

## ■ General Description

The AME8853 family of positive, CMOS linear regulators provide low dropout voltage(220mV@300mA), low quiescent current, and low noise CMOS LDO. These rugged devices have both Thermal Shutdown, and Current limit to prevent device failure under the "Worst" of operating conditions.

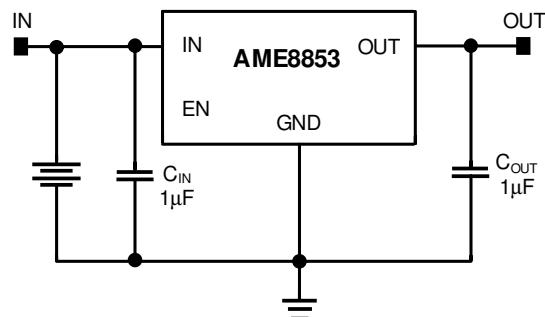
## ■ Features

- Low Dropout Voltage: 220mV@300mA
- Guaranteed Current: 300mA
- Quiescent Current: 60 $\mu$ A (typ.)
- Over-Temperature Shutdown
- Current Limiting protection
- PSRR: 60dB@10KHz
- Ultra-Low-Noise: 100 $\mu$ V<sub>RMS</sub> at 1Hz to 100KHz
- Low Temperature Coefficient
- Input Voltage Range : 2.5V~5.5V
- Output Voltage Range: 0.8V~ 4.3V
- Green Products Meet RoHS Standards

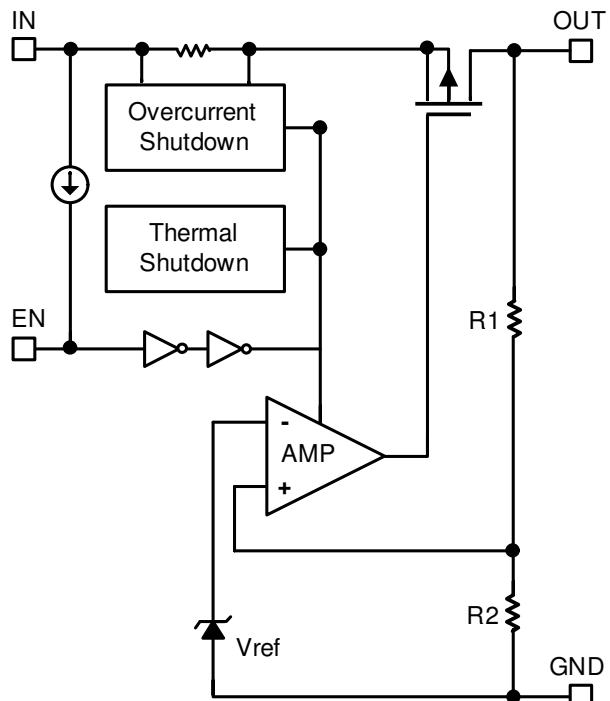
## ■ Applications

- Instrumentation
- Portable Electronics
- Wireless Devices
- Cordless Phones
- PC Peripherals
- Battery Powered Widgets

## ■ Typical Application

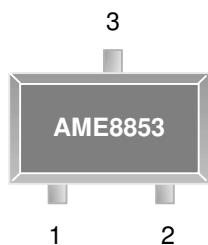


## ■ Functional Block Diagram



## ■ Pin Configuration

**SOT-23/TSOT-23A  
Top View**

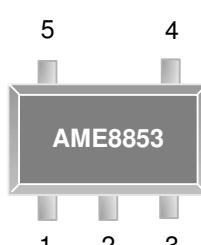


**AME8853-AETxxx**

1. GND
2. OUT
3. IN

\* Die Attach:  
Non-Conductive Epoxy

**SOT-25/TSOT-25A  
Top View**

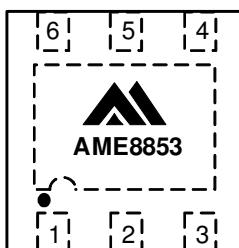


**AME8853-AEVxxxx**

1. IN
2. GND
3. EN
4. NC
5. OUT

\* Die Attach:  
Conductive Epoxy

**DFN-6D  
(2mmx2mmx0.75mm)  
Top View**

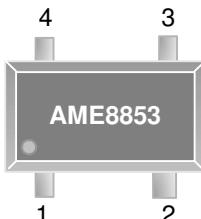


**AME8853-AVYxxx**

1. OUT
2. NC
3. GND
4. EN
5. NC
6. IN

\* Die Attach:  
Conductive Epoxy

**SC-70-4 (SC-82)  
Top View**



**AME8853-AIUxxx**

1. EN
2. GND
3. OUT
4. IN

\* Die Attach:  
Conductive Epoxy

**AME8853****High PSRR, Low Noise, 300mA  
CMOS Regulator**

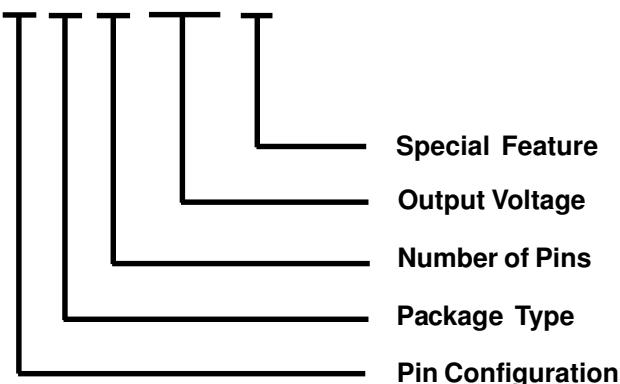
## ■ Pin Description

Pin Number		Pin Name	Pin Description
SOT-25 TSOT-25A	SOT-23 TSOT-23A		
1	3	IN	Input voltage pin; should be decoupled with 1µF or greater capacitor.
2	1	GND	Ground connection pin.
3	N/A	EN	Enable pin, Active "high". When pulled "low", the PMOS pass transistor turns off, current consuming less than 1µA. When EN pin float outside, it's weakly pulled high from internal MOS.
4	N/A	NC	No connection.
5	2	OUT	LDO voltage regulator output pin; should be decoupled with a 1.0µF or greater value low ESR ceramic capacitor.
N/A	N/A	NC	No connection.

Pin Number		Pin Name	Pin Description
SC-70-4 (SC-82)	DFN-6		
1	4	EN	Enable pin, Active "high". When pulled "low", the PMOS pass transistor turns off, current consuming less than 1µA. When EN pin float outside, it's weakly pulled high.
2	3	GND	Ground connection pin.
3	1	OUT	LDO voltage regulator output pin; should be decoupled with a 1.0µF or greater value low ESR ceramic capacitor.
4	6	IN	Input voltage pin; should be decoupled with 1µF or greater capacitor.
N/A	2、5	NC	No connection.

## ■ Ordering Information

**AME8853 - X X X XXX X**



Pin Configuration	Package Type	Number of Pins	Output Voltage	Special Feature
A 1. IN (SOT-25) 2. GND (TSOT-25A) 3. EN 4. NC 5. OUT	E: SOT-2X I: SC-70 (SC-82) V: DFN-6	T: 3 U: 4 V: 5 Y: 6	080: 0.8V 090: 0.9V 100: 1.0V 110: 1.1V 120: 1.2V 130: 1.3V 140: 1.4V 150: 1.5V : 180: 1.8V : 250: 2.5V : 280: 2.8V : 420: 4.2V 430: 4.3V	N/A: SOT-2X K: 0.9mm max height (for TSOT-2XA Only)
A 1. EN (SC-70-4/ SC-82) 2. GND 3. OUT 4. IN				
A 1. GND (SOT-23) 2. OUT (TSOT-23A) 3. IN				
A 1. OUT (DFN-6D) 2. NC 3. GND 4. EN 5. NC 6. IN				

## ■ Absolute Maximum Ratings

Parameter	Maximum	Unit
Input Voltage	-0.3 to 6	V
EN Voltage	-0.3 to 6	V
Output Current	$P_D/(V_{IN}-V_{OUT})$	mA
Output Voltage	GND-0.3 to $V_{IN}+0.3$	V
ESD Classification	HBM	2
	MM	200

## ■ Recommended Operating Conditions

Parameter	Symbol	Rating	Unit
Ambient Temperature Range	$T_A$	-40 to +85	$^{\circ}\text{C}$
Junction Temperature Range	$T_J$	-40 to +125	
Storage Temperature Range	$T_{STG}$	-65 to +150	

## ■ Thermal Information

Parameter	Package	Die Attach	Symbol	Maximum	Unit	
Thermal Resistance* (Junction to Case)	SC-70-4(SC-82)	Conductive Epoxy	$\theta_{JC}$	224	°C / W	
	SOT-25			81		
	TSOT-25A			81		
	DFN-6D			61		
	SOT-23 TSOT-23A	Non-Conductive Epoxy		140		
Thermal Resistance (Junction to Ambient)	SC-70-4(SC-82)	Conductive Epoxy	$\theta_{JA}$	331	°C / W	
	SOT-25			260		
	TSOT-25A			230		
	DFN-6D			130		
	SOT-23 TSOT-23A	Non-Conductive Epoxy		280		
Internal Power Dissipation	SC-70-4(SC-82)	Conductive Epoxy	$P_D$	300	mW	
	SOT-25			400		
	TSOT-25A			455		
	DFN-6D			769		
	SOT-23 TSOT-23A	Non-Conductive Epoxy		400		
Maximum Junction Temperature				150	°C	
Lead Temperature (Soldering, 10Sec.)**				260	°C	

\* Measure  $\theta_{JC}$  on backside center of molding compound if IC has no tab.

\*\* MIL-STD-202G 210F



**AME8853**

**High PSRR, Low Noise, 300mA  
CMOS Regulator**

## ■ Electrical Specifications

$V_{IN} = V_{OUT(NOM)} + 1V$ , (for  $V_{OUT} < 2V$ ,  $V_{IN} = 2.5V$ ),  $I_{OUT} = 1mA$ , and  $C_{OUT} = 1\mu F$ ,  $C_{IN} = 1\mu F$  unless otherwise noted.  
Typical values are at  $T_A = 25^\circ C$ .

