

# 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

## Notification# 20180531000A Datasheet for OPA354-OPA4354, OPA357-OPA2357, OPA355-OPA3355 Information Only

Error Correction (Datasheet Update #3): TSSOP package type device inclusion in the page 2 of the customer specific letter.

**Date:** June 11, 2018

To: TOKYO ELECTRON DEVICE (DSTR) PCN

#### Dear Customer:

This is information-only announcement of a change to product data sheets for devices that are currently offered by Texas Instruments. The details of the change are described on the following pages.

The changes within this notification are for your information only.

Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN\_ww\_admin\_team@list.ti.com).

Sincerely,

PCN Team SC Business Services

# Information Only Attachments

#### **Products Affected:**

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

**DEVICE** OPA3355EA/2K5

**CUSTOMER PART NUMBER** 

null

Technical details of this Datasheet Change follow on the next page(s).

PCN Nu	ımber:	20180531000A			PCN Date:	Ju	ine	11, 201	18		
<b>Title:</b> Datasheet for OPA354-OPA4354, OPA357-OPA2357, OPA355-OPA3355											
Custom	er Contact:	PCN Manage	ger					ot:	Quality Services		
Change Type:											
Assembly Site				Design				Wafer Bump Site			
Assembly Process			□ Data Sheet					Wafer Bump Material			
Assembly Materials			Part number change					Wafer Bump Process			
Mechanical Specification				Test Site				Wafer Fab Site			
Pac	king/Shipping/	Labeling	Test Process				Wafer Fab Materials				
☐ Wafer Fab Process								Fab Process			
	Notification Details										

# **Description of Change:**

Texas Instruments Incorporated is announcing datasheet updates in an information only notification. The product datasheets are being updated as summarized in the revision history provided below.

Error Correction (Datasheet Update #3): TSSOP package type device inclusion in the page 2 of the customer specific letter.

## Datasheet Update# 1

Literature Number Update- From: SBOS233F To: SBOS233G



OPA354, OPA2354, OPA4354

SBOS233G - MARCH 2002 - REVISED APRIL 2018

#### Changes from Revision F (June 2016) to Revision G

Page

Link to Full Datasheet: <a href="http://www.ti.com/product/OPA354">http://www.ti.com/product/OPA354</a>

# Affected Products:

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Device Marking (4/5)
OPA2354AIDDA	ACTIVE	SO PowerPAD	DDA	8	75	Green (RoHS & no Sb/Br)	CUSN	Level-1-260C-UNLIM	-40 to 125	OPA 2354A
OPA2354AIDDAG3	ACTIVE	SO PowerPAD	DDA	8	75	Green (RoHS & no Sb/Br)	CUSN	Level-1-260C-UNLIM	-40 to 125	OPA 2354A
OPA2354AIDDAR	ACTIVE	SO PowerPAD	DDA	8	2500	Green (RoHS & no Sb/Br)	CU SN	Level-1-260C-UNLIM	-40 to 125	OPA 2354A
OPA2354AIDDARG3	ACTIVE	SO PowerPAD	DDA	8	2500	Green (RoHS & no Sb/Br)	CU SN	Level-1-260C-UNLIM	-40 to 125	OPA 2354A
OPA2354AIDGKR	ACTIVE	VSSOP	DGK	8	2500	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	OACI
OPA2354AIDGKRG4	ACTIVE	VSSOP	DGK	8	2500	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	OACI
OPA2354AIDGKT	ACTIVE	VSSOP	DGK	8	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	OACI
OPA2354AIDGKTG4	ACTIVE	VSSOP	DGK	8	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	OACI
OPA354AIDBVR	ACTIVE	SOT-23	DBV	5	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OABI
OPA354AIDBVRG4	ACTIVE	SOT-23	DBV	5	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OABI
OPA354AIDBVT	ACTIVE	SOT-23	DBV	5	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OABI
OPA354AIDBVTG4	ACTIVE	SOT-23	DBV	5	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OABI
OPA354AIDDA	ACTIVE	SO PowerPAD	DDA	8	75	Green (RoHS & no Sb/Br)	CUSN	Level-1-260C-UNLIM	-40 to 125	OPA 354A
OPA354AIDDAG3	ACTIVE	SO PowerPAD	DDA	8	75	Green (RoHS & no Sb/Br)	CUSN	Level-1-260C-UNLIM	-40 to 125	OPA 354A
OPA354AIDDAR	ACTIVE	SO PowerPAD	DDA	8	2500	Green (RoHS & no Sb/Br)	CUSN	Level-1-260C-UNLIM	-40 to 125	OPA 354A
OPA4354AID	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA4354A
OPA4354AIDG4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA4354A

Orderable Device	Status (1)	Package Type	Package Drawing		Package Qty	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Device Marking (4/5)
OPA4354AIDR	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA4354A
OPA4354AIDRG4	ACTIVE	SOIC	D	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA4354A
OPA4354AIPWR	ACTIVE	TSSOP	PW	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 4354A
OPA4354AIPWRG4	ACTIVE	TSSOP	PW	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 4354A
OPA4354AIPWT	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 4354A
OPA4354AIPWTG4	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 4354A

