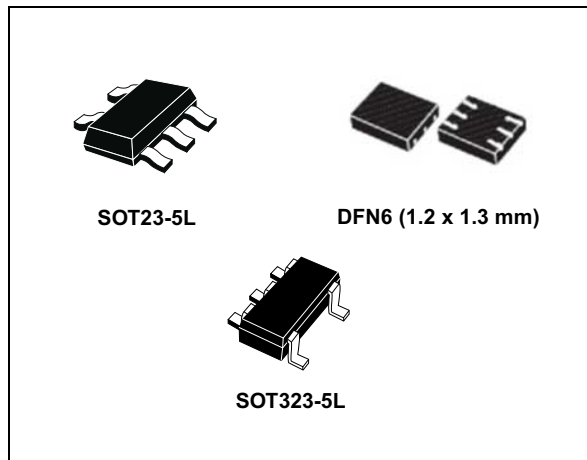


## 200 mA low quiescent current very low noise LDO

Datasheet - production data



### Features

- Input voltage from 1.9 to 5.5 V
- Very low dropout voltage (100 mV typ. at 100 mA load)
- Low quiescent current (max. 100  $\mu$ A, 1  $\mu$ A in OFF mode)
- Very low noise
- Output voltage tolerance:  $\pm 2.0\%$  @ 25  $^{\circ}$ C
- 200 mA guaranteed output current
- Wide range of fixed output voltages available on request: from 0.8 V to 3.5 V with 100 mV step
- Adjustable version: from 0.8 V to  $V_{IN}-V_{drop}$
- Logic-controlled electronic shutdown
- Compatible with ceramic capacitor  $C_{OUT} = 1 \mu$ F
- Internal current and thermal limit
- Available in SOT23-5L, SOT323-5L and DFN6 (1.2 x 1.3 mm) packages
- Temperature range: -40  $^{\circ}$ C to 125  $^{\circ}$ C

### Applications

- Mobile phones
- Personal digital assistants (PDAs)
- Cordless phones and similar battery-powered systems
- Digital still cameras

### Description

The LDK120 low drop voltage regulator provides 200 mA of maximum current from an input supply voltage in the range of 1.9 V to 5.5 V, with a typical dropout voltage of 100 mV.

It is stabilized with a ceramic capacitor on the output.

The very low drop voltage, low quiescent current and low noise features make it suitable for low power battery-powered applications.

An enable logic control function puts the LDK120 in shutdown mode allowing a total current consumption lower than 1  $\mu$ A.

The device also includes a short-circuit constant current limiting and thermal protection.

Contents

1      Diagram ..... 3

2      Pin configuration ..... 4

3      Typical application ..... 5

4      Maximum ratings ..... 6

5      Electrical characteristics ..... 7

6      Typical performance characteristics ..... 9

7      Package mechanical data ..... 14

8      Packaging mechanical data ..... 20

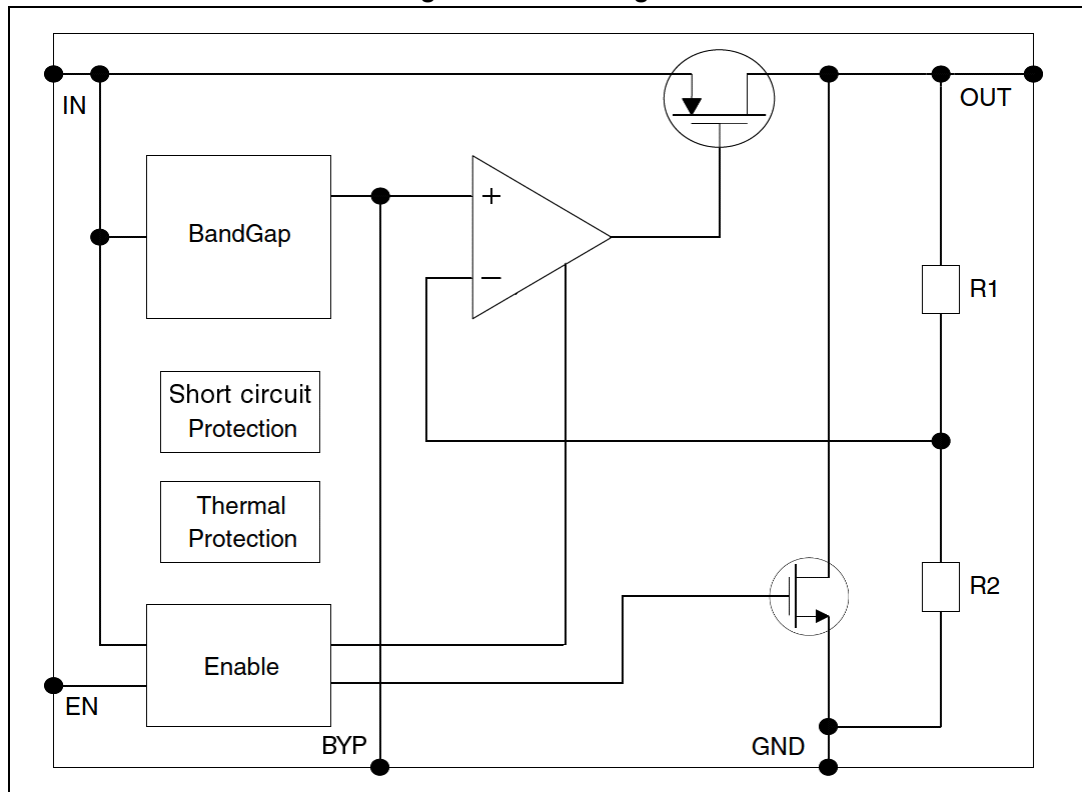
9      Order codes ..... 22

10     Revision history ..... 23



# 1 Diagram

Figure 1. Block diagram



## 2 Pin configuration

Figure 2. Pin connection (top view)

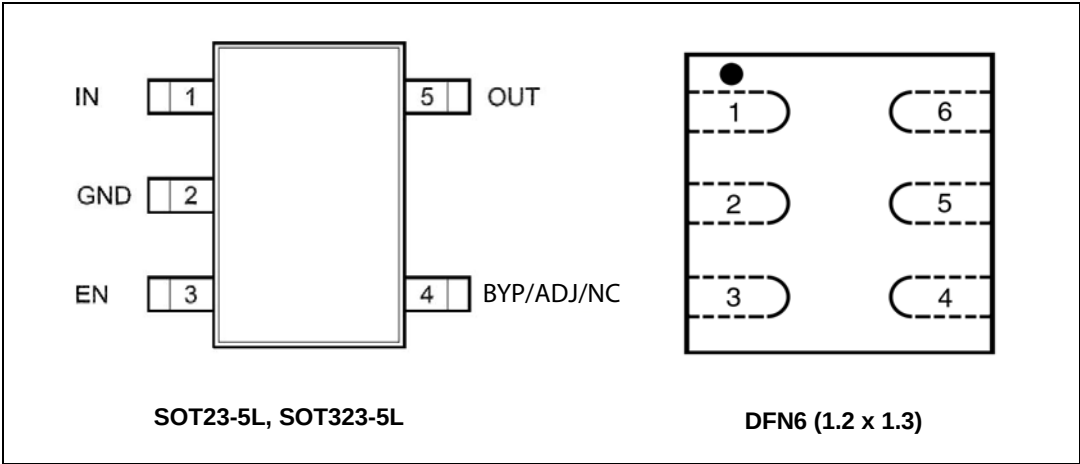


Table 1. Pin description (SOT23-5L, SOT323-5L)

| Pin              |      | Symbol                     | Function                                              |                |                          |
|------------------|------|----------------------------|-------------------------------------------------------|----------------|--------------------------|
| SOT23/<br>SOT323 | DFN6 |                            | Fixed                                                 | Adjustable     | D version                |
| 1                | 6    | IN                         | Input voltage of the LDO                              |                |                          |
| 2                | 2    | GND                        | Common ground                                         |                |                          |
| 3                | 4    | EN                         | Enable pin logic input: Low = shutdown, High = active |                |                          |
| 4                | 3    | BYP <sup>(1)</sup> /ADJ/NC | Bypass capacitor                                      | Adjustable pin | Internally not connected |
| 5                | 1    | OUT                        | Output voltage of the LDO                             |                |                          |
| -                | 5    | N/C                        | Not connected. This pin should be connected to GND    |                |                          |

1. Bypass capacitor for noise reduction on fixed version is optional, if not used the relevant pin must be left floating with no routing on the board.