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Input Voltage	$V_{IN}$		2.5		5.5	V
Output Accuracy	$V_{OUT,ACC}$	$I_{OUT} = 1mA$	-2.0		2.0	%
Output Voltage Range	$V_{OUT}$		0.8		4.3	V
Dropout Voltage (Note 1)	$V_{DROP}$	$I_{OUT} = 300mA, 0.8V \leq V_{OUT(NOM)} \leq 2.0V$			Note2	mV
		$I_{OUT} = 300mA, 2.0V < V_{OUT(NOM)} \leq 2.4V$			500	
		$I_{OUT} = 300mA, 2.4V < V_{OUT(NOM)} \leq 2.8V$			400	
		$I_{OUT} = 300mA, 2.8V < V_{OUT(NOM)}$		220	300	
Output Current	$I_{OUT}$		300			mA
Quiescent Current	$I_Q$	$I_{OUT} = 0mA$		60	90	$\mu A$
Line Regulation $\frac{\Delta V_{OUT}}{\Delta V_{IN}} \times 100\%$	$REG_{LINE}$	$I_{OUT} = 1mA, 0.8V \leq V_{OUT} \leq 1.2V, 2.5V \leq V_{IN} \leq 3.5V$		0.125	0.25	%/V
		$I_{OUT} = 1mA, 1.2V < V_{OUT} \leq 2.0V, 2.5V \leq V_{IN} \leq 3.5V$		0.1	0.2	
		$I_{OUT} = 1mA, 2.0V < V_{OUT} \leq 4.2V, V_{IN(MIN)} \leq V_{IN} \leq V_{IN(MIN)} + 1V$		0.05	0.1	
		$I_{OUT} = 1mA, 4.2V < V_{OUT} \leq 4.5V, V_{IN(MIN)} \leq V_{IN} \leq 5.5V$ (Note2)		0.05	0.1	
Load Regulation $\frac{\Delta V_{OUT}}{\Delta I_{OUT}} \times 100\%$	$REG_{LOAD}$	$1mA \leq I_{OUT} \leq 300mA, 0.8V \leq V_{OUT(NOM)} \leq 1.2V$		1.5	3.0	%/A
		$1mA \leq I_{OUT} \leq 300mA, 1.2V < V_{OUT(NOM)} \leq 2.0V$		1.25	2.5	
		$1mA \leq I_{OUT} \leq 300mA, 2.0V < V_{OUT(NOM)}$		1.0	2	

## ■ Electrical Specifications (Contd.)

Parameter	Symbol	Test Condition		Min	Typ	Max	Units
Power Supply Rejection Ration	PSRR	$C_{OUT}=1\mu F$ , $V_{OUT}=0.8V$ $I_{OUT}=10mA$ $V_{IN}=2.8V$	$F=100Hz$		60		dB
			$F=1KHz$		60		
			$F=10KHz$		60		
Output Voltage Noise	$eN$	$I_{OUT}=10mA$ , $V_{OUT}=0.8V$ , $f=1Hz$ to $100KHz$			100		$\mu V_{RMS}$
Enable High (enabled)	$V_{EN,HI}$	$V_{IN(MIN)} \leq V_{IN} \leq 5.5V$		1.4		$V_{IN}$	V
Enable Low (shutdown)	$V_{EN,LO}$	$V_{IN(MIN)} \leq V_{IN} \leq 5.5V$		0		0.4	
Enable Input Bias Current	$I_{EN,HI}$	$V_{EN}=V_{IN}$				1	$\mu A$
	$I_{EN,LO}$	$V_{EN}=0V$				2	
Shutdown Current	$I_{SHDN}$	$V_{IN}=5.0V$ , $V_{EN}=0V$			0.1	1	$\mu A$
Shutdown Output Voltage	$V_{OUT,SD}$	$I_{OUT}=0.4mA$ , $V_{EN}=0$				0.4	V
<b>Protection</b>							
Output Current Limit	$I_{LIM}$	$V_{OUT}=0.9 \times V_{OUT(NOM)}$		400			$mA$
Thermal Shutdown Temperature	$T_{SHDN}$	Shutdown, temperature increasing			150		$^{\circ}C$
Thermal Shutdown Hysteresis	$T_{SHDN(HYS)}$				20		

Note1: Dropout Voltage is measured at  $V_{OUT}=V_{OUT(NOM)} \times 98\%$

Note2: For  $V_{OUT}$  below 2.0V, Dropout Voltage is the input<sub>(MIN)</sub> to output differential.



AME

AME8853

## High PSRR, Low Noise, 300mA CMOS Regulator

### ■ Detailed Description

The AME8853 family of CMOS regulators contain a PMOS pass transistor, voltage reference, error amplifier, over-current protection thermal shutdown, and Power Good detection circuitry.

The P-channel pass transistor receives data from the error amplifier, over-current shutdown, and thermal protection circuits. During normal operation, the error amplifier compares the output voltage to a precision reference. Over-current and Thermal shutdown circuits become active when the junction temperature exceeds 150°C, or the current exceeds 300mA. During thermal shutdown, the output voltage remains low. Normal operation is restored when the junction temperature drops more 20°C.

### Capacitor Selection and Regulator Stability

The AME8853 is stable with an output capacitor to ground of 1 $\mu$ F or greater. Ceramic capacitors have the lowest ESR, and will offer the best AC performance. Conversely, Aluminum Electrolytic capacitors exhibit the highest ESR, resulting in the poorest AC response. Unfortunately, large value ceramic capacitors are comparatively expensive. One option is to parallel a 0.1 $\mu$ F ceramic capacitor with a 10 $\mu$ F Aluminum Electrolytic. The benefit is low ESR, high capacitance, and low overall cost.

A second capacitor is recommended between the input and ground to stabilize  $V_{IN}$ . The input capacitor should be at least 0.1 $\mu$ F to have a beneficial effect.

### Enable Pin

The Enable Pin is Active High. When activated pulled low, the MOS pass transistor shuts off, and all internal circuits are powered down. In this state, the stand by current is than 1 $\mu$ A. When EN pin float outside, it's pulled high.

### Capacitor Selection and Regulator Stability

The maximum output power of the AME8853 is limited by the maximum power dissipation of the package. By calculation the power dissipation of the package as a function of the input voltage, output voltage and output current, the maximum input voltage can be obtained. The maximum power dissipation should not exceed the package's maximum power rating.

$$P_{MAX} = (V_{IN(MAX)} - V_{OUT}) \times I_{OUT}$$

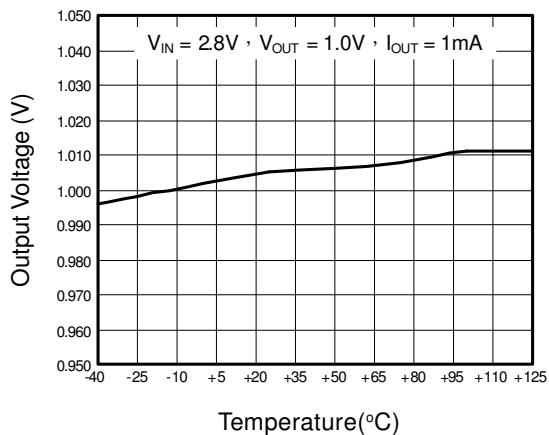
Where:

$V_{IN(MAX)}$  = maximum input voltage

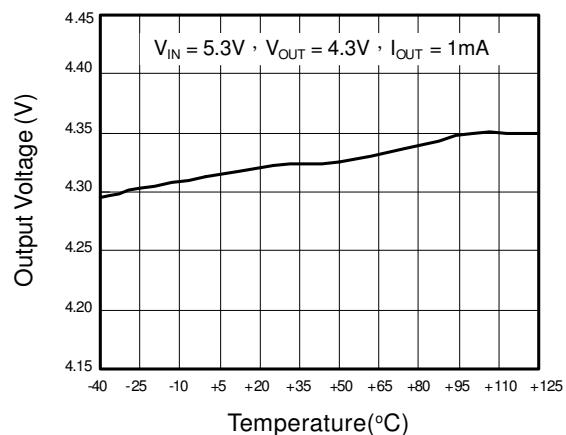
$P_{MAX}$  = maximum power dissipation of the package