#### Datasheet Update# 2

Literature Number Update- From: SBOS235E To: SBOS235F



OPA357, OPA2357

SBOS235F - MARCH 2002-REVISED APRIL 2018

#### Changes from Revision E (May 2009) to Revision F

Page

Added Device Information table, Pin Functions table, ESD Ratings table, Recommended Operating Conditions
table, Thermal Information table, Overview section, Functional Block Diagram section, Feature Description section,
Device Functional Modes section, Application and Implementation section, Power Supply Recommendations
section, Layout section, Device and Documentation Support section, and Mechanical, Packaging, and Orderable
Information section

Link to Full Datasheet: <a href="http://www.ti.com/product/OPA2357">http://www.ti.com/product/OPA2357</a>

#### Affected Products:

Orderable Device	Status	Package Type	Package	Pins	Package	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Device Marking
	(1)		Drawing		Qty	(2)	(6)	(3)		(4/5)
OPA2357AIDGSR	ACTIVE	VSSOP	DGS	10	2500	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	BBG
OPA2357AIDGSRG4	ACTIVE	VSSOP	DGS	10	2500	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	BBG
OPA2357AIDGST	ACTIVE	VSSOP	DGS	10	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	BBG
OPA2357AIDGSTG4	ACTIVE	VSSOP	DGS	10	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	BBG
OPA357AIDBVR	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OADI
OPA357AIDBVRG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OADI
OPA357AIDBVT	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OADI
OPA357AIDBVTG4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OADI

# Datasheet Update# 3

Literature Number Update- From: SBOS195D To: SBOS195E



OPA355, OPA2355, OPA3355

SBOS195E -MARCH 2001-REVISED APRIL 2018

CI	hanges from Revision D (January 2004) to Revision E	Page
	Updated data sheet to latest TIS documentation and translation standards	1
	Changed pin type typo from MSOP to VSSOP in Description section	1
•	Added Device Information table	1
•	Changed pin 1 of OPA355 D (SOIC) pinout drawing from "OUT" to "NC"	4
•	Deleted the Absolute Maximum Ratings tablenote: Input terminals are diode-clamped to the power-supply rails.  Input signals that can swing more than 0.5V beyond the supply rails should be current limited to 10mA or less	7
•	Added ESD Ratings table	7
•	Added Recommended Operating Conditions table	7
•	Added Thermal Information tables	8
•	Changed pin type typo from MSOP to VSSOP in Electrical Characteristics section	10
•	Deleted the test conditions statement from <i>Typical Characteristics</i> graphs and moved the conditions to tablenotes below the graphs	11
	Added Detailed Description section	16
•	Added Functional Block Diagram graphic	16
•	Deleted Input and ESD Protection section	16
•	Added Application and Implementation section	
•	Deleted Internal ESD Protection application	18
•	Added Power Supply Recommendations section	25
	Added Layout Guidelines section	25

Link to Full Datasheet: <a href="http://www.ti.com/product/OPA355">http://www.ti.com/product/OPA355</a>

#### Affected Products:

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan	Lead/Ball Finish (6)	MSL Peak Temp (3)	Op Temp (°C)	Device Marking (4/5)
OPA2355DGSA/250	ACTIVE	VSSOP	DGS	10	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	D55
OPA2355DGSA/250G4	ACTIVE	VSSOP	DGS	10	250	Green (RoHS & no Sb/Br)	CU NIPDAUAG	Level-2-260C-1 YEAR	-40 to 125	D55
OPA3355EA/250	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 3355EA
OPA3355EA/250G4	ACTIVE	TSSOP	PW	14	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 3355EA
OPA3355EA/2K5	ACTIVE	TSSOP	PW	14	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 3355EA
OPA3355UA	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA3355UA
OPA3355UAG4	ACTIVE	SOIC	D	14	50	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA3355UA
OPA355NA/250	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	C55
OPA355NA/250G4	ACTIVE	SOT-23	DBV	6	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	C55
OPA355NA/3K	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	C55
OPA355NA/3KG4	ACTIVE	SOT-23	DBV	6	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	C55
OPA355UA	ACTIVE	SOIC	D	8	75	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 355UA
OPA355UA/2K5	ACTIVE	SOIC	D	8	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 355UA
OPA355UA/2K5G4	ACTIVE	SOIC	D	8	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 355UA
OPA355UAG4	ACTIVE	SOIC	D	8	75	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 125	OPA 355UA

#### **Reason for Change:**

To accurately reflect device characteristics.

# Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device.

# Changes to product identification resulting from this PCN:

None.

For TI datasheet updates, please consider mapping the TI device to a customer "Alert". Alerts can be managed from the ti.com website at https://www.ti.com/myti/docs/maintainalert.tsp

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com