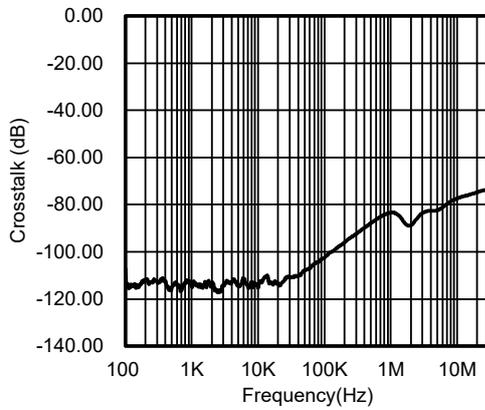
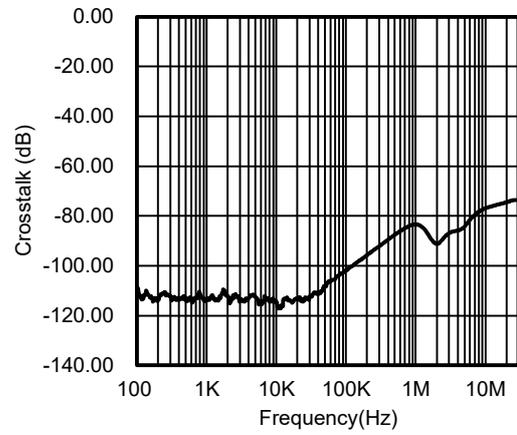


Figure 18. Voltage Noise Spectral Density vs. Frequency



**Figure 19. CHA to CHB, Crosstalk vs. Frequency  
TPA3672**



**Figure 20. CHB to CHA, Crosstalk vs. Frequency  
TPA3672**

## Application and Implementation

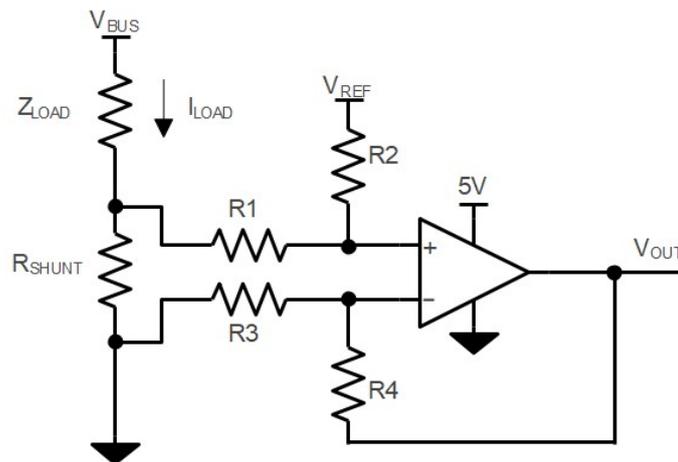
Note

Information in the following application sections is not part of the 3PEAK's component specification and 3PEAK does not warrant its accuracy or completeness. 3PEAK's customers are responsible for determining suitability of components for their purposes. Customers should validate and test their design implementation to confirm system functionality.

## Application Information

### Low Side Current Sensing Application

Figure 21 shows the device configured in a low-side current sensing application. The low-side current sensing method consists of placing a sense resistor between the load and the circuit ground. The voltage dropping across the resistor is amplified by different amplifier circuits within the device. The  $V_{REF}$  can be used to add bias voltage to the output voltage. Particular attention must be paid to the matching and precision of R1, R2, R3, and R4, to maximize the accuracy of the measurement.



$$V_{OUT} = (I_{LOAD} \times R_{SHUNT}) \times (R2 / R1) + V_{REF}$$

$$\text{When } R3 = R1, R2 = R4, R_{SHUNT} \ll R1$$

Figure 21. Low-Side Current Sensing Application

### Power Supply Recommendations

Place 0.1- $\mu$ F bypass capacitors close to the power supply pins to reduce coupling errors from the noise or high-impedance power supplies.

## Detailed Description

### Overview

The TPA367x series op amps can operate on a single-supply voltage (3 V to 16 V), or a split supply voltage ( $\pm 1.5$  V to  $\pm 8$  V), making them highly versatile and easy to use. The power-supply pins should have local bypass ceramic capacitors (typically 0.01  $\mu$ F to 0.1  $\mu$ F). These devices are specified from 3 V to 16 V and over the extended temperature range of  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ . Parameters that can exhibit variance with regard to operating voltage or temperature are presented in the [Typical Performance Characteristics](#).