### 3 Typical application

Figure 3. Typical application circuits for fixed version

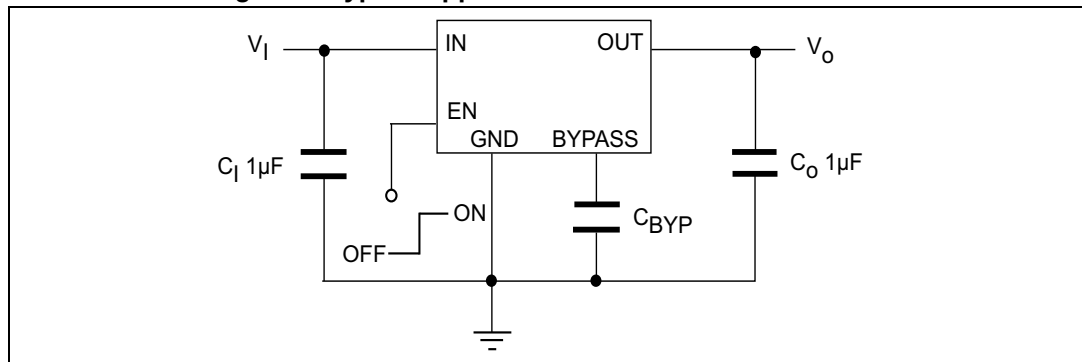


Figure 4. Typical application circuits for D version

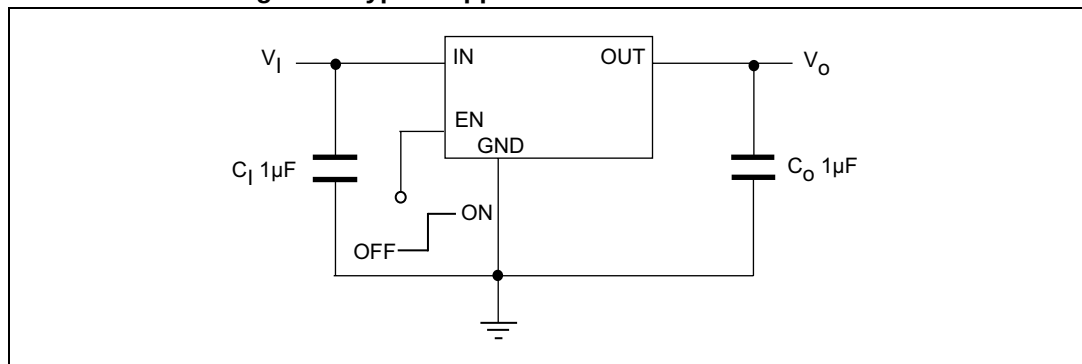
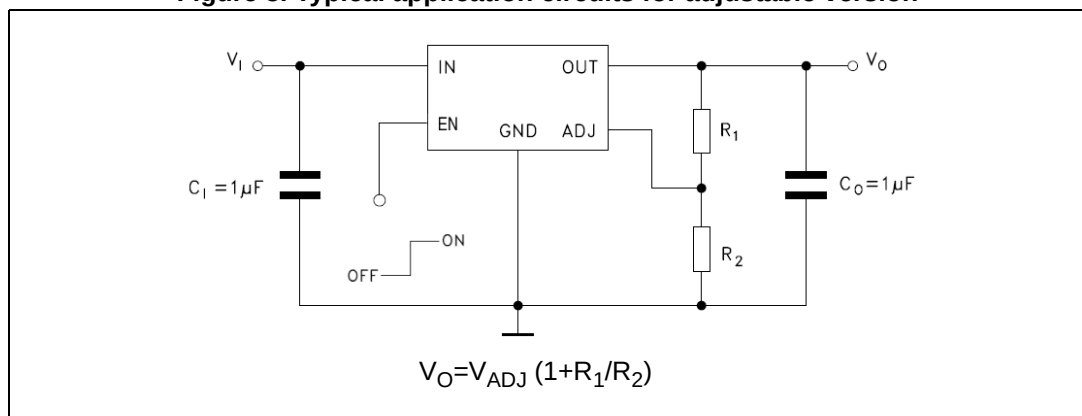


Figure 5. Typical application circuits for adjustable version



## 4 Maximum ratings

**Table 2. Absolute maximum ratings**

| Symbol        | Parameter                            | Value                | Unit |
|---------------|--------------------------------------|----------------------|------|
| $V_{IN}$      | DC input voltage                     | - 0.3 to 7           | V    |
| $V_{OUT}$     | DC output voltage                    | - 0.3 to $V_I + 0.3$ | V    |
| $V_{EN}$      | Enable input voltage                 | - 0.3 to $V_I + 0.3$ | V    |
| $V_{BYP/ADJ}$ | ADJ/Bypass pin voltage               | 2                    | V    |
| $I_{OUT}$     | Output current                       | Internally limited   | mA   |
| $P_D$         | Power dissipation                    | Internally limited   | mW   |
| $T_{STG}$     | Storage temperature range            | - 65 to 150          | °C   |
| $T_{OP}$      | Operating junction temperature range | - 40 to 125          | °C   |

*Note:* Absolute maximum ratings are those values beyond which damage to the device may occur. Functional operation under these conditions is not implied. All values are referred to GND.

**Table 3. Thermal data**

| Symbol     | Parameter                           | SOT23-5L | SOT323-5L | DFN-6L | Unit |
|------------|-------------------------------------|----------|-----------|--------|------|
| $R_{thJA}$ | Thermal resistance junction-ambient | 160      | 246       | 237    | °C/W |
| $R_{thJC}$ | Thermal resistance junction-case    | 68       | 134       | 104    | °C/W |

## 5 Electrical characteristics

$T_J = 25\text{ °C}$ ,  $V_{IN} = V_{OUT(NOM)} + 1\text{ V}$ ,  $C_{IN} = C_{OUT} = 1\text{ }\mu\text{F}$ ,  $I_{OUT} = 1\text{ mA}$ ,  $V_{EN} = V_{IN}$ , unless otherwise specified.

**Table 4. Electrical characteristics for LDK120 (fixed version)**

| Symbol           | Parameter                      | Test conditions                                                                                                               | Min. | Typ.  | Max. | Unit                |
|------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------|-------|------|---------------------|
| $V_{IN}$         | Operating input voltage        |                                                                                                                               | 1.9  |       | 5.5  | V                   |
| $V_{OUT}$        | $V_{OUT}$ accuracy             | $I_{OUT}=1\text{ mA}$ , $T_J=25\text{ °C}$                                                                                    | -2.0 |       | 2.0  | %                   |
|                  |                                | $I_{OUT}=1\text{ mA}$ , $-40\text{ °C}<T_J<125\text{ °C}$                                                                     | -3.0 |       | 3.0  | %                   |
| $\Delta V_{OUT}$ | Static line regulation         | $V_{OUT} + 1\text{ V} \leq V_{IN} \leq 5.5\text{ V}$ , $I_{OUT}=1\text{ mA}$                                                  |      | 0.05  |      | %/V                 |
| $\Delta V_{OUT}$ | Static load regulation         | $I_{OUT} = 1\text{ mA}$ to $200\text{ mA}$                                                                                    |      | 0.006 |      | %/mA                |
| $V_{DROP}$       | Dropout voltage <sup>(1)</sup> | $I_{OUT} = 100\text{ mA}$ , $V_{OUT}=2.5\text{ V}$                                                                            |      | 100   |      | mV                  |
|                  |                                | $I_{OUT} = 200\text{ mA}$ , $V_{OUT}=2.5\text{ V}$<br>$40\text{ °C}<T_J<125\text{ °C}$                                        |      | 150   | 300  |                     |
| $e_N$            | Output noise voltage           | 10 Hz to 100 kHz, $I_{OUT}=10\text{ mA}$ ,<br>$V_{OUT}=2.5\text{ V}$ , $C_{BYP}=10\text{ nF}$                                 |      | 51    |      | $\mu\text{V}_{RMS}$ |
| $e_N^{(2)}$      | Output noise voltage           | 10 Hz to 100 kHz, $I_{OUT}=10\text{ mA}$ ,<br>$V_{OUT}=2.5\text{ V}$                                                          |      | 148   |      | $\mu\text{V}_{RMS}$ |
| SVR              | Supply voltage rejection       | $V_{IN}=V_{OUTNOM}+0.5\text{ V} \pm V_{RIPPLE}$<br>$V_{RIPPLE}=0.1\text{ V}$ Freq.=120 Hz to 10 kHz<br>$I_{OUT}=10\text{ mA}$ |      | 55    |      | dB                  |
| $I_Q$            | Quiescent current              | $I_{OUT}=0\text{ mA}$ , $-40\text{ °C}<T_J<125\text{ °C}$                                                                     |      | 30    | 60   | $\mu\text{A}$       |
|                  |                                | $I_{OUT}=200\text{ mA}$ , $-40\text{ °C}<T_J<125\text{ °C}$                                                                   |      | 50    | 100  |                     |
|                  |                                | $V_{IN}$ input current in OFF mode:<br>$V_{EN}=GND$                                                                           |      |       | 1    |                     |
| $I_{SC}$         | Short-circuit current          | $R_L=0$                                                                                                                       |      | 400   |      | mA                  |
| $V_{EN}$         | Enable input logic low         | $V_{IN}=1.9\text{ V}$ to $5.5\text{ V}$ , $-40\text{ °C}<T_J<125\text{ °C}$                                                   |      |       | 0.4  | V                   |
|                  | Enable input logic high        | $V_{IN}=1.9\text{ V}$ to $5.5\text{ V}$ , $-40\text{ °C}<T_J<125\text{ °C}$                                                   | 1.2  |       |      |                     |
| $I_{EN}$         | Enable pin input current       | $V_{SHDN}=V_{IN}$                                                                                                             |      |       | 100  | nA                  |
| $T_{SHDN}$       | Thermal shutdown               |                                                                                                                               |      | 160   |      | $^{\circ}\text{C}$  |
|                  | Hysteresis                     |                                                                                                                               |      | 20    |      |                     |
| $C_{OUT}$        | Output capacitor               | Capacitance (see <a href="#">Section 6: Typical performance characteristics</a> )                                             | 1    |       | 22   | $\mu\text{F}$       |

1. Dropout voltage is the input-to-output voltage difference at which the output voltage is 100 mV below its nominal value.