## ■ Characterization Curve

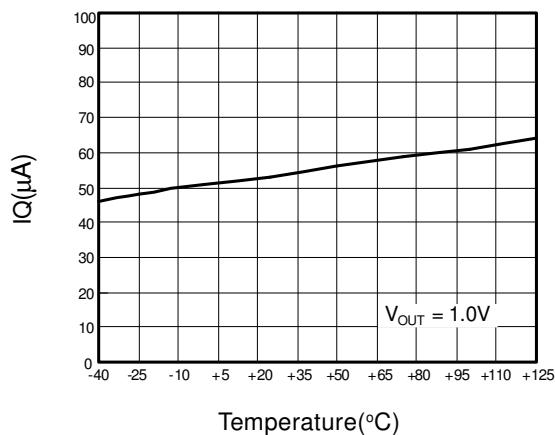
Output Voltage



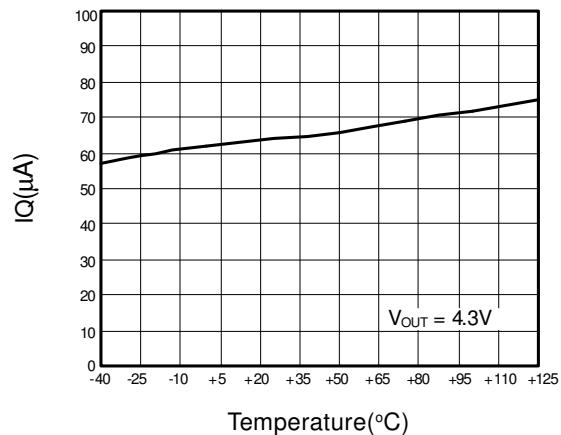
Output Voltage



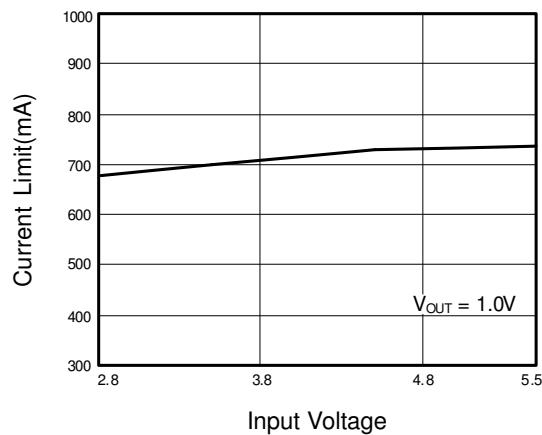
Quiescent Current



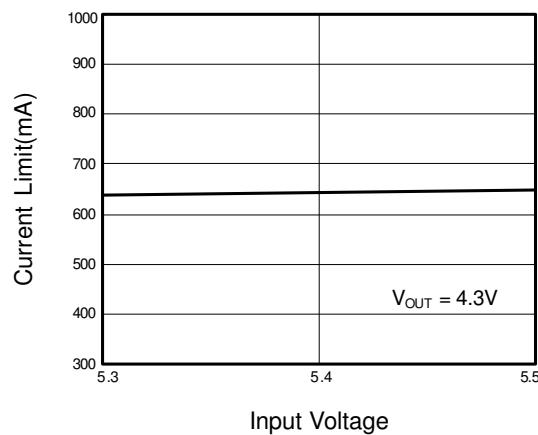
Quiescent Current



Current Limit vs. Input Voltage



Current Limit vs. Input Voltage



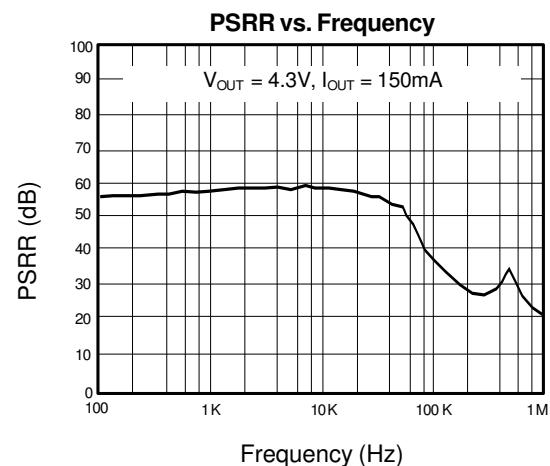
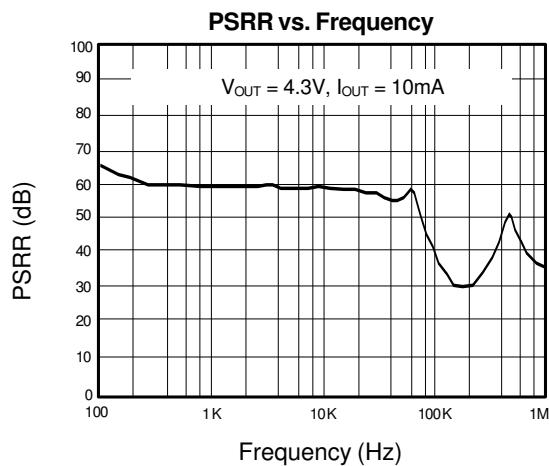
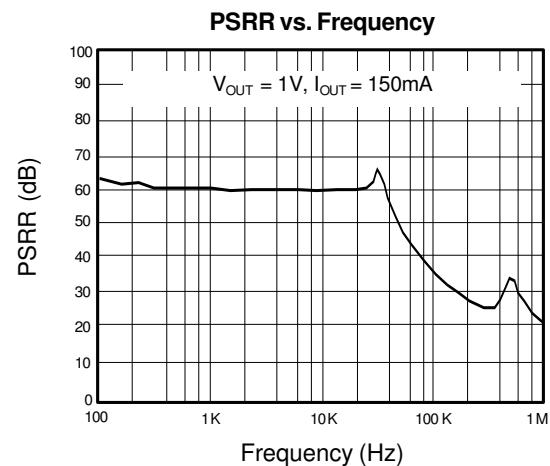
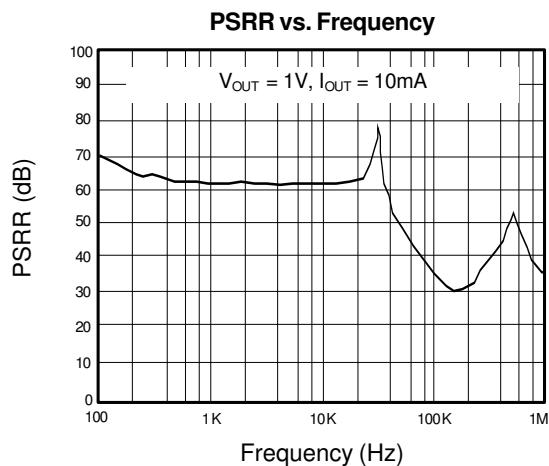
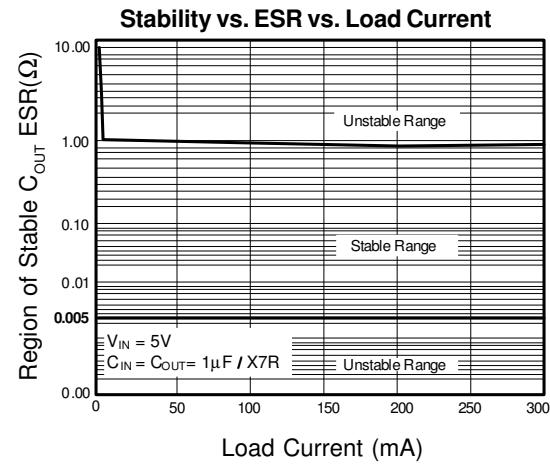
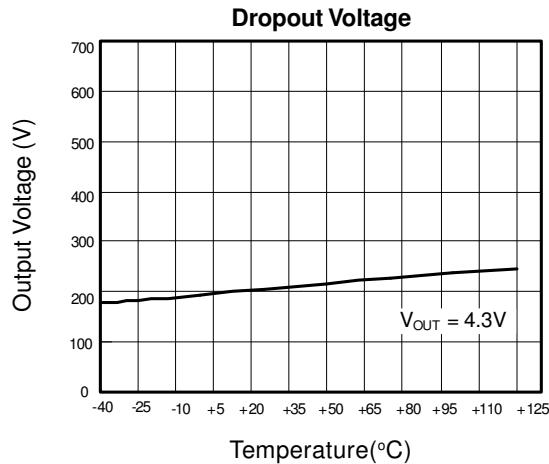


AME

AME8853

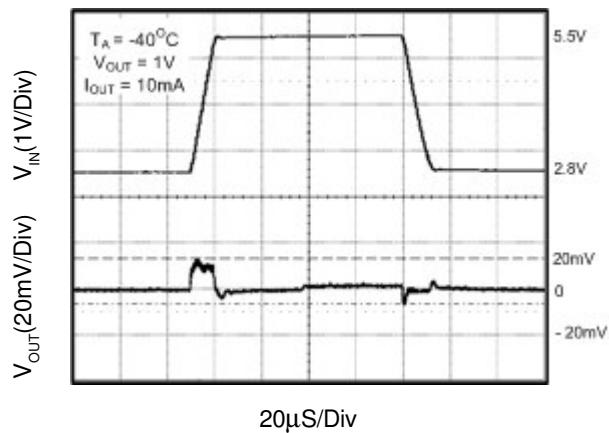
**High PSRR, Low Noise, 300mA  
CMOS Regulator**