### Functional Block Diagram

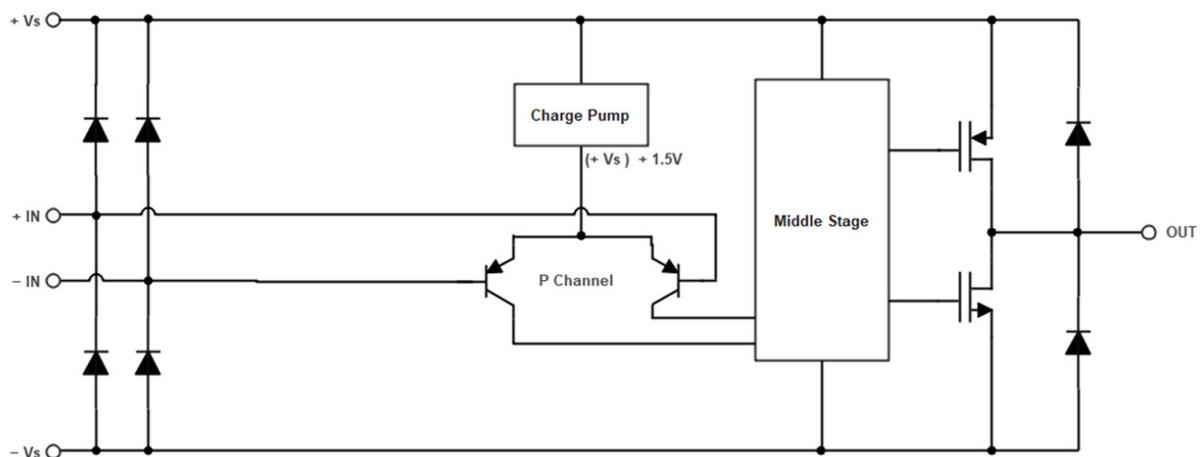


Figure 22. Functional Block Diagram

## Feature Description

### Operating Supply Voltage

The devices are designed for single supply operation from 3 V to 16 V or dual supply operation from  $\pm 1.5$  V to  $\pm 8$  V.

The recommended operating voltage conditions are as follows:

Power supply voltage ( $+V_S$ ) - ( $-V_S$ ): 3 V to 16 V. The power supply voltage can support the following three scenarios:

- Single supply
- Dual supplies with equal voltage values
- Various voltage configurations, as long as the voltage range of ( $+V_S$ ) - ( $-V_S$ ) is within 3 V to 16 V

For example, if operating with a single supply, ( $-V_S$ ) = 0 V, then ( $+V_S$ ) can support 3 V to 16 V. If using dual supplies with equal absolute values, the minimum voltage would be  $\pm 1.5$  V and the maximum voltage would be  $\pm 8$  V. It can even support other voltage configurations, such as ( $-V_S$ ) = -6 V, ( $+V_S$ ) = 10 V.

### Rail-to-Rail Input

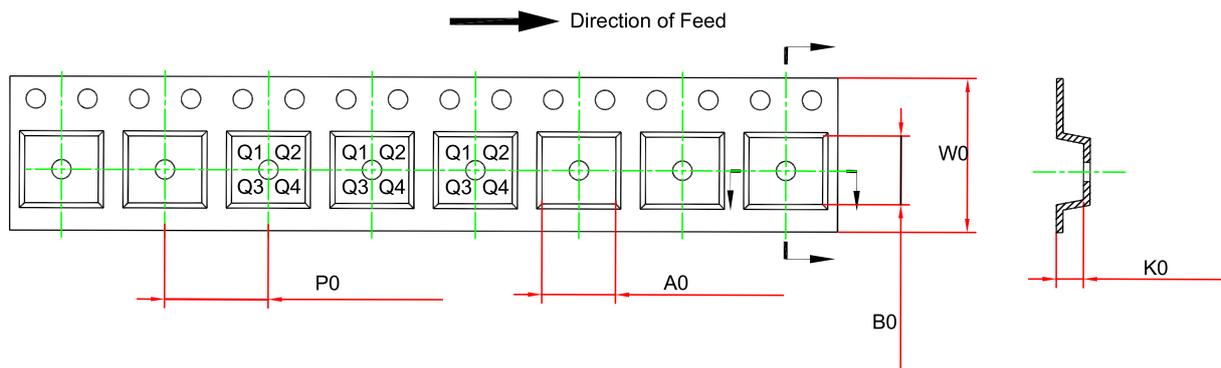
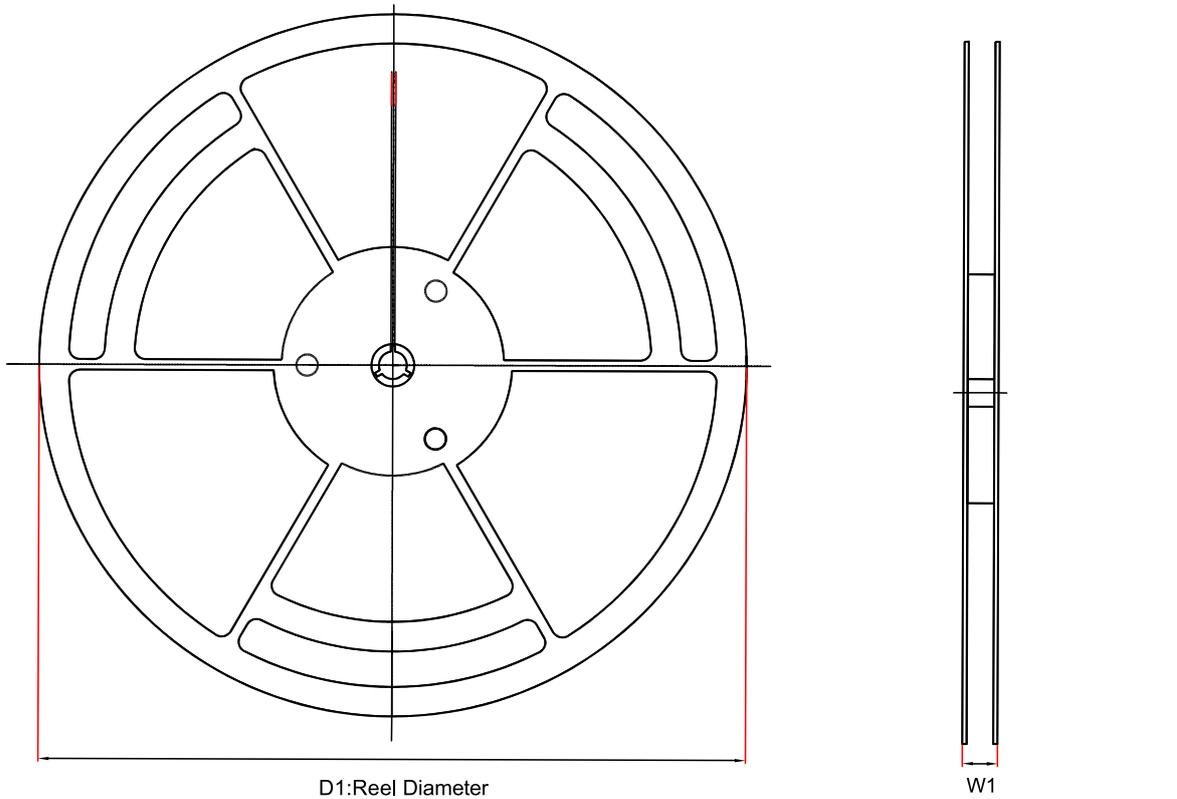
The devices have a unique zero-crossover input topology to eliminate the input offset transition region, which is brought by the complementary input stage of rail-to-rail input operational amplifiers. The input common-mode range includes both the negative and positive supplies. CMRR is excellent in all common-mode ranges and has no input stage crossover distortion.