2. Valid for D version or standard version without  $C_{BYP}$ .

$T_J = 25\text{ }^{\circ}\text{C}$ ,  $V_{IN} = V_{OUT(NOM)} + 1\text{ V}$ ,  $C_{IN} = C_{OUT} = 1\text{ }\mu\text{F}$ ,  $I_{OUT} = 1\text{ mA}$ ,  $V_{EN} = V_{IN}$ , unless otherwise specified.

**Table 5. Electrical characteristics for LDK120 (adjustable version)**

| Symbol           | Parameter                      | Test conditions                                                                                                               | Min. | Typ.  | Max. | Unit                |
|------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------|-------|------|---------------------|
| $V_{IN}$         | Operating input voltage        |                                                                                                                               | 1.9  |       | 5.5  | V                   |
| $V_{ADJ}$        | $V_{ADJ}$ accuracy             | $I_{OUT}=1\text{ mA}$ , $T_J=25\text{ }^{\circ}\text{C}$                                                                      | 784  | 800   | 816  | mV                  |
|                  |                                | $I_{OUT}=1\text{ mA}$ , $-40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$                                         | -3.0 |       | 3.0  | %                   |
| $\Delta V_{OUT}$ | Static line regulation         | $V_{OUT} + 1\text{ V} \leq V_{IN} \leq 5.5\text{ V}$ , $I_{OUT}=1\text{ mA}$                                                  |      | 0.05  |      | %/V                 |
| $\Delta V_{OUT}$ | Static load regulation         | $I_{OUT}=1\text{ mA}$ to 200 mA                                                                                               |      | 0.006 |      | %/mA                |
| $V_{DROP}$       | Dropout voltage <sup>(1)</sup> | $I_{OUT}=100\text{ mA}$ , $V_{OUT}=2.5\text{ V}$                                                                              |      | 100   |      | mV                  |
|                  |                                | $I_{OUT} = 200\text{ mA}$ , $V_{OUT}=2.5\text{ V}$<br>$40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$ ,          |      | 150   | 300  |                     |
| $e_N$            | Output noise voltage           | 10 Hz to 100 kHz, $I_{OUT}=10\text{ mA}$<br>$V_{OUT}=V_{ADJ}$                                                                 |      | 115   |      | $\mu\text{V}_{RMS}$ |
| $I_{ADJ}$        | Adjust pin current             |                                                                                                                               |      |       | 1    | $\mu\text{A}$       |
| SVR              | Supply voltage rejection       | $V_{IN}=V_{OUTNOM}+0.5\text{ V} \pm V_{RIPPLE}$<br>$V_{RIPPLE}=0.1\text{ V}$ Freq.=120 Hz to 10 kHz<br>$I_{OUT}=10\text{ mA}$ |      | 55    |      | dB                  |
| $I_Q$            | Quiescent current              | $I_{OUT}=0\text{ mA}$ , $-40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$                                         |      | 30    | 60   | $\mu\text{A}$       |
|                  |                                | $I_{OUT}=200\text{ mA}$ , $-40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$                                       |      | 50    | 100  |                     |
|                  |                                | $V_{IN}$ input current in OFF mode:<br>$V_{EN}=\text{GND}$                                                                    |      |       | 1    |                     |
| $I_{SC}$         | Short-circuit current          | $R_L=0$                                                                                                                       |      | 400   |      | mA                  |
| $V_{EN}$         | Enable input logic low         | $V_{IN}=1.9\text{ V}$ to 5.5 V, $-40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$                                 |      |       | 0.4  | V                   |
|                  | Enable input logic high        | $V_{IN}=1.9\text{ V}$ to 5.5 V, $-40\text{ }^{\circ}\text{C}<T_J<125\text{ }^{\circ}\text{C}$                                 | 1.2  |       |      |                     |
| $I_{EN}$         | Enable pin input current       | $V_{SHDN}=V_{IN}$                                                                                                             |      |       | 100  | nA                  |
| $T_{SHDN}$       | Thermal shutdown               |                                                                                                                               |      | 160   |      | $^{\circ}\text{C}$  |
|                  | Hysteresis                     |                                                                                                                               |      | 20    |      |                     |
| $C_{OUT}$        | Output capacitor               | Capacitance (see <a href="#">Section 6: Typical performance characteristics</a> )                                             | 1    |       | 22   | $\mu\text{F}$       |

1. Dropout voltage is the input-to-output voltage difference at which the output voltage is 100 mV below its nominal value.

## 6 Typical performance characteristics

$C_{IN} = C_{OUT} = 1 \mu F$ ,  $V_{EN}$  to  $V_{IN}$ , unless otherwise specified.