## ■ Characterization Curve (Contd.)

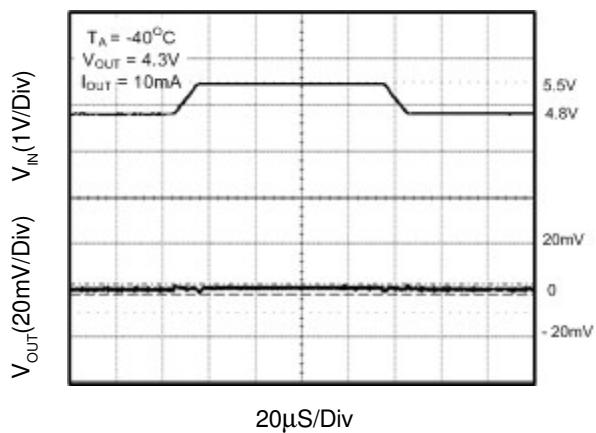


## ■ Characterization Curve (Contd.)

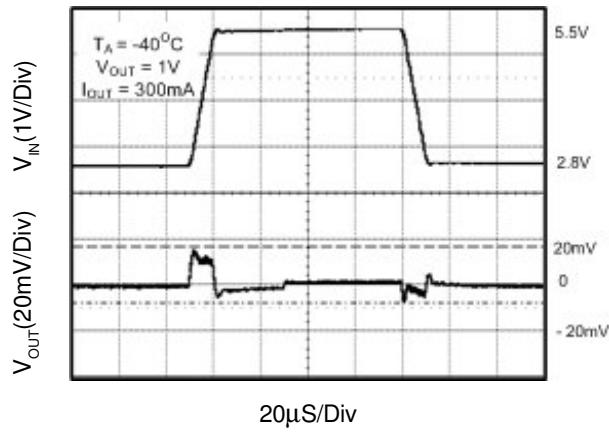
Line Transient Response



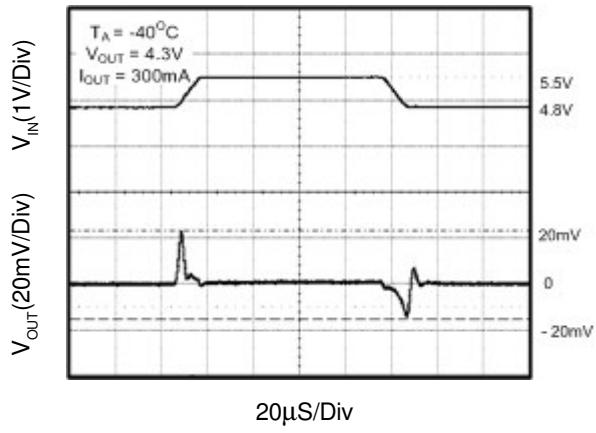
Line Transient Response



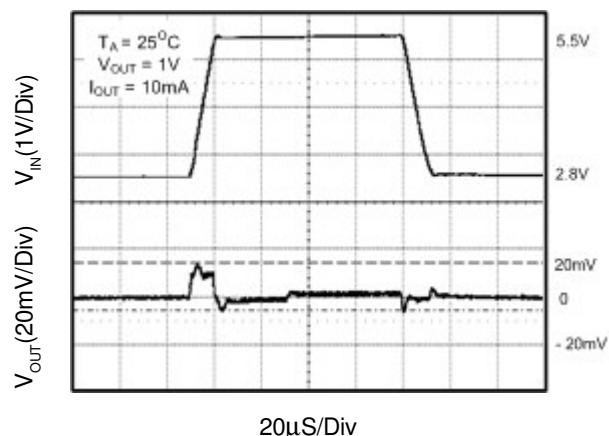
Line Transient Response



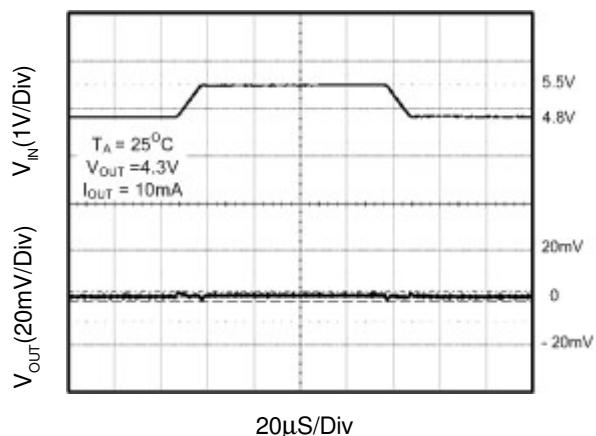
Line Transient Response



Line Transient Response



Line Transient Response





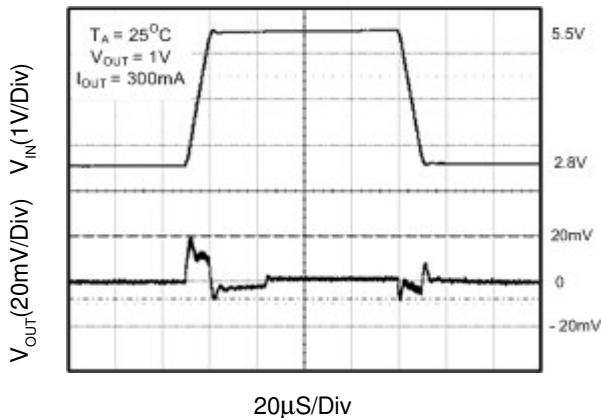
AME

AME8853

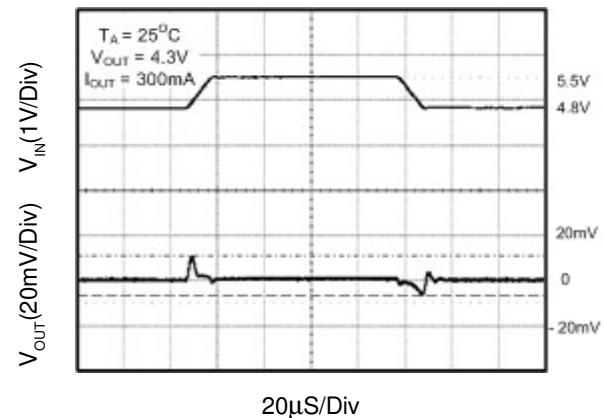
**High PSRR, Low Noise, 300mA  
CMOS Regulator**

## ■ Characterization Curve (Contd.)

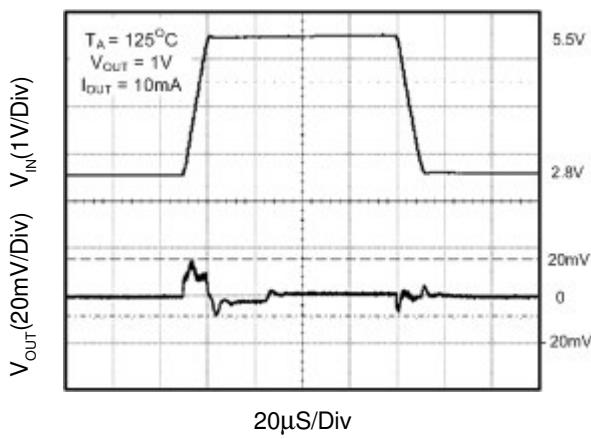
Line Transient Response



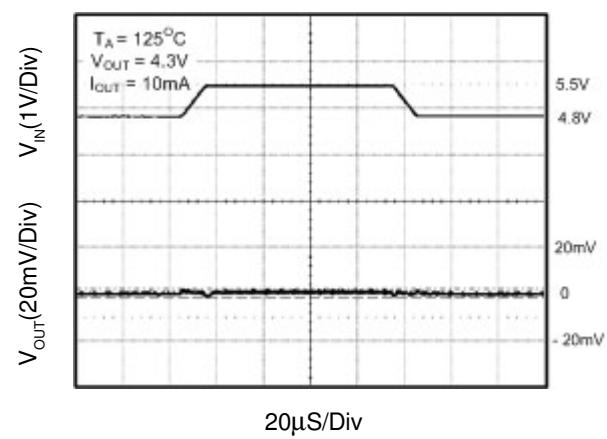
Line Transient Response



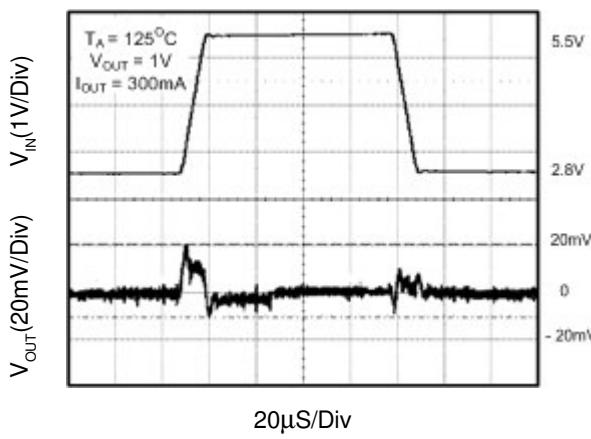
Line Transient Response



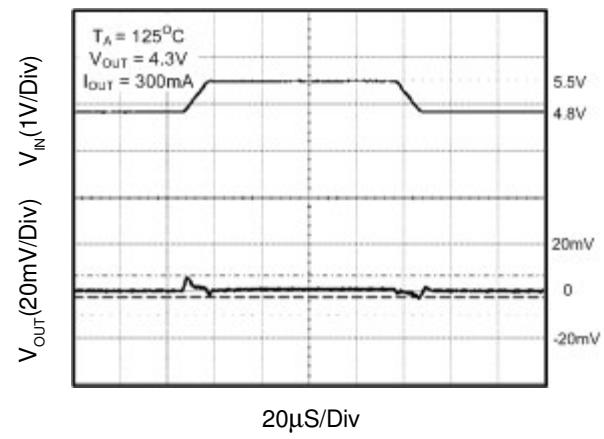
Line Transient Response



Line Transient Response



Line Transient Response





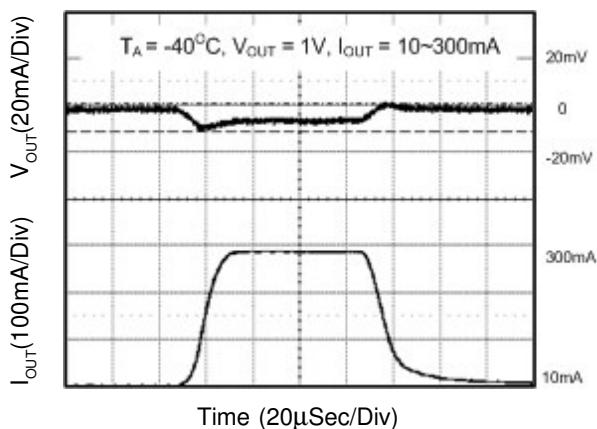
AME

AME8853

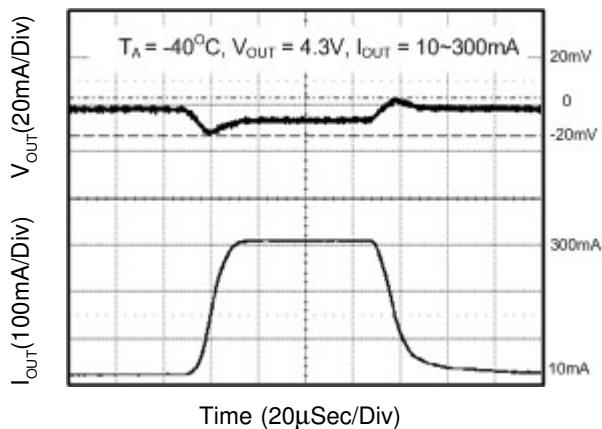
High PSRR, Low Noise, 300mA  
CMOS Regulator