When driving ADCs, the highly linear common-mode range of the devices assures that the signal conditional system linearity performance is not compromised.

**Rail-to-Rail Output**

The device delivers rail-to-rail output swing capability with a class-AB output stage. Different load conditions change the ability of the amplifier to swing close to the rails.

### Tape and Reel Information



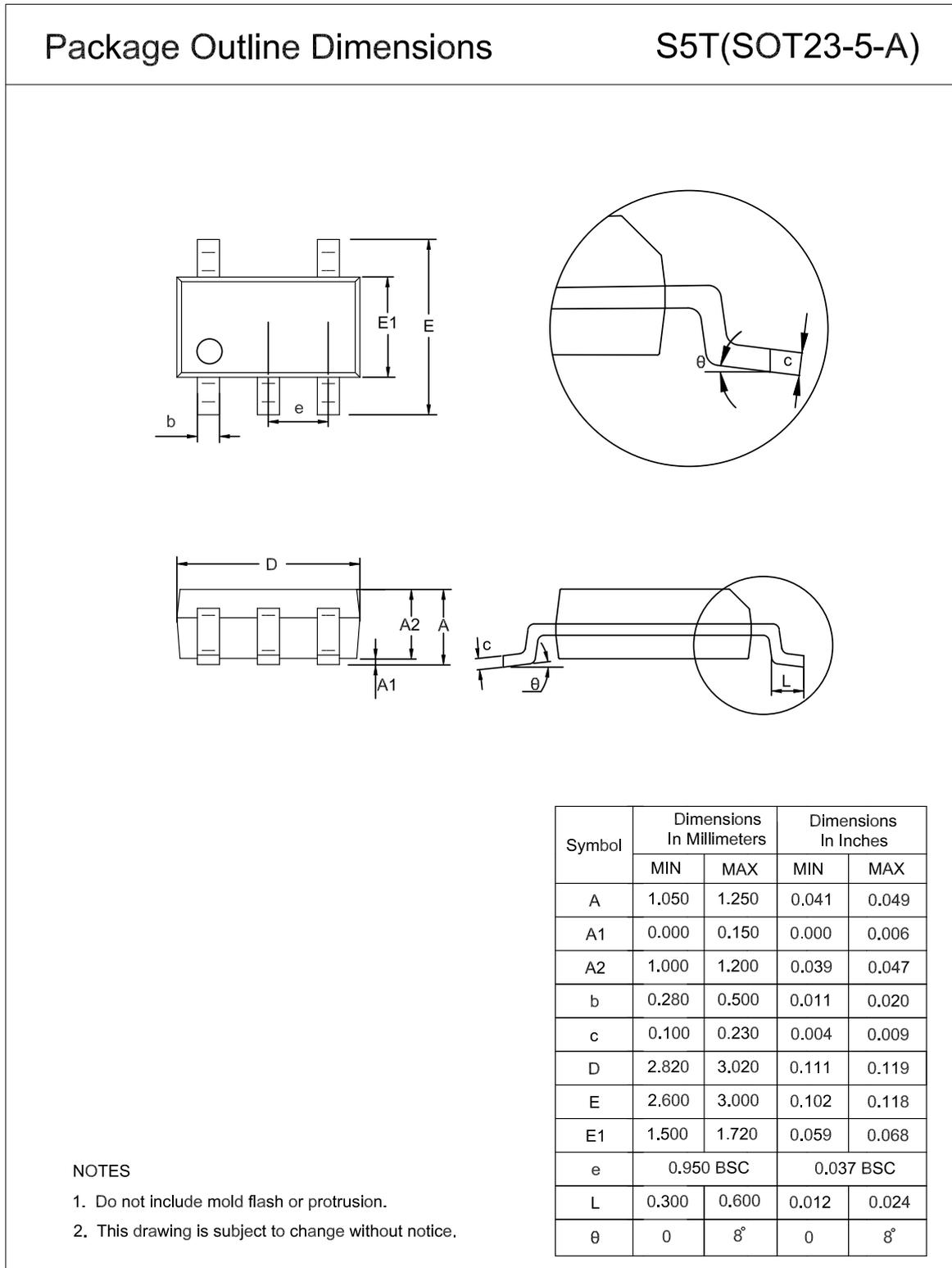
Order Number	Package	D1 (mm)	W1 (mm)	A0 (mm) <sup>(1)</sup>	B0 (mm) <sup>(1)</sup>	K0 (mm) <sup>(1)</sup>	P0 (mm)	W0 (mm)	Pin1 Quadrant
TPA3671-S5TR	SOT23-5	180.0	12.0	3.3	3.25	1.4	4.0	8.0	Q3
TPA3672-SO1R	SOP8	330.0	17.6	6.5	5.4	2.0	8.0	12.0	Q1
TPA3672-TS1R	TSSOP8	330	17.6	6.8	3.4	1.8	8.0	12.0	Q1
TPA3672-VS1R	MSOP8	330.0	17.6	5.3	3.3	1.3	8.0	12.0	Q1
TPA3672-WLPR	WLCSP	178.0	12.5	1.7	1.7	0.75	4.0	8.0	Q1