**Figure 6. Output voltage vs. temp. for adjustable ( $I_O = 1 \text{ mA}$ )**

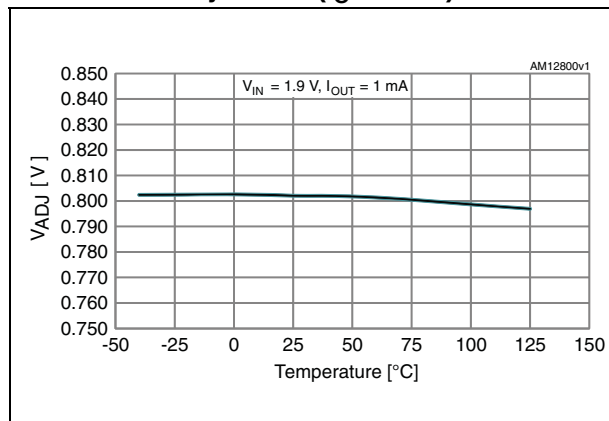


**Figure 7. Output voltage vs. temp. for adjustable version ( $I_O = 200 \text{ mA}$ )**

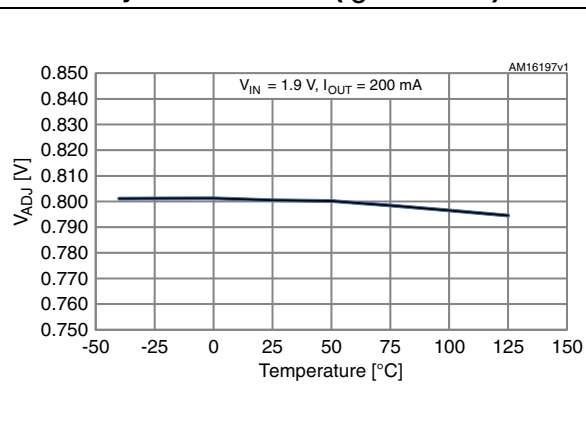


**Figure 8. Output voltage vs. temp. for fixed version ( $I_O = 1 \text{ mA}$ )**

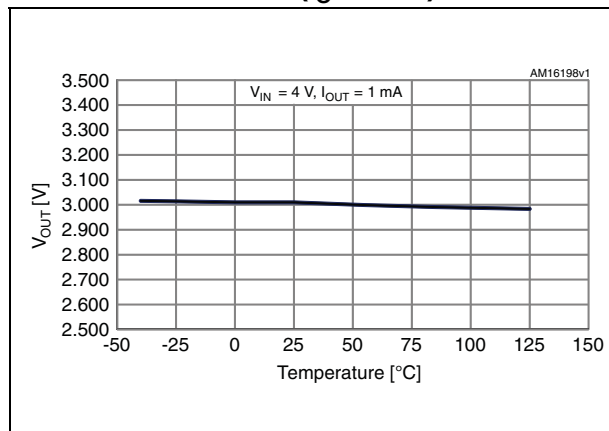


**Figure 9. Output voltage vs. temp. for fixed version ( $I_O = 200 \text{ mA}$ )**

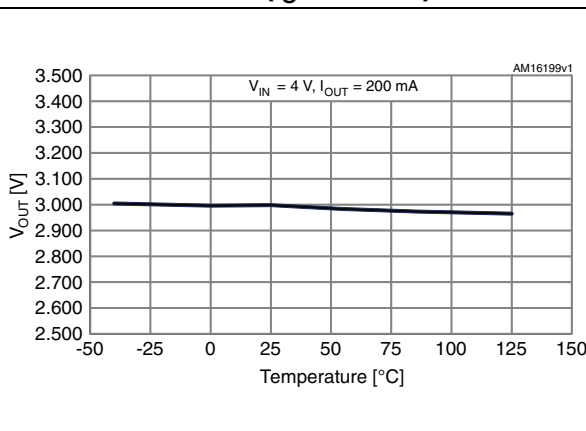


**Figure 10. Line regulation vs. temp. for adjustable version**

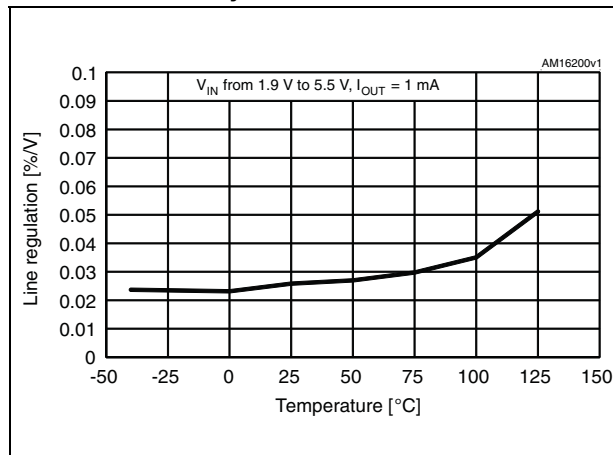


**Figure 11. Short-circuit current vs. temp. for adjustable version**

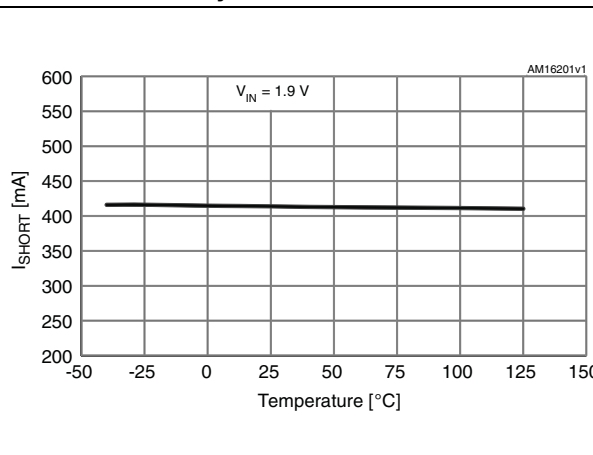


Figure 12. Load regulation vs. temp. for adjustable version

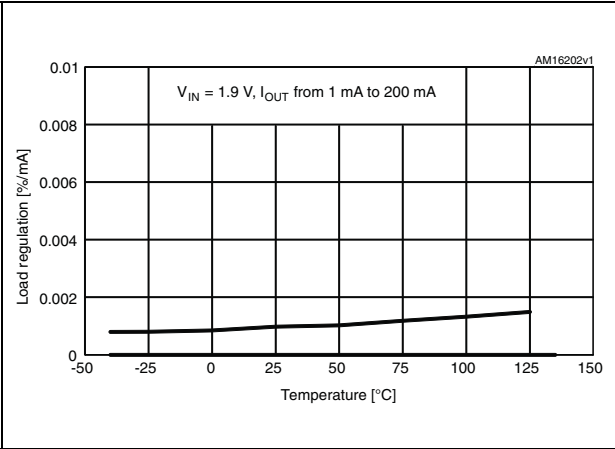


Figure 13. Load regulation vs. temp. for fixed version

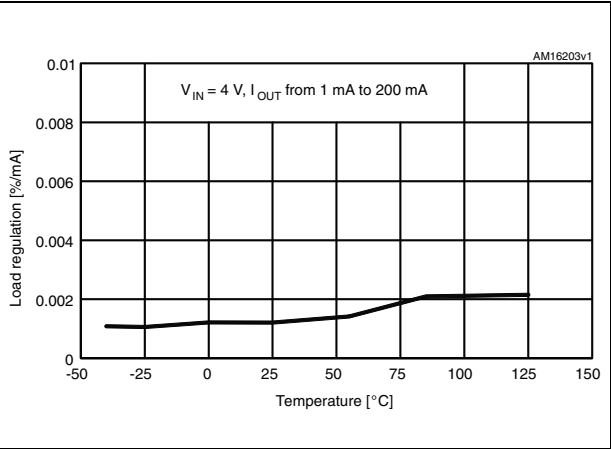


Figure 14. Enable pin thresholds vs. temp. ( $V_{IN} = 1.9\text{ V}$ )

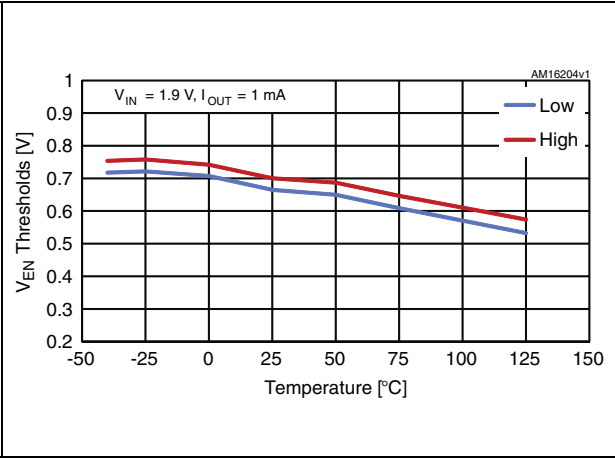


Figure 15. Enable pin thresholds vs. temp.

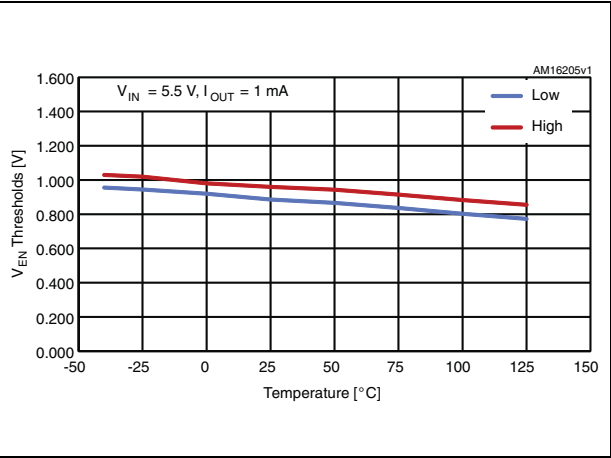


Figure 16. Quiescent current vs. temp. for adjustable version ( $I_O = 0\text{ mA}$ )

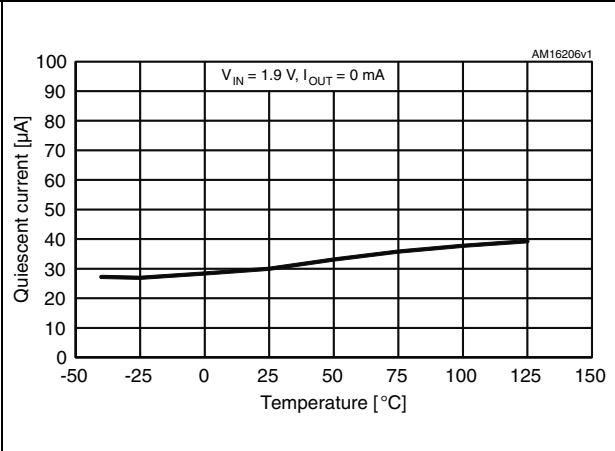


Figure 17. Quiescent current vs. temp. for adjustable version ( $I_O = 200\text{ mA}$ )

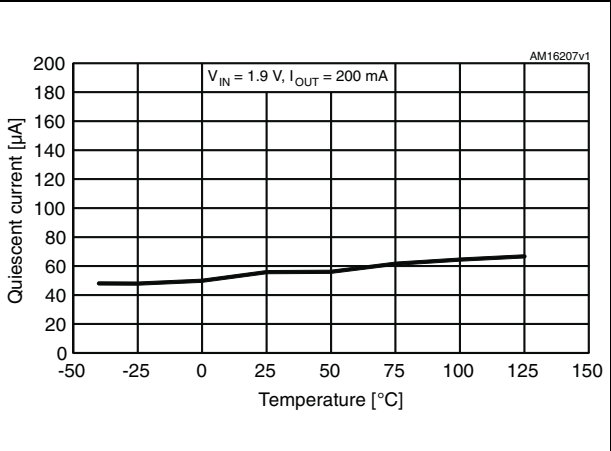


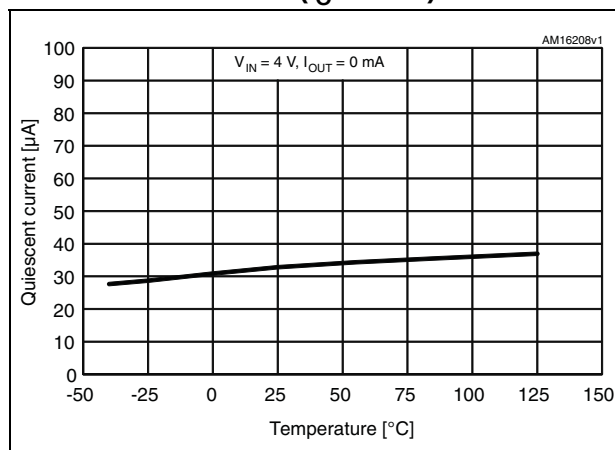
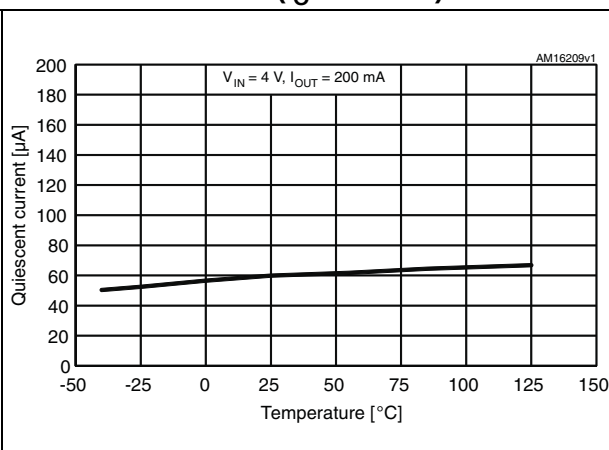
Figure 18. Quiescent current vs. temp. for fixed version ( $I_O = 0$  mA)Figure 19. Quiescent current vs. temp. for fixed version ( $I_O = 200$  mA)