## ■ Characterization Curve (Contd.)

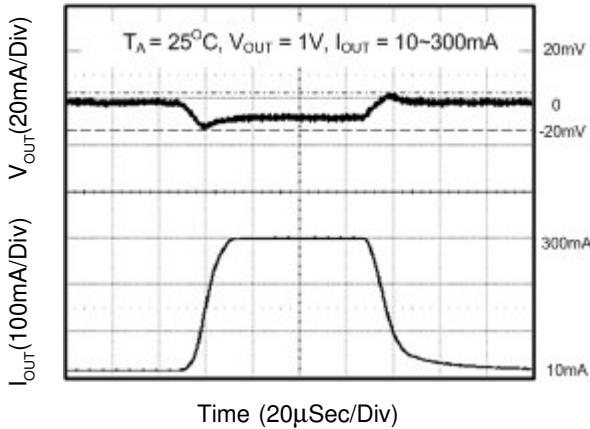
Load Transient Response



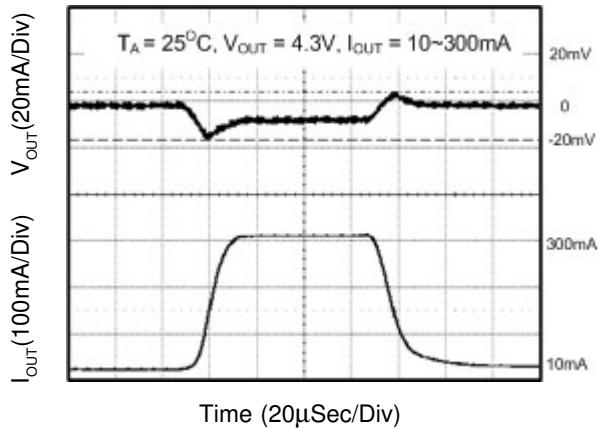
Load Transient Response



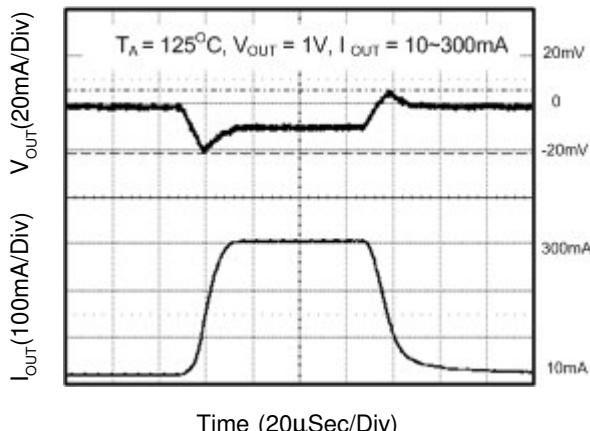
Load Transient Response



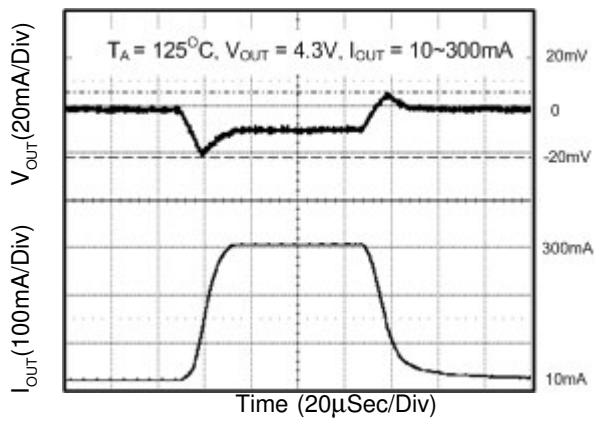
Load Transient Response



Load Transient Response

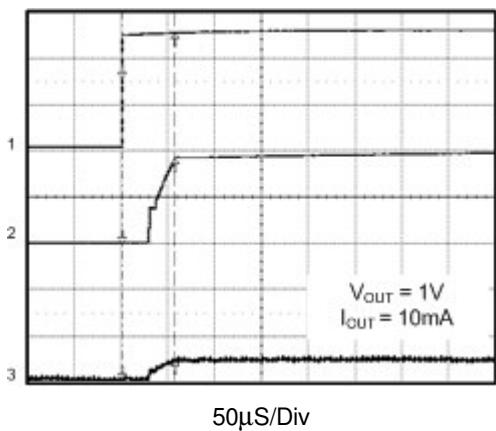


Load Transient Response



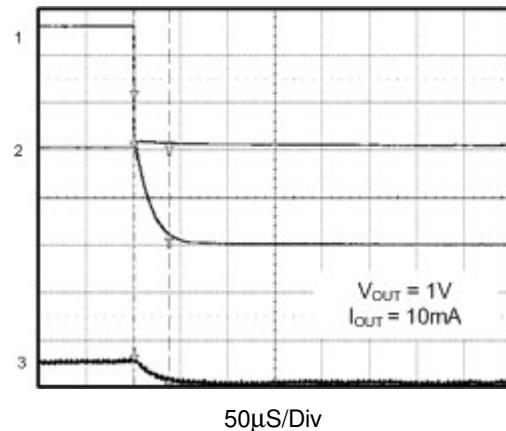
## ■ Characterization Curve (Contd.)

Chip Enable Transient Response



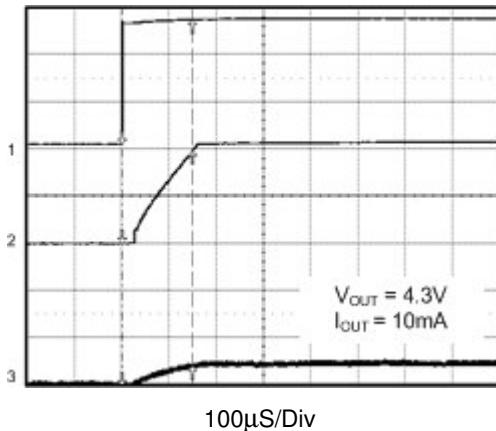
- 1) EN= 1V/div
- 2)  $V_{OUT}= 500mV/div$
- 3)  $I_{OUT}= 20mA/div$

Chip Enable Transient Response



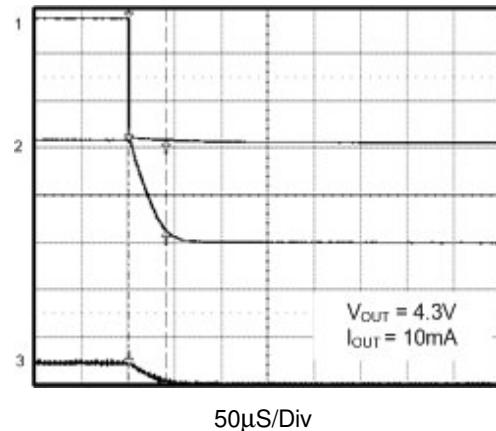
- 1) EN= 1V/div
- 2)  $V_{OUT}= 500mV/div$
- 3)  $I_{OUT}= 20mA/div$

Chip Enable Transient Response



- 1) EN= 2V/div
- 2)  $V_{OUT}= 2V/div$
- 3)  $I_{OUT}= 20mA/div$

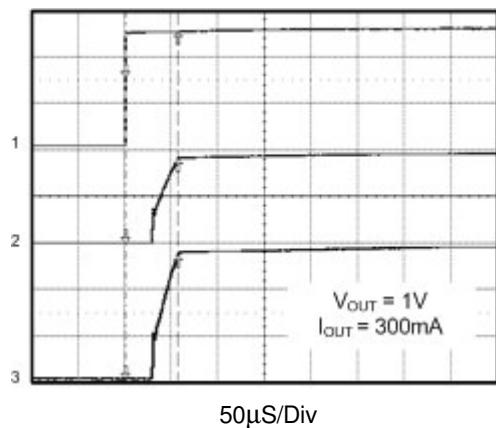
Chip Enable Transient Response



- 1) EN= 2V/div
- 2)  $V_{OUT}= 2V/div$
- 3)  $I_{OUT}= 20mA/div$

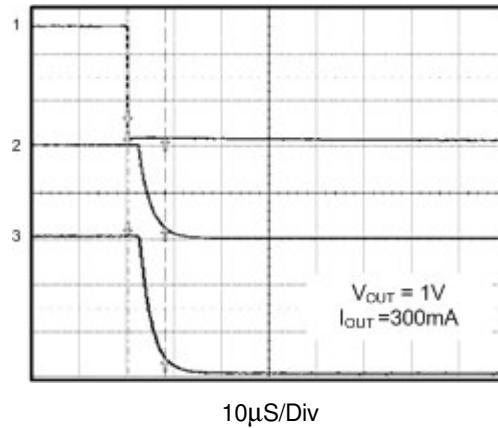
## ■ Characterization Curve (Contd.)