Order Number	Package	D1 (mm)	W1 (mm)	A0 (mm) <sup>(1)</sup>	B0 (mm) <sup>(1)</sup>	K0 (mm) <sup>(1)</sup>	P0 (mm)	W0 (mm)	Pin1 Quadrant
TPA3674-SO2R	SOP14	330.0	21.6	6.5	9.15	1.8	8.0	16.0	Q1
TPA3674-TS2R	TSSOP14	330.0	17.6	6.8	5.5	1.7	8.0	12.0	Q1

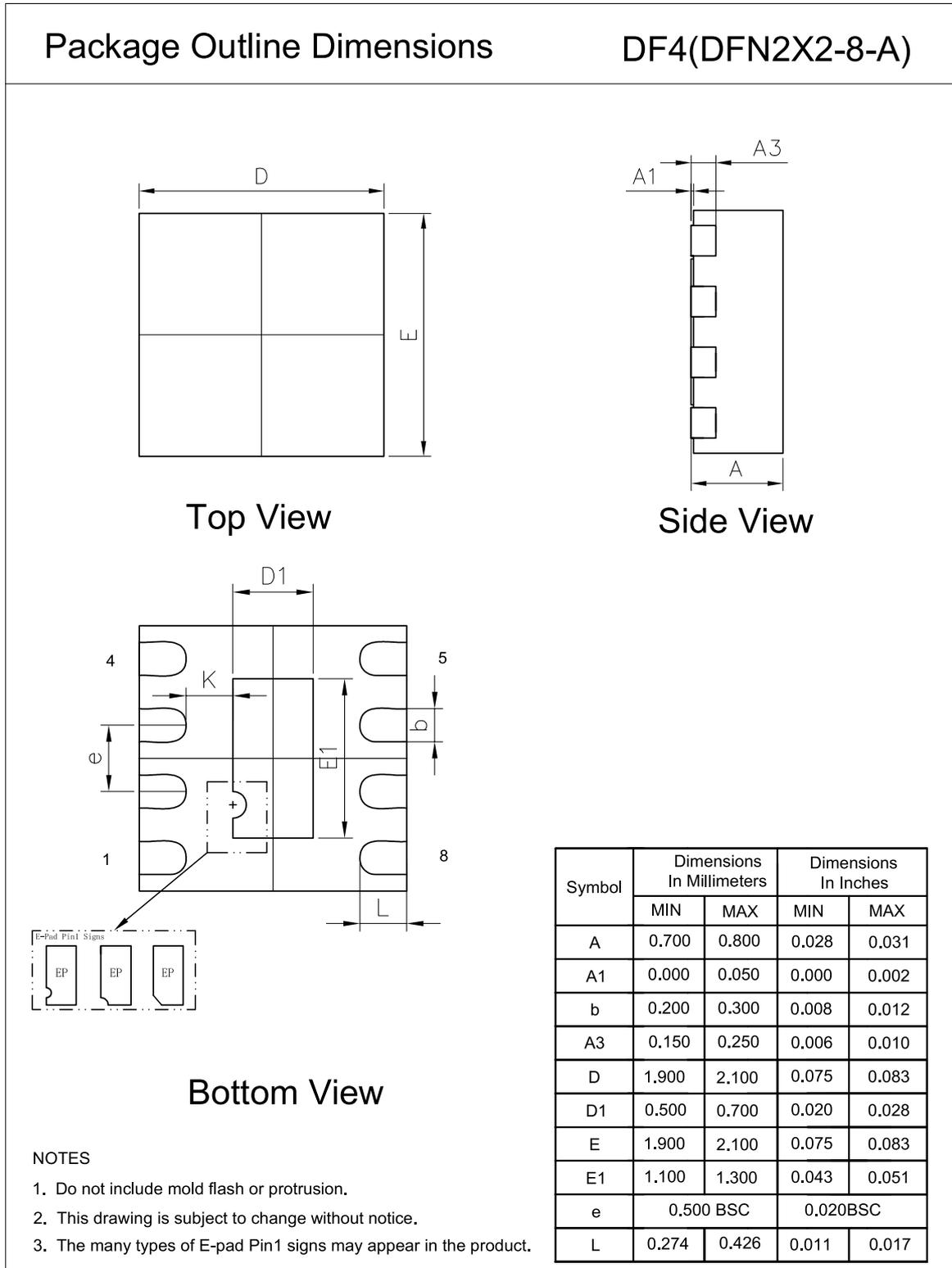
(1) The value is for reference only. Contact the 3PEAK factory for more information.