Figure 20. Shutdown current vs. temperature

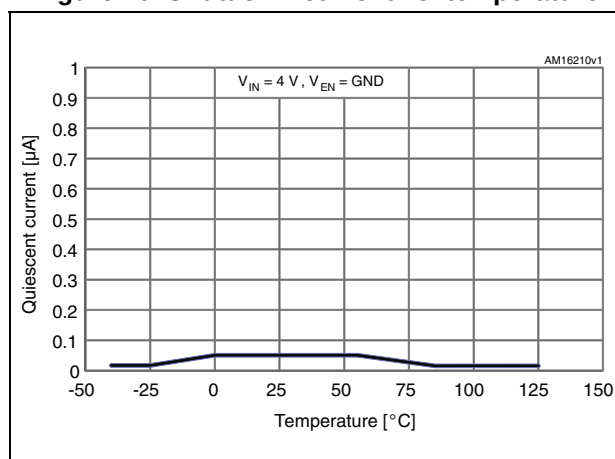
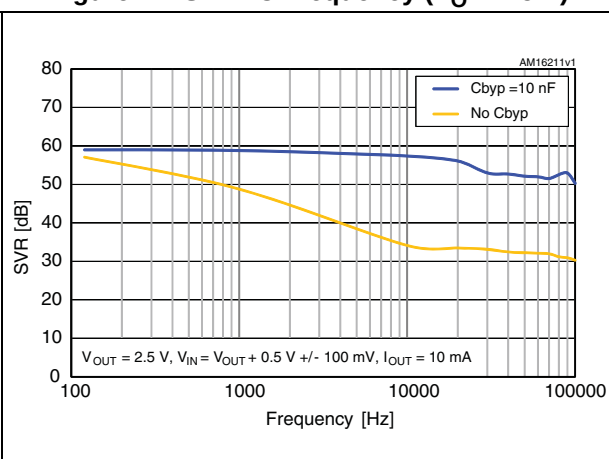
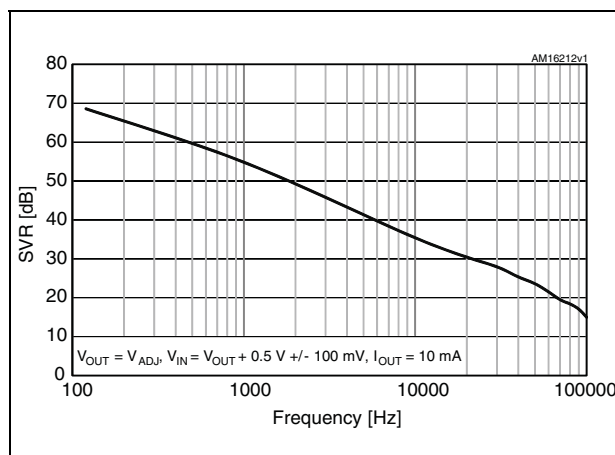
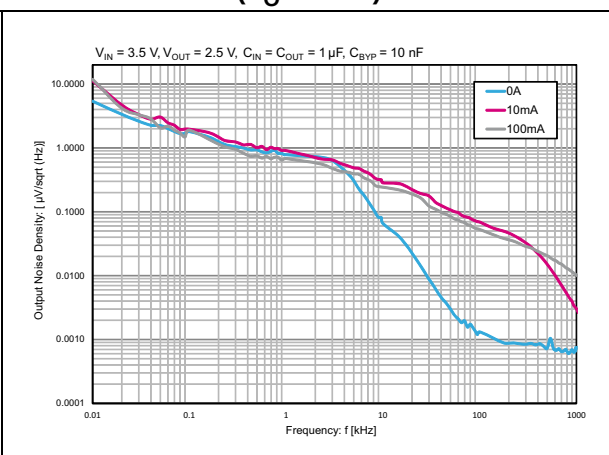
Figure 21. SVR vs. frequency ( $V_O = 2.5$  V)Figure 22. SVR vs. frequency ( $V_O = V_{ADJ}$ )Figure 23. Output noise vs. frequency ( $V_O = 2.5$  V)

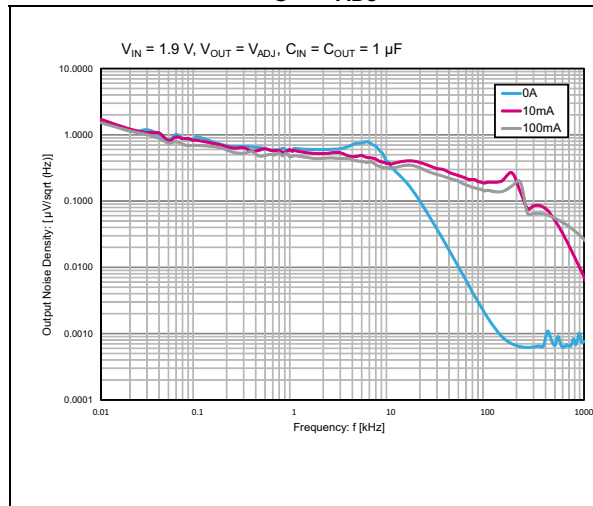
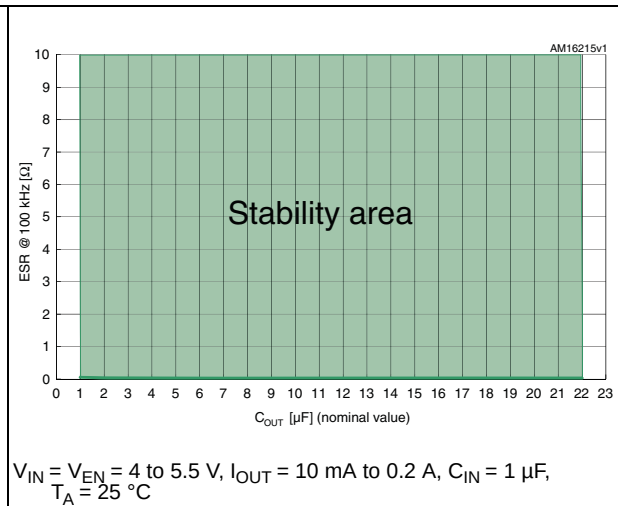
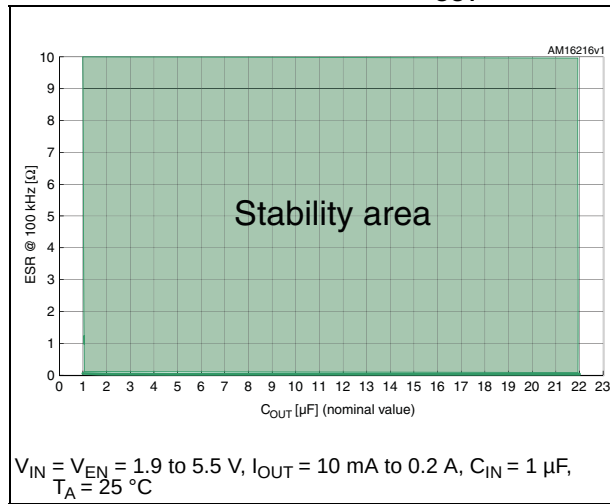
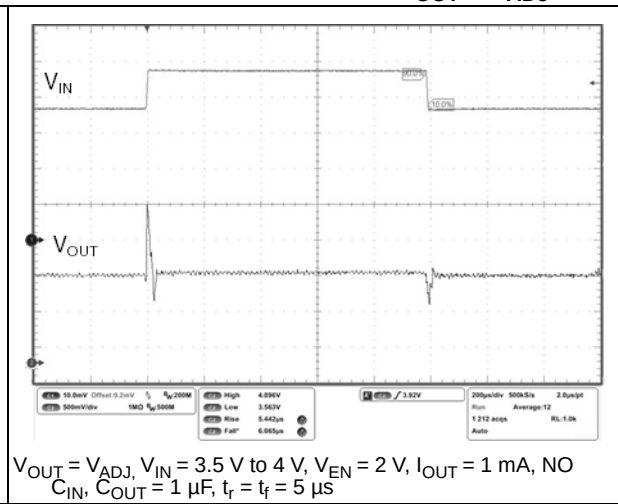
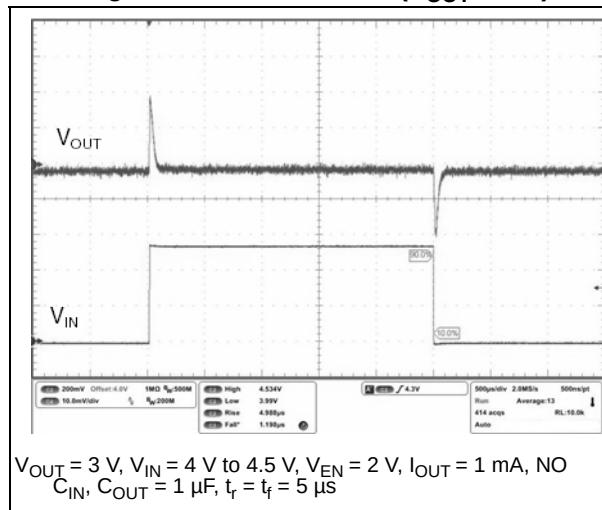
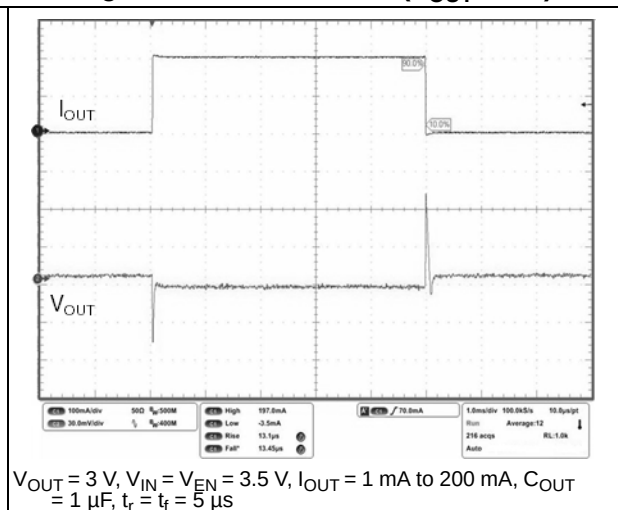
Figure 24. Output noise vs. frequency  
( $V_O = V_{ADJ}$ )Figure 25. Stability region vs.  $C_{OUT}$  (fixed)Figure 26. Stability region vs  $C_{OUT}$  (adjust.)Figure 27. Line transient ( $V_{OUT} = V_{ADJ}$ )Figure 28. Line transient ( $V_{OUT} = 3\text{ V}$ )Figure 29. Load transient ( $V_{OUT} = 3\text{ V}$ )