Chip Enable Transient Response



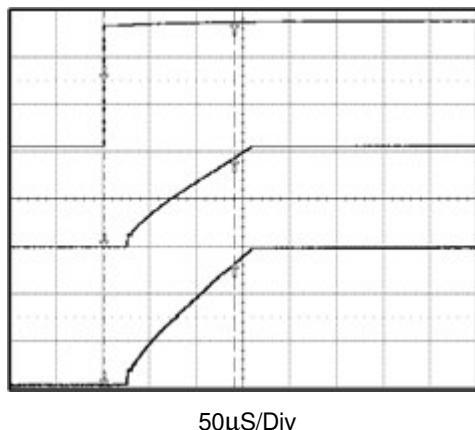
- 1) EN= 1V/div
- 2)  $V_{OUT}= 500\text{mV}/\text{div}$
- 3)  $I_{OUT}= 100\text{mA}/\text{div}$

Chip Enable Transient Response



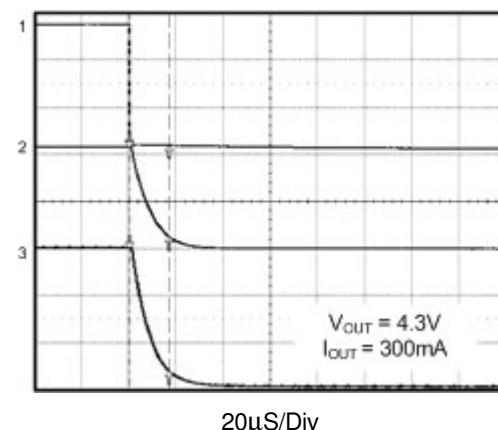
- 1) EN= 1V/div
- 2)  $V_{OUT}= 500\text{mV}/\text{div}$
- 3)  $I_{OUT}= 100\text{mA}/\text{div}$

Chip Enable Transient Response



- 1) EN= 2V/div
- 2)  $V_{OUT}= 2\text{V}/\text{div}$
- 3)  $I_{OUT}= 100\text{mA}/\text{div}$

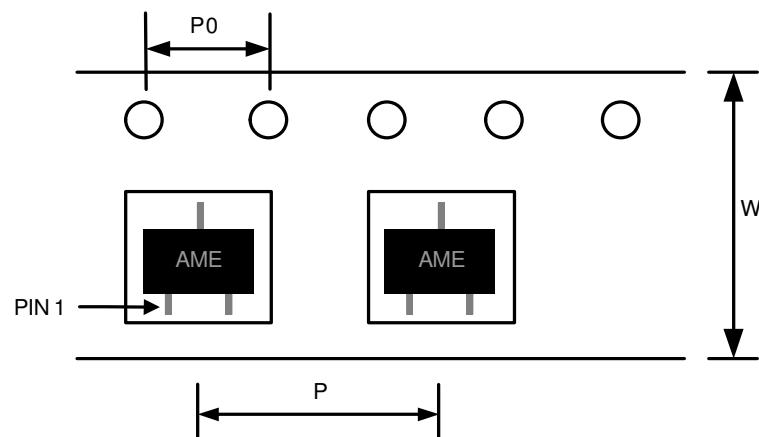
Chip Enable Transient Response



- 1) EN= 2V/div
- 2)  $V_{OUT}= 2\text{V}/\text{div}$
- 3)  $I_{OUT}= 100\text{mA}/\text{div}$

## ■ Tape and Reel Dimension

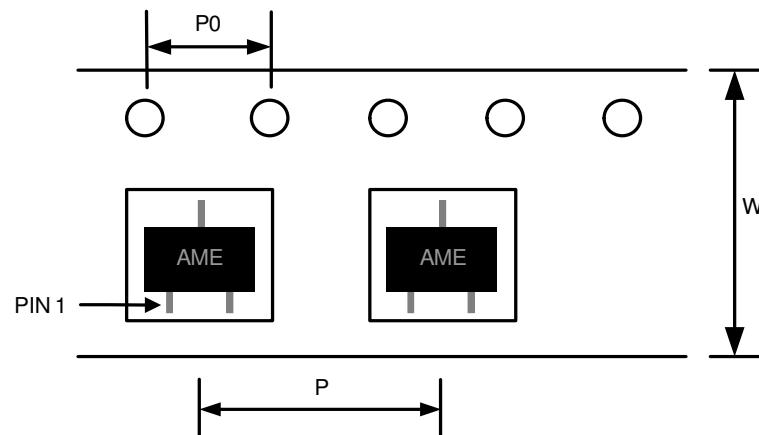
**SOT-23**



**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
SOT-23	8.0±0.1 mm	4.0±0.1 mm	4.0±0.1 mm	3000pcs	180±1 mm

**TSOT-23A**

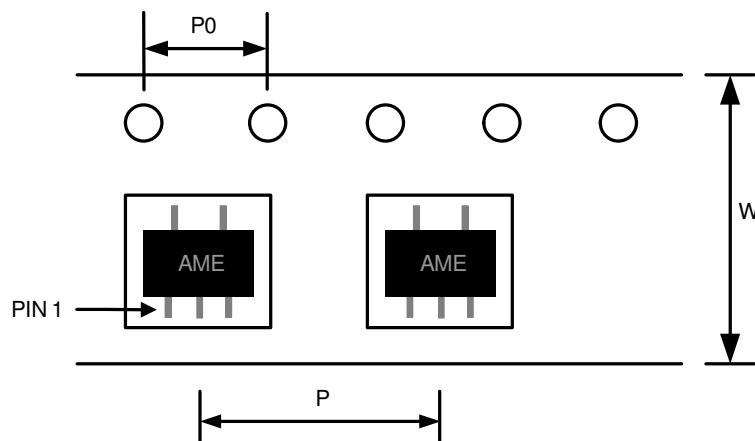


**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
TSOT-23A	8.0±0.1 mm	4.0±0.1 mm	4.0±0.1 mm	3000pcs	180±1 mm

## ■ Tape and Reel Dimension (Contd.)

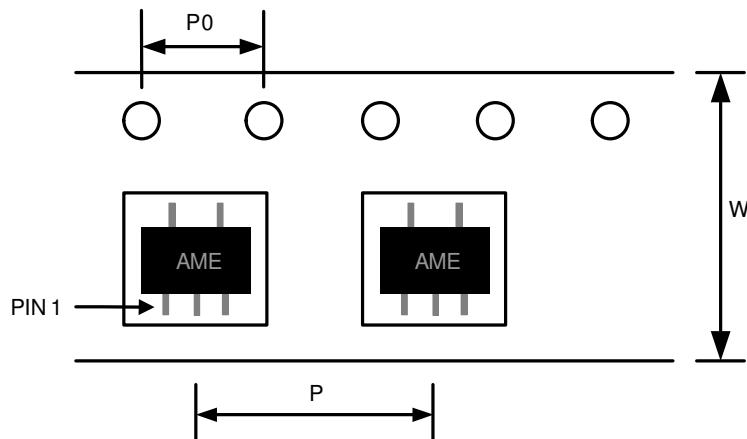
**SOT-25**



**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
SOT-25	$8.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	3000pcs	$180 \pm 1$ mm

**TSOT-25A**

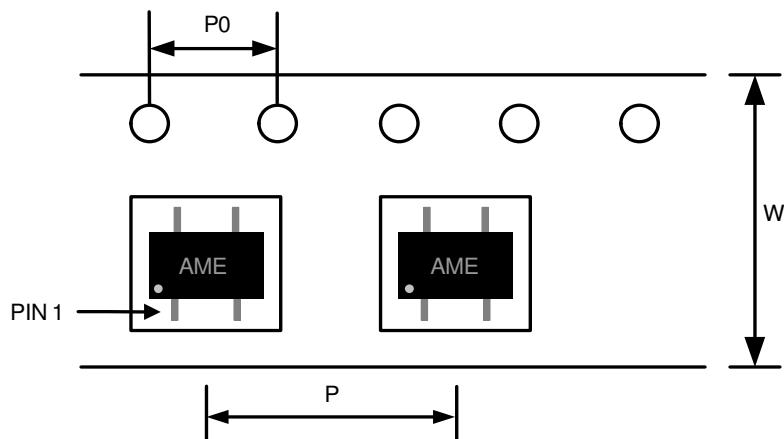


**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
TSOT-25A	$8.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	3000pcs	$180 \pm 1$ mm

## ■ Tape and Reel Dimension (Contd.)

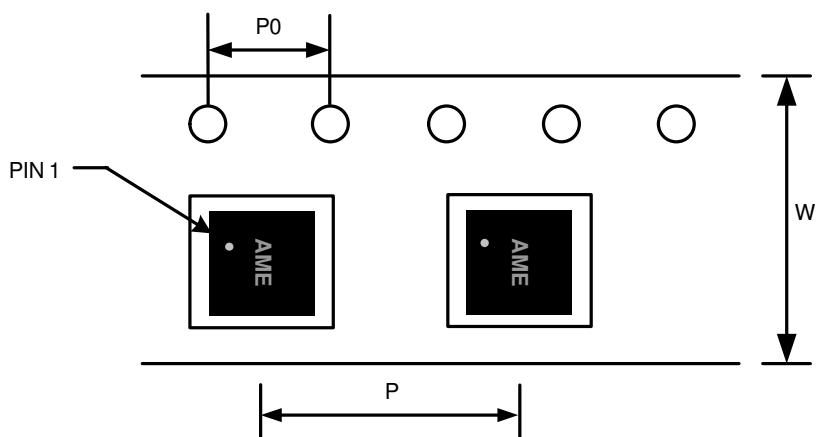
**SC-70-4 (SC-82)**



**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
SC-70-4	$8.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	3000pcs	$180 \pm 1$ mm

**DFN-6D  
(2mmx2mmx0.75mm)**

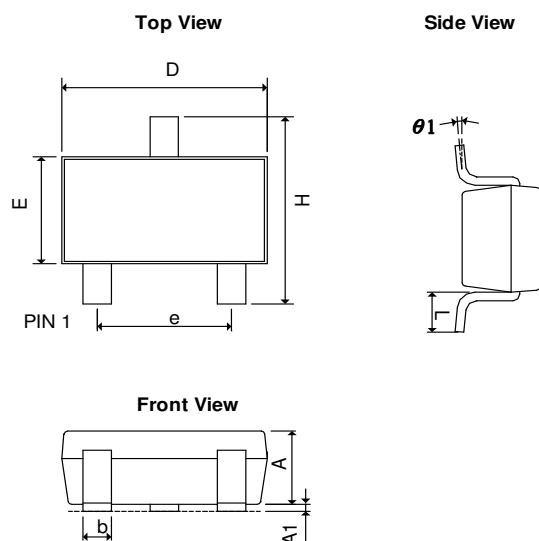


**Carrier Tape, Number of Components Per Reel and Reel Size**

Package	Carrier Width (W)	Pitch (P)	Pitch (P0)	Part Per Full Reel	Reel Size
DFN-6D (2x2x0.75mm)	$8.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	$4.0 \pm 0.1$ mm	3000pcs	$180 \pm 1$ mm