Package Outline Dimensions

SOT23-5



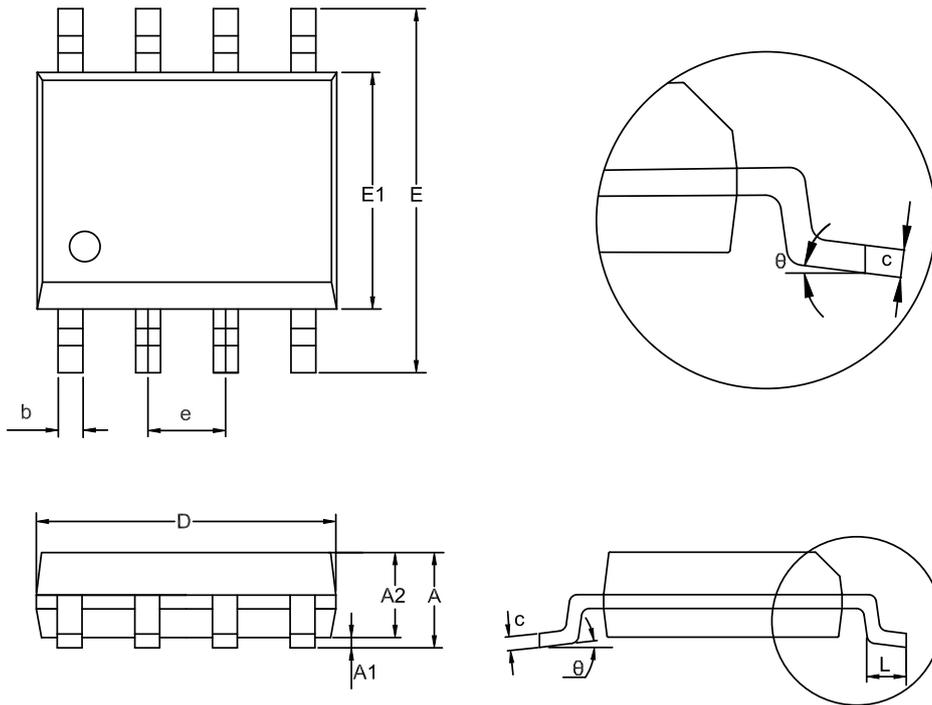
DFN2X2-8



SOP8

Package Outline Dimensions

SO1(SOP-8-A)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	1.350	1.750	0.053	0.069
A1	0.050	0.250	0.002	0.010
A2	1.250	1.550	0.049	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.007	0.010
D	4.700	5.100	0.185	0.201
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
e	1.270 BSC		0.050 BSC	
L	0.400	1.000	0.016	0.039
θ	0	8°	0	8°