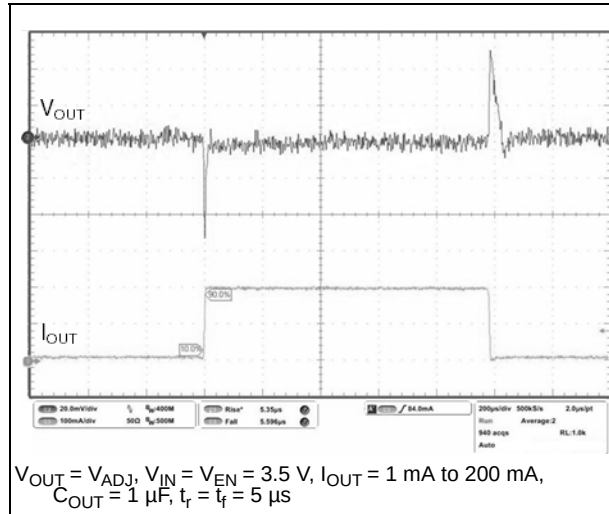
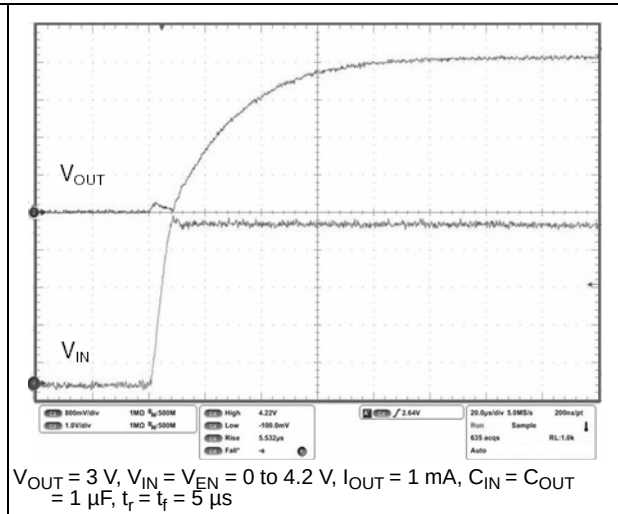
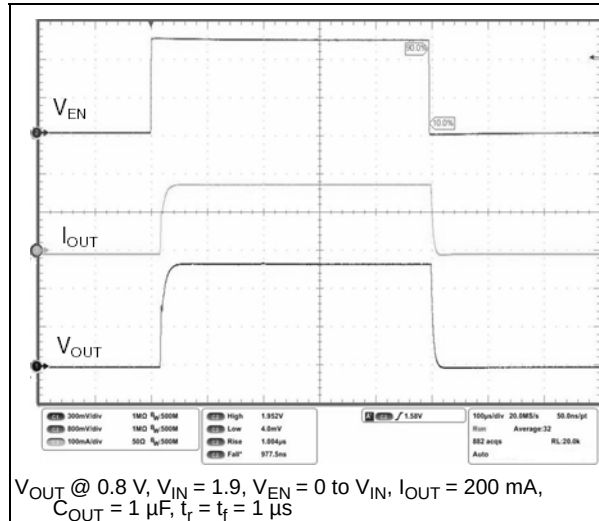
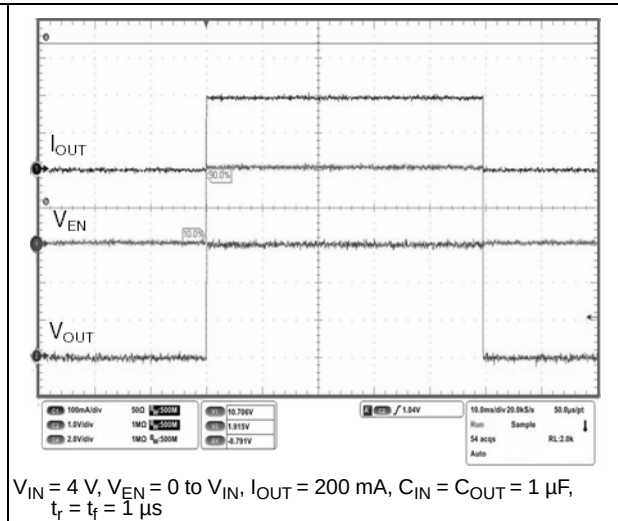
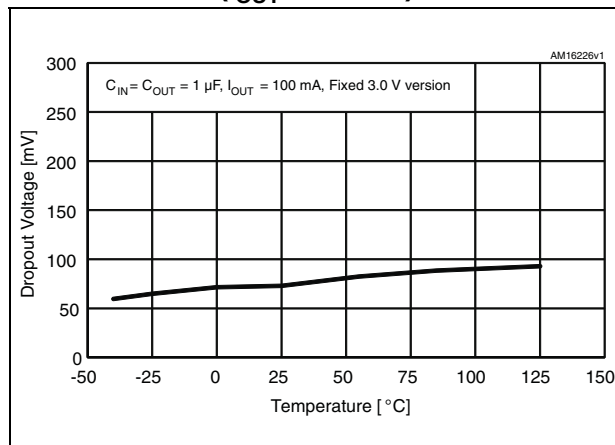
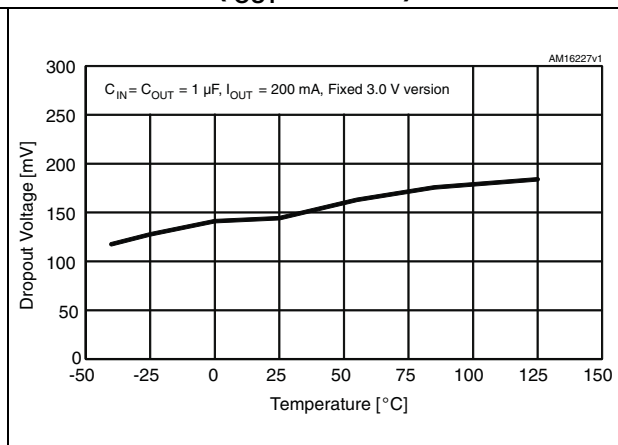
Figure 30. Load transient ( $V_{OUT} = V_{ADJ}$ )

Figure 31. Startup transient

Figure 32. Enable transient ( $V_{OUT} = V_{ADJ}$ )Figure 33. Enable transient ( $V_{OUT} = 3\text{ V}$ )Figure 34. Dropout voltage vs. temperature  
( $I_{OUT} = 100\text{ mA}$ )Figure 35. Dropout voltage vs. temperature  
( $I_{OUT} = 200\text{ mA}$ )

## 7 Package mechanical data

In order to meet environmental requirements, ST offers these devices in different grades of ECOPACK® packages, depending on their level of environmental compliance. ECOPACK specifications, grade definitions and product status are available at: [www.st.com](http://www.st.com). ECOPACK is an ST trademark.