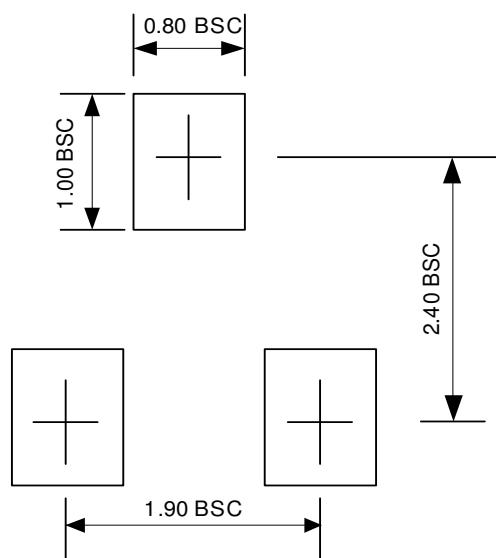
## ■ Package Dimension

**SOT-23**



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.90	1.40	0.0354	0.0551
A <sub>1</sub>	0.00	0.15	0.0000	0.0059
b	0.30	0.50	0.0118	0.0197
D	2.70	3.10	0.1063	0.1220
E	1.40	1.80	0.0551	0.0709
e	1.90 BSC		0.0748 BSC	
H	2.40	3.00	0.0945	0.1181
L	0.35BSC		0.0138 BSC	
θ1	0°	10°	0°	10°

## ■ Lead Pattern

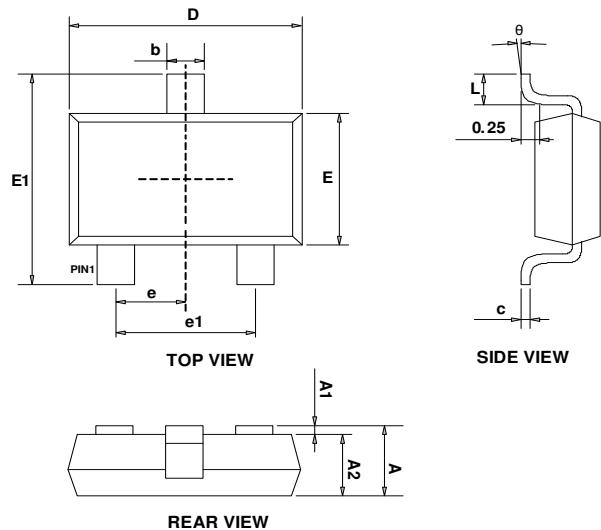


**Note:**

1. Lead pattern unit description:  
BSC: Basic. Represents theoretical exact dimension or dimension target.
2. Dimensions in Millimeters.
3. General tolerance  $\pm 0.05\text{mm}$  unless otherwise specified.

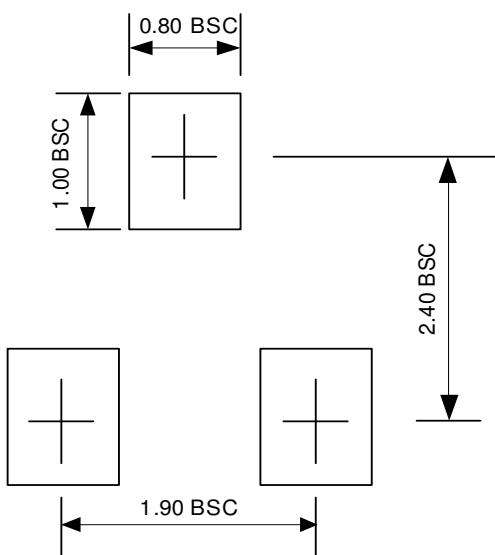
## ■ Package Dimension (Contd.)

TSOT-23A



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
<b>A</b>	0.700	0.900	0.028	0.035
<b>A1</b>	0.000	0.100	0.000	0.004
<b>A2</b>	0.700	0.800	0.028	0.031
<b>b</b>	0.350	0.500	0.014	0.020
<b>c</b>	0.080	0.200	0.003	0.008
<b>D</b>	2.820	3.020	0.111	0.119
<b>E</b>	1.600	1.700	0.063	0.067
<b>E1</b>	2.650	2.950	0.104	0.116
<b>e</b>	0.95 BSC		0.037 BSC	
<b>e1</b>	1.90 BSC		0.075 BSC	
<b>L</b>	0.300	0.600	0.012	0.024
<b>θ</b>	0°	8°	0°	8°

## ■ Lead Pattern

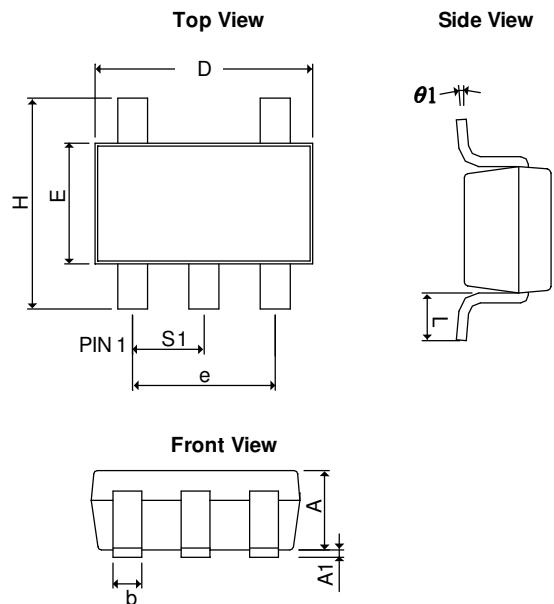


Note:

1. Lead pattern unit description:  
BSC: Basic. Represents theoretical exact dimension or dimension target.
2. Dimensions in Millimeters.
3. General tolerance  $\pm 0.05\text{mm}$  unless otherwise specified.

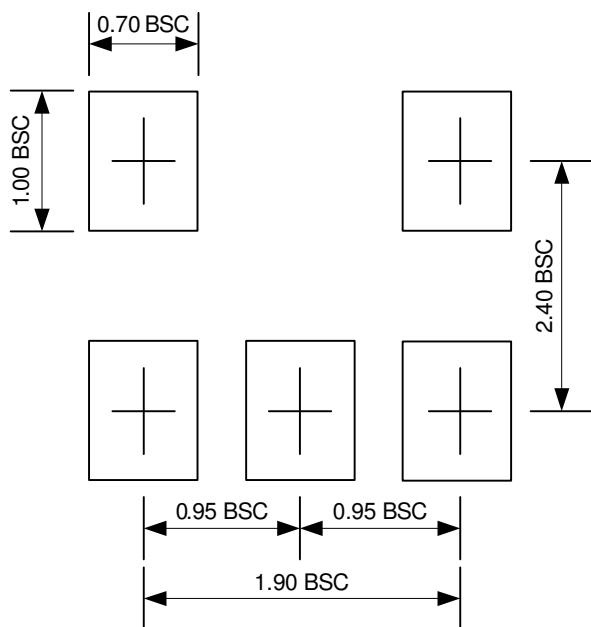
## ■ Package Dimension (Contd.)

**SOT-25**



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.90	1.30	0.0354	0.0512
A <sub>1</sub>	0.00	0.15	0.0000	0.0059
b	0.30	0.55	0.0118	0.0217
D	2.70	3.10	0.1063	0.1220
E	1.40	1.80	0.0551	0.0709
e	1.90 BSC		0.0748 BSC	
H	2.60	3.00	0.1024	0.1181
L	0.37 BSC		0.0146 BSC	
θ1	0°	10°	0°	10°
S <sub>1</sub>	0.95 BSC		0.0374 BSC	

## ■ Lead Pattern

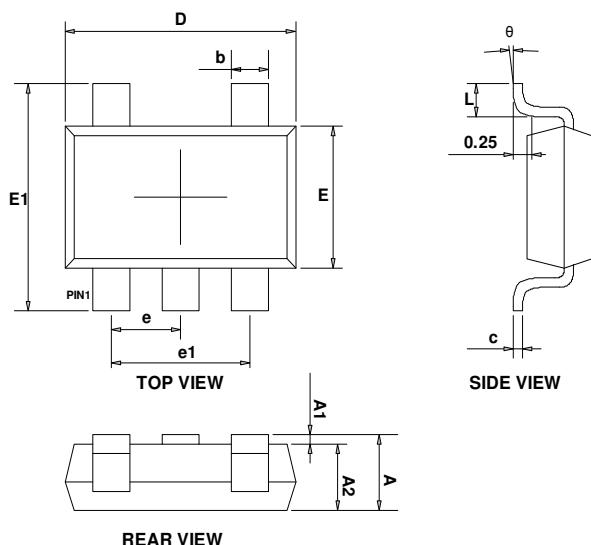


### Note:

1. Lead pattern unit description:  
BSC: Basic. Represents theoretical exact dimension or dimension target.
2. Dimensions in Millimeters.
3. General tolerance  $\pm 0.05\text{mm}$  unless otherwise specified.

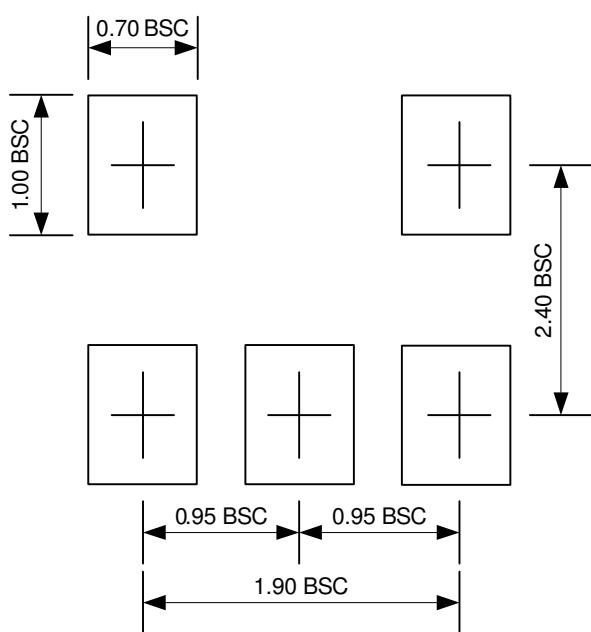
## ■ Package Dimension (Contd.)