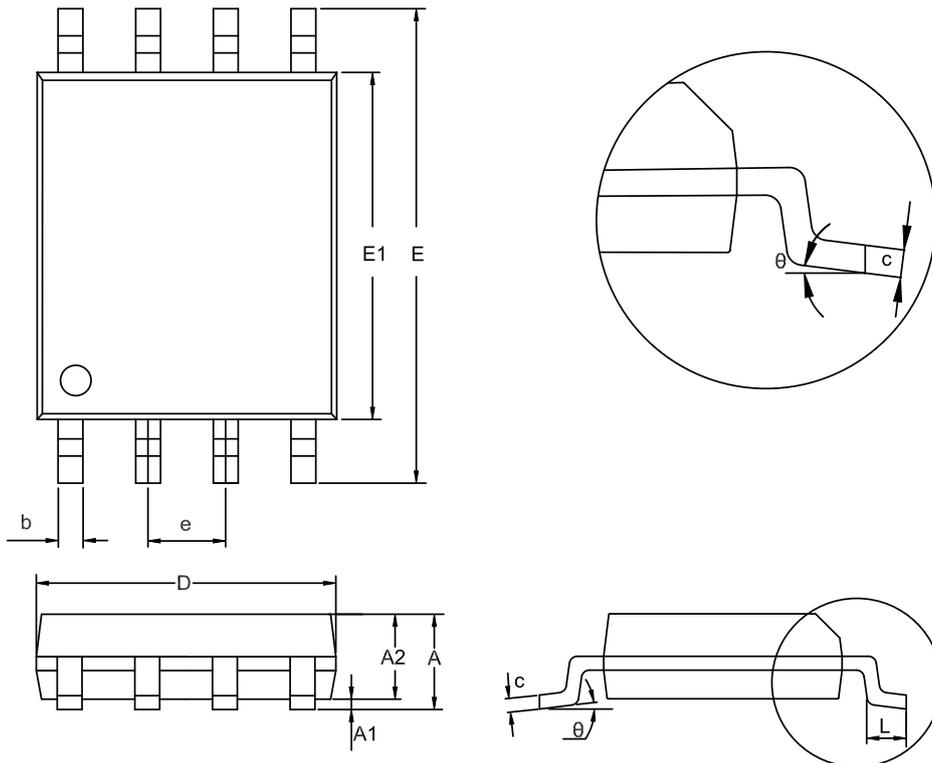
NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.

TSSOP8

Package Outline Dimensions

TS1(TSSOP-8-A)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	0.900	1.200	0.035	0.047
A1	0.050	0.150	0.002	0.006
A2	0.800	1.050	0.031	0.041
b	0.190	0.300	0.007	0.012
c	0.090	0.200	0.004	0.008
D	2.900	3.100	0.114	0.122
E	6.200	6.600	0.244	0.260
E1	4.300	4.500	0.169	0.177
e	0.650 BSC		0.026 BSC	
L	0.450	0.750	0.018	0.030
theta	0	8°	0	8°

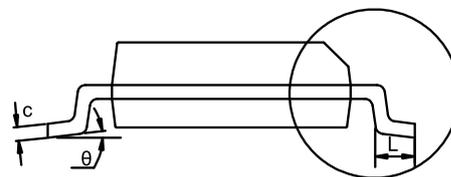
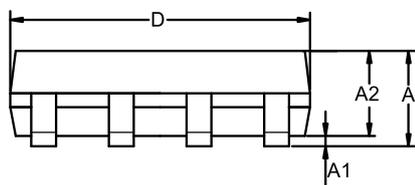
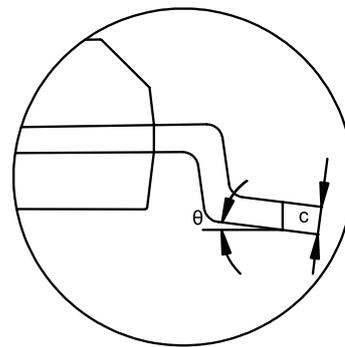
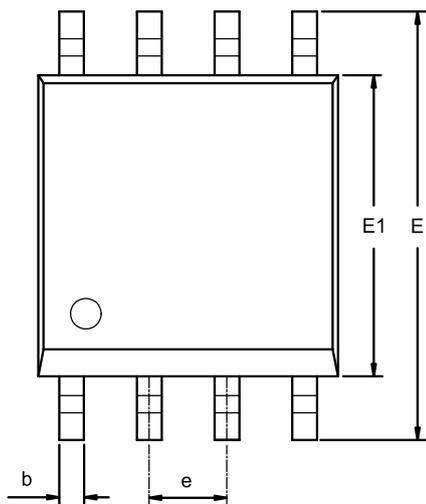
NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.

MSOP8

Package Outline Dimensions

VS1(MSOP-8-A)