Figure 36. SOT23-5L mechanical drawing

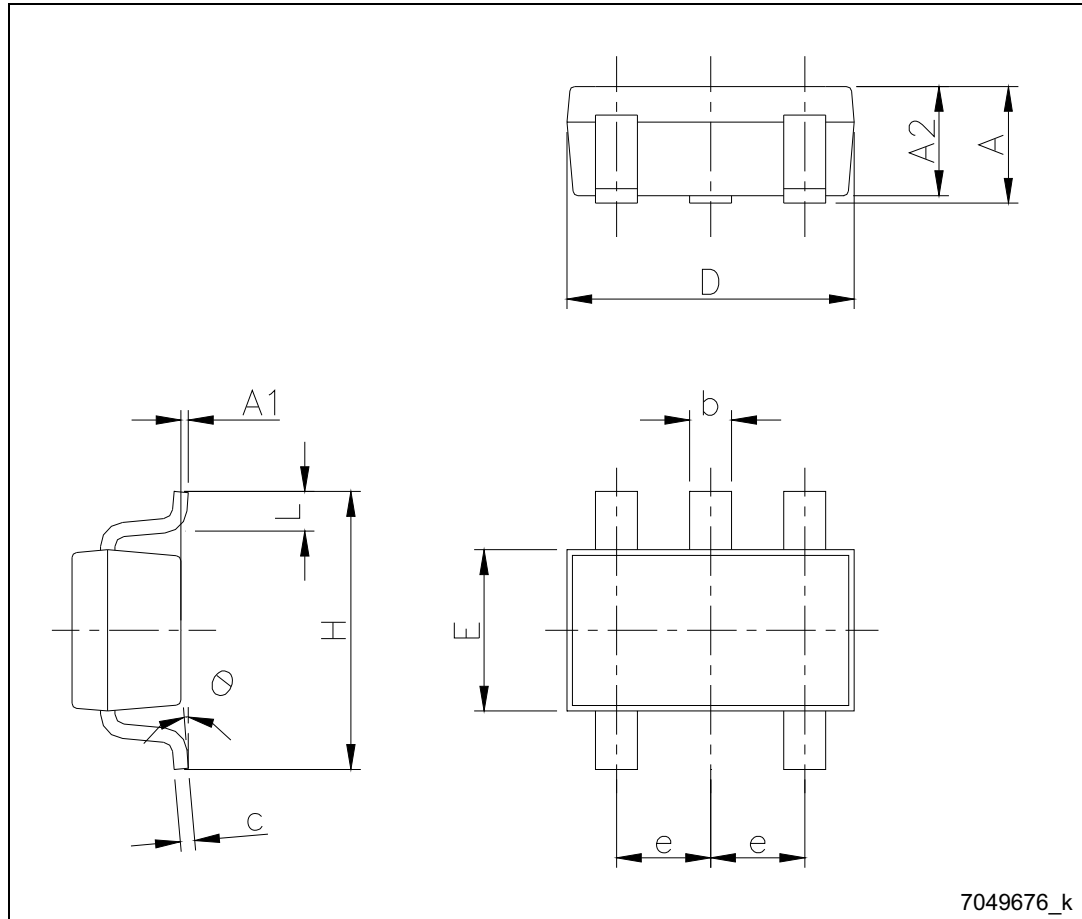


Table 6. SOT23-5L mechanical data

| Dim. | mm   |      |      |
|------|------|------|------|
|      | Min. | Typ. | Max. |
| A    | 0.90 |      | 1.45 |
| A1   | 0    |      | 0.15 |
| A2   | 0.90 |      | 1.30 |
| b    | 0.30 |      | 0.50 |
| c    | 0.09 |      | 0.20 |
| D    |      | 2.95 |      |
| E    |      | 1.60 |      |
| e    |      | 0.95 |      |
| H    |      | 2.80 |      |
| L    | 0.30 |      | 0.60 |
| θ    | 0    |      | 8    |

Figure 37. SOT23-5L footprint (dimensions in mm)

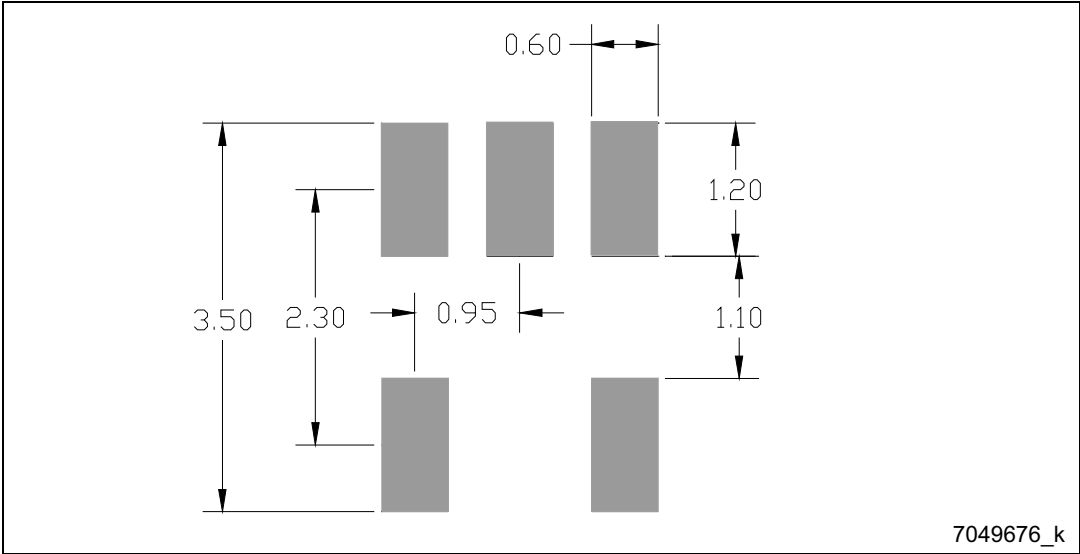
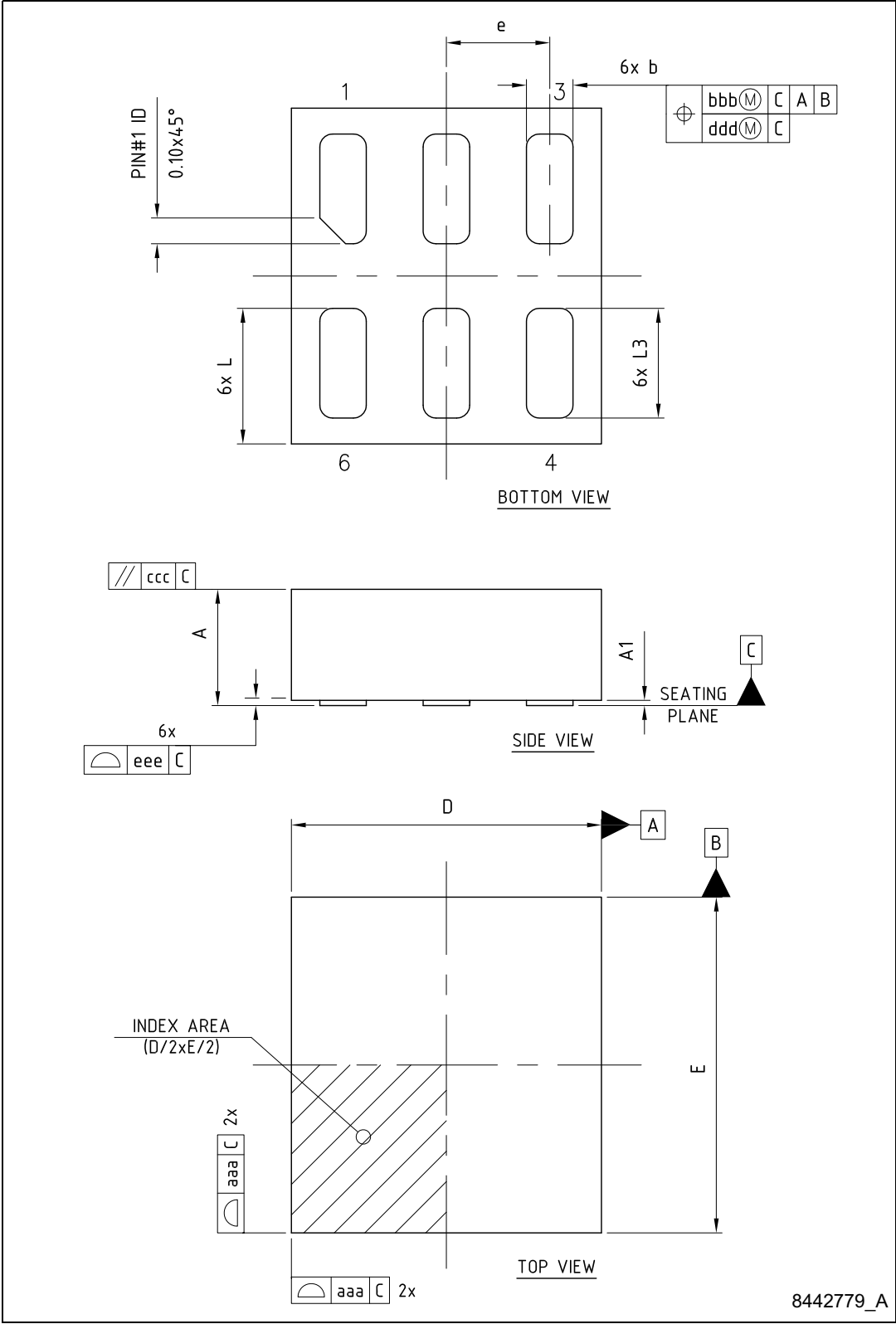