**TSOT-25A**



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b	0.350	0.500	0.014	0.020
c	0.080	0.200	0.003	0.008
D	2.820	3.020	0.111	0.119
E	1.600	1.700	0.063	0.067
E1	2.650	2.950	0.104	0.116
e	0.95 BSC		0.037 BSC	
e1	1.90 BSC		0.075 BSC	
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

## ■ Lead Pattern

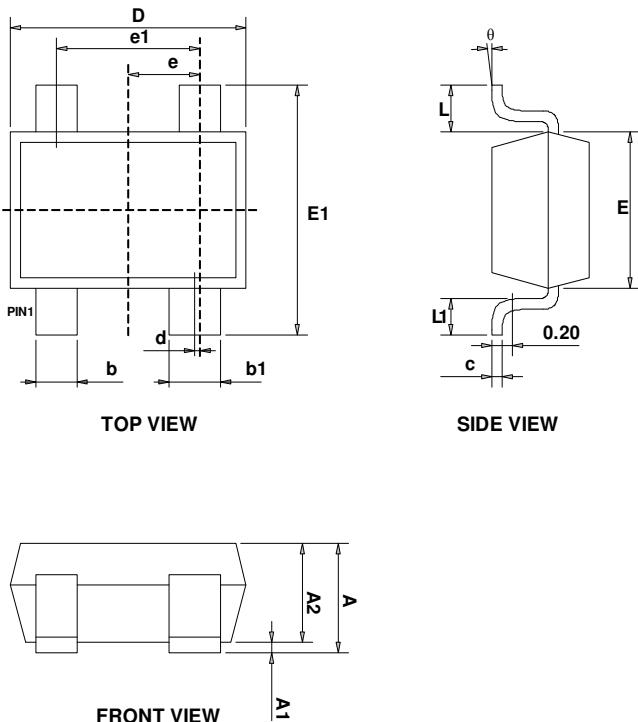


Note:

1. Lead pattern unit description:  
BSC: Basic. Represents theoretical exact dimension or dimension target.
2. Dimensions in Millimeters.
3. General tolerance  $\pm 0.05\text{mm}$  unless otherwise specified.

## ■ Package Dimension (Contd.)

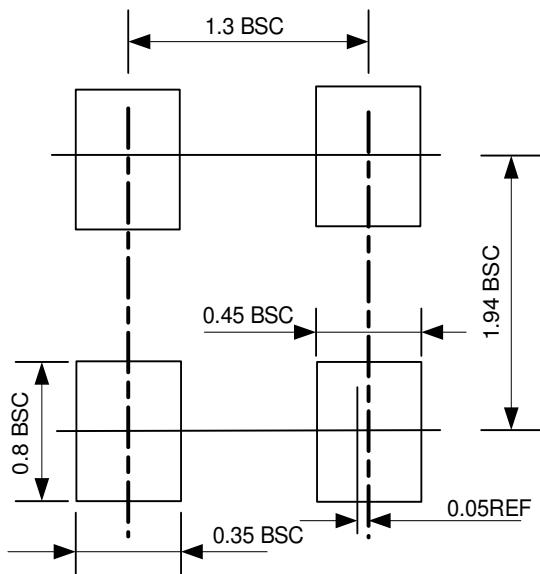
**SC-70-4 (SC-82)**



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
<b>A</b>	0.900	1.100	0.035	0.043
<b>A1</b>	0.000	0.100	0.000	0.004
<b>A2</b>	0.900	1.000	0.035	0.039
<b>b</b>	0.250	0.400	0.010	0.016
<b>b1</b>	0.350	0.500	0.014	0.020
<b>c</b>	0.080	0.150	0.003	0.006
<b>d</b>	0.050 TYP		0.002 TYP	
<b>D</b>	2.000	2.200	0.079	0.087
<b>E</b>	1.150	1.350	0.045	0.053
<b>E1</b>	2.150	2.450	0.085	0.096
<b>e</b>	0.650 TYP		0.026TYP	
<b>e1</b>	1.200	1.400	0.047	0.055
<b>L</b>	0.525 REF		0.021 REF	
<b>L1</b>	0.260	0.460	0.010	0.018
<b>θ</b>	0°	8°	0°	8°

## ■ Lead Pattern

**SC-70-4/SC-82**

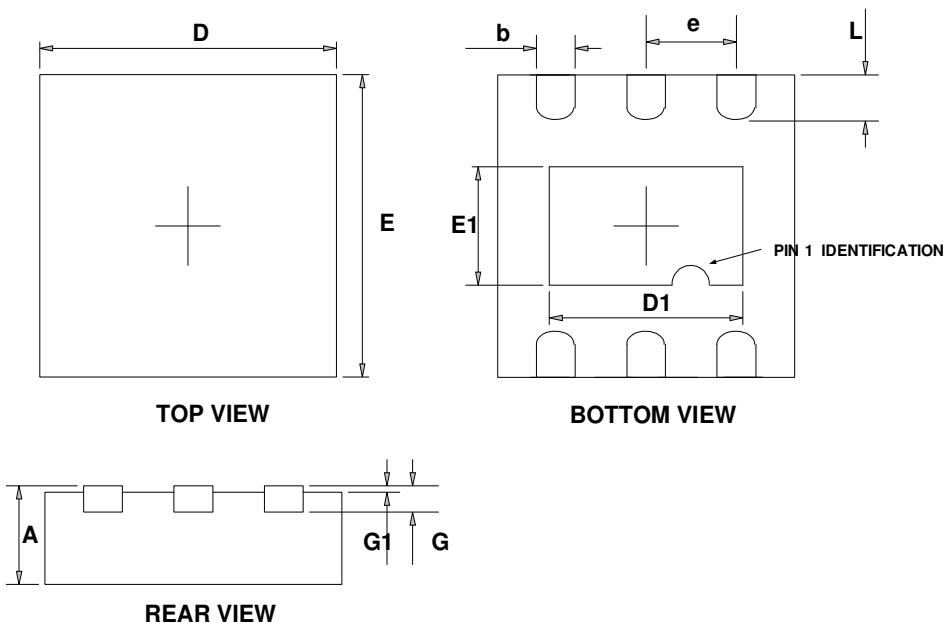


Note:

1. Lead pattern unit description:  
BSC: Basic. Represents theoretical exact dimension or dimension target.
2. Dimensions in Millimeters.
3. General tolerance  $\pm 0.05\text{mm}$  unless otherwise specified.

## ■ Package Dimension (Contd.)

**DFN-6D**  
(2mmx2mmx0.75mm)



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
<b>A</b>	0.700	0.800	0.028	0.031
<b>D</b>	1.900	2.100	0.075	0.083
<b>E</b>	1.900	2.100	0.075	0.083
<b>e</b>	0.650 TYP		0.026 TYP	
<b>D1</b>	1.100	1.650	0.043	0.065
<b>E1</b>	0.600	1.050	0.024	0.041
<b>b</b>	0.180	0.350	0.007	0.014
<b>L</b>	0.200	0.450	0.008	0.018
<b>G</b>	0.178	0.228	0.007	0.009
<b>G1</b>	0.000	0.050	0.000	0.002



**www.ame.com.tw**  
**E-Mail: sales@ame.com.tw**

**Life Support Policy:**

These products of AME, Inc. are not authorized for use as critical components in life-support devices or systems, without the express written approval of the president of AME, Inc.

AME, Inc. reserves the right to make changes in the circuitry and specifications of its devices and advises its customers to obtain the latest version of relevant information.

© AME, Inc., April 2016

Document: TM001-DS8853-E.01

**Corporate Headquarter  
AME, Inc.**

8F, 12, WenHu St., Nei Hu

Taipei, Taiwan. 114

Tel: 886 2 2627-8687

Fax: 886 2 2659-2989

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for LDO Voltage Regulators category:***

***Click to view products by Analog Microelectronics manufacturer:***

Other Similar products are found below :

[AP7363-SP-13](#) [L79M05TL-E](#) [AP7362-HA-7](#) [PT7M8202B12TA5EX](#) [TCR3DF185,LM\(CT\)](#) [TCR3DF45,LM\(CT\)](#) [TLE4473G V52](#) [059985X](#)  
[NCP4687DH15T1G](#) [701326R](#) [NCV8170AXV250T2G](#) [AP7315-25W5-7](#) [AP2111H-1.2TRG1](#) [ZLDO1117QK50TC](#) [AZ1117ID-ADJTRG1](#)  
[TCR3DG12,LF](#) [MIC5514-3.3YMT-T5](#) [SCD7912BTG](#) [NCP154MX180270TAG](#) [SCD33269T-5.0G](#) [NCV8170BXV330T2G](#)  
[NCV8170BMX330TCG](#) [NCV8170AMX120TCG](#) [NCP706ABMX300TAG](#) [NCP153MX330180TCG](#) [NCP114BMX075TCG](#) [MC33269T-3.5G](#)  
[CAT6243-ADJCMT5T](#) [TCR3DG33,LF](#) [TCR4DG35,LF](#) [TAR5S15U\(TE85L,F\)](#) [TAR5S18U\(TE85L,F\)](#) [TCR3UG19A,LF](#) [TCR4DG105,LF](#)  
[MPQ2013AGG-5-P](#) [NCV8170AMX360TCG](#) [TLE4268GSXUMA2](#) [NCP715SQ15T2G](#) [MIC5317-3.0YD5-T5](#) [NCV563SQ18T1G](#)  
[NCP715MX30TBG](#) [NCV8702MX25TCG](#) [NCV8170BXV120T2G](#) [MIC5317-1.2YD5-T5](#) [NCV8170AMX150TCG](#) [NCV8170BMX150TCG](#)  
[AP2213D-3.3TRG1](#) [NCV8170BMX120TCG](#) [NCV8170BMX310TCG](#) [NCV8170BMX360TCG](#)