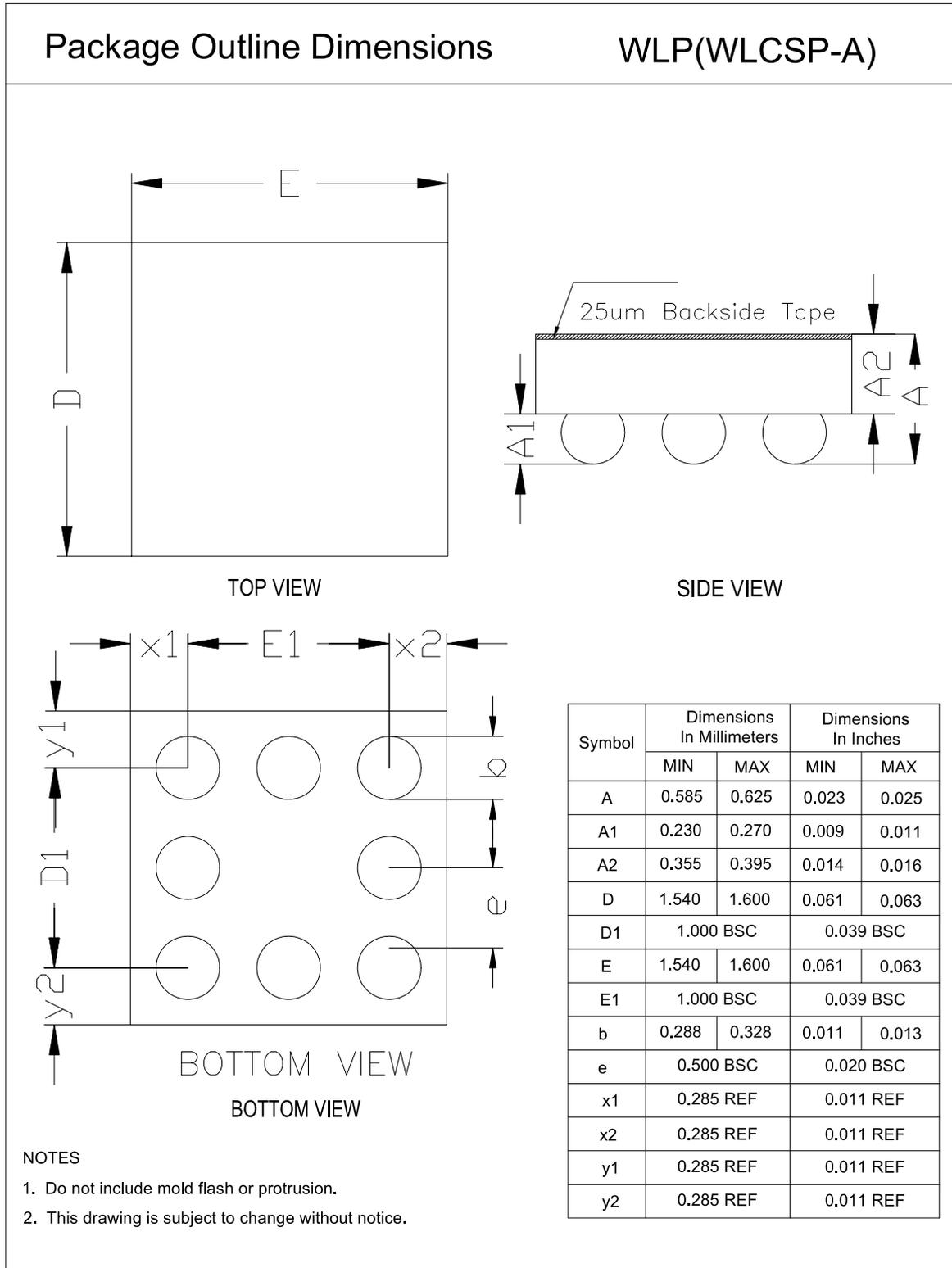


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	0.800	1.100	0.031	0.043
A1	0.020	0.150	0.001	0.006
A2	0.750	0.950	0.030	0.037
b	0.250	0.380	0.010	0.015
c	0.090	0.230	0.004	0.009
D	2.900	3.100	0.114	0.122
E	4.700	5.100	0.185	0.201
E1	2.900	3.100	0.114	0.122
e	0.650 BSC		0.026 BSC	
L	0.400	0.800	0.016	0.031
$\theta$	0	8°	0	8°

NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.

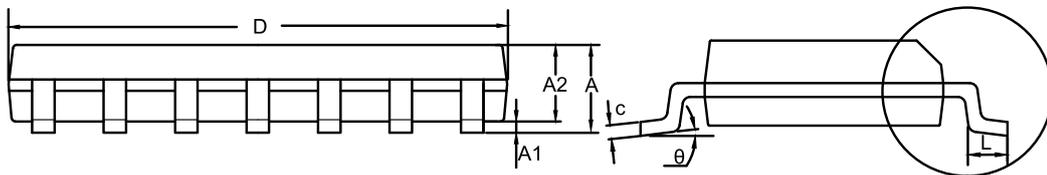
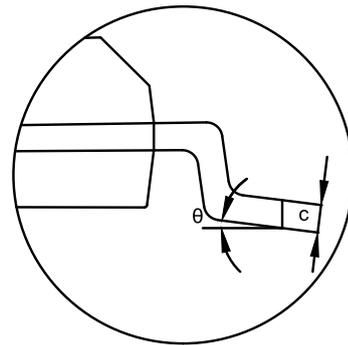
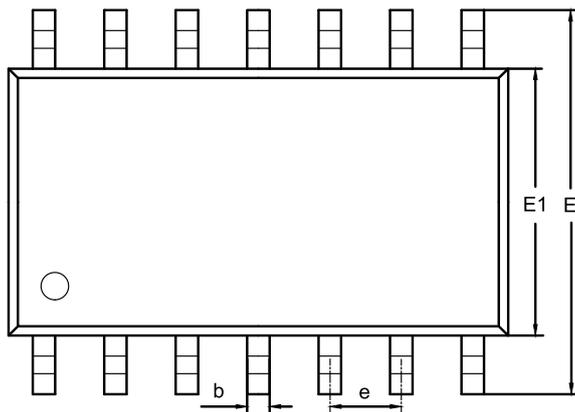
WLCSP