Figure 38. DFN6L (1.2 x 1.3 mm) drawing



8442779\_A

**Table 7. DFN6L (1.2 x 1.3 mm) mechanical data**

| Dim. | mm    |       |       |
|------|-------|-------|-------|
|      | Min.  | Typ.  | Max.  |
| A    | 0.41  | 0.45  | 0.50  |
| A1   | 0.00  | 0.02  | 0.05  |
| D    | -     | 1.20  | -     |
| E    | -     | 1.30  | -     |
| e    | -     | 0.40  | -     |
| b    | 0.15  | 0.18  | 0.25  |
| L    | 0.475 | 0.525 | 0.575 |
| L3   | 0.375 | 0.425 | 0.475 |
| aaa  | -     | 0.05  | -     |

**Figure 39. DFN6L footprint (dimensions in mm)**

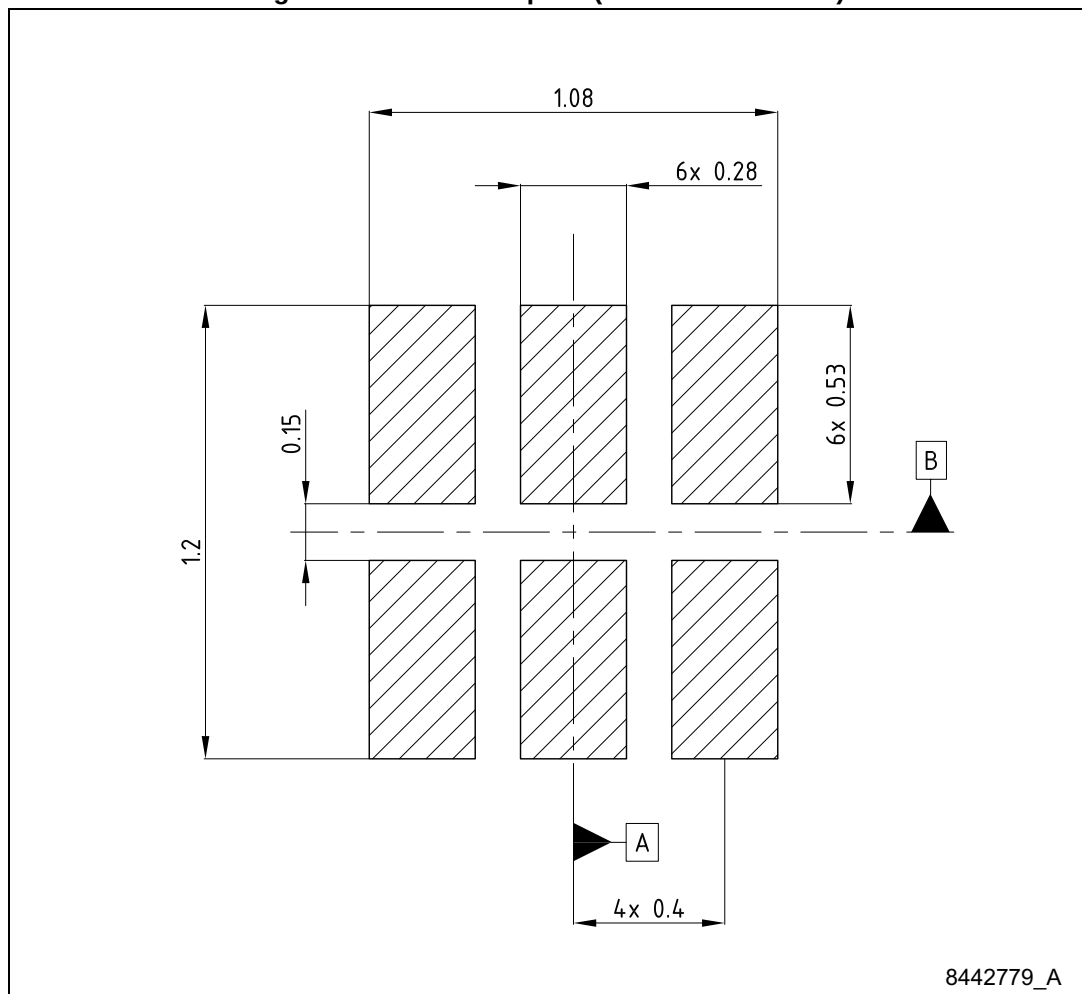


Figure 40. SOT323-5L drawing

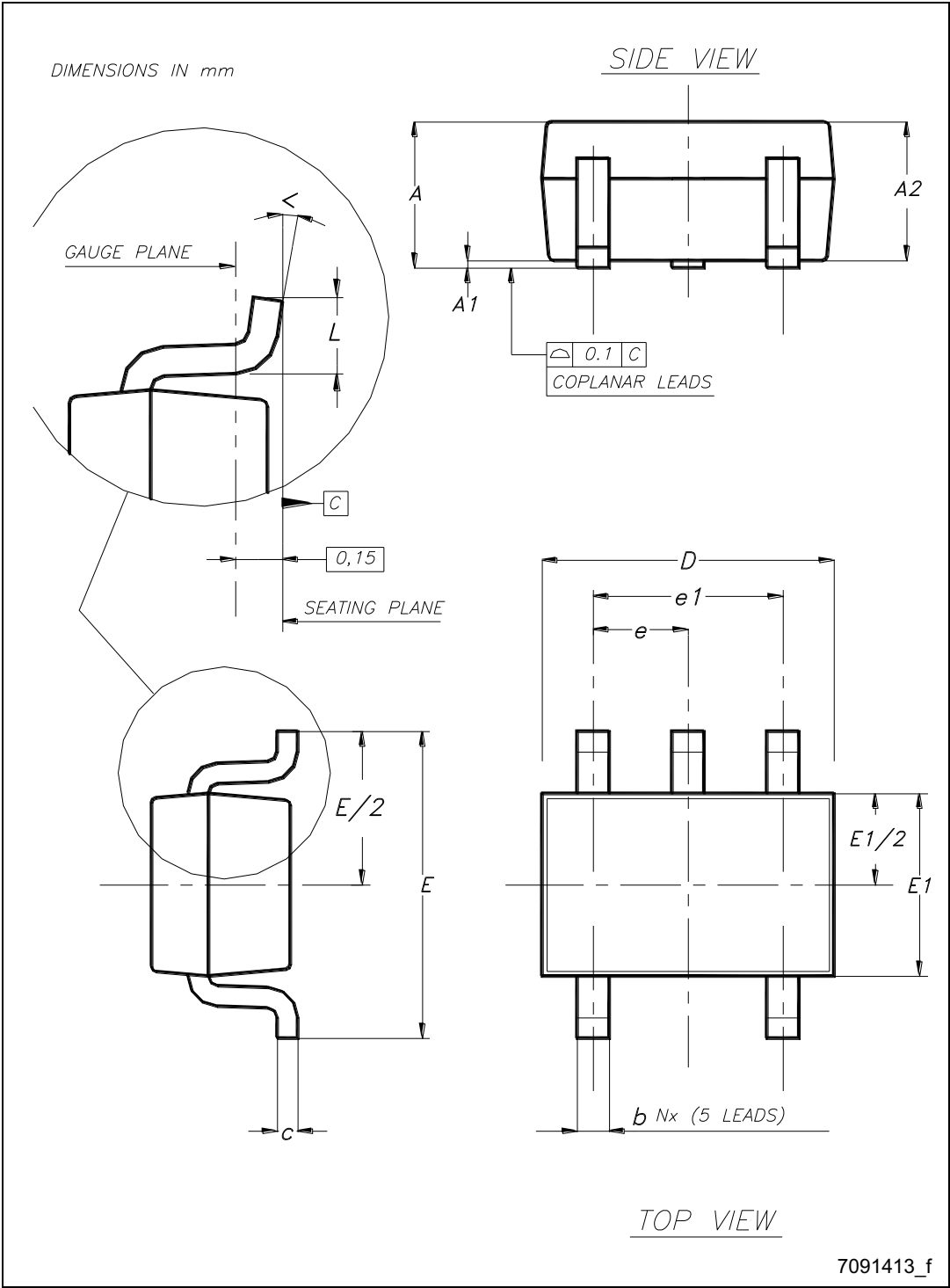


Table 8. SOT323-5L mechanical data

| Dim. | mm   |      |      |
|------|------|------|------|
|      | Min. | Typ. | Max. |
| A    | 0.80 |      | 1.10 |
| A1   | 0    |      | 0.10 |
| A2   | 0.80 | 0.90 | 1    |
| b    | 0.15 |      | 0.30 |
| c    | 0.10 |      | 0.22 |
| D    | 1.80 | 2    | 2.20 |
| E    | 1.80 | 2.10 | 2.40 |
| E1   | 1.15 | 1.25 | 1.35 |
| e    |      | 0.65 |      |
| e1   |      | 1.30 |      |
| L    | 0.26 | 0.36 | 0.46 |
| <    | 0°   |      | 8°   |

8 Packaging mechanical data

Figure 41. SOT23-5L and SOT323-xL tape and reel drawing