SOP14

Package Outline Dimensions

SO2(SOP-14-A)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	1.350	1.750	0.053	0.069
A1	0.050	0.250	0.002	0.010
A2	1.250	1.650	0.049	0.065
b	0.310	0.510	0.012	0.020
c	0.100	0.250	0.004	0.010
D	8.450	8.850	0.333	0.348
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
e	1.270 BSC		0.050 BSC	
L	0.400	1.270	0.016	0.050
θ	0	8°	0	8°

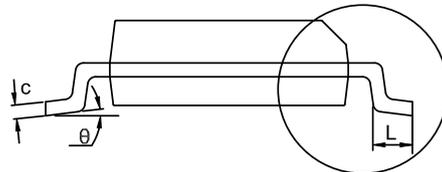
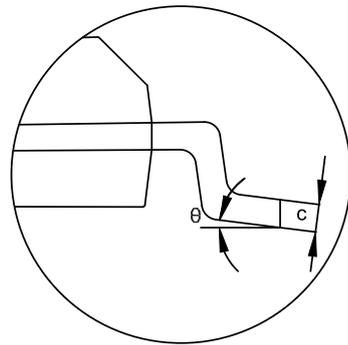
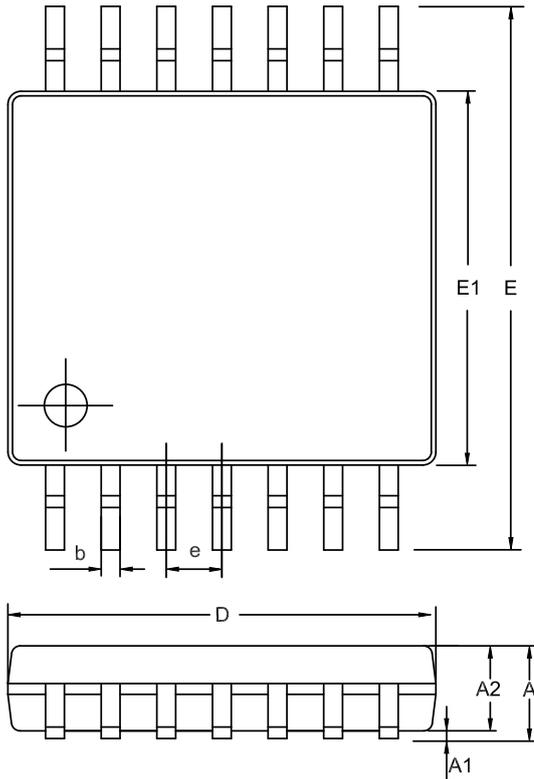
NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.

TSSOP14

Package Outline Dimensions

TS2(TSSOP-14-A)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	0.900	1.200	0.035	0.047
A1	0.050	0.150	0.002	0.006
A2	0.800	1.050	0.031	0.041
b	0.190	0.300	0.007	0.012
c	0.090	0.200	0.004	0.008
D	4.900	5.100	0.193	0.201
E	6.200	6.600	0.244	0.260
E1	4.300	4.500	0.169	0.177
e	0.650 BSC		0.026 BSC	
L	0.450	0.750	0.018	0.030
θ	0	8°	0	8°

NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.

**Order Information**

Order Number	Operating Temperature Range	Package	Marking Information	MSL	Transport Media, Quantity	Eco Plan
TPA3671-S5TR <sup>(1)</sup>	-40 to 125°C	SOT23-5	A29	MSL 3	Tape and Reel, 3000	Green
TPA3672-DFGR <sup>(1)</sup>	-40 to 125°C	DFN2X2-8	A32	MSL 3	Tape and Reel, 3000	Green
TPA3672-SO1R	-40 to 125°C	SOP8	A3672	MSL 3	Tape and Reel, 4000	Green
TPA3672-TS1R <sup>(1)</sup>	-40 to 125°C	TSSOP8	A3672	MSL 3	Tape and Reel, 3000	Green
TPA3672-VS1R <sup>(1)</sup>	-40 to 125°C	MSOP8	A3672	MSL 3	Tape and Reel, 3000	Green
TPA3672-WLPR	-40 to 125°C	WLCSP	A11	MSL 1	Tape and Reel, 3000	Green
TPA3674-SO2R <sup>(1)</sup>	-40 to 125°C	SOP14	A3674	MSL 3	Tape and Reel, 2500	Green
TPA3674-TS2R <sup>(1)</sup>	-40 to 125°C	TSSOP14	A3674	MSL 3	Tape and Reel, 3000	Green

(1) For future products, contact the 3PEAK factory for more information and samples.

**Green:** 3PEAK defines "Green" to mean RoHS compatible and free of halogen substances.

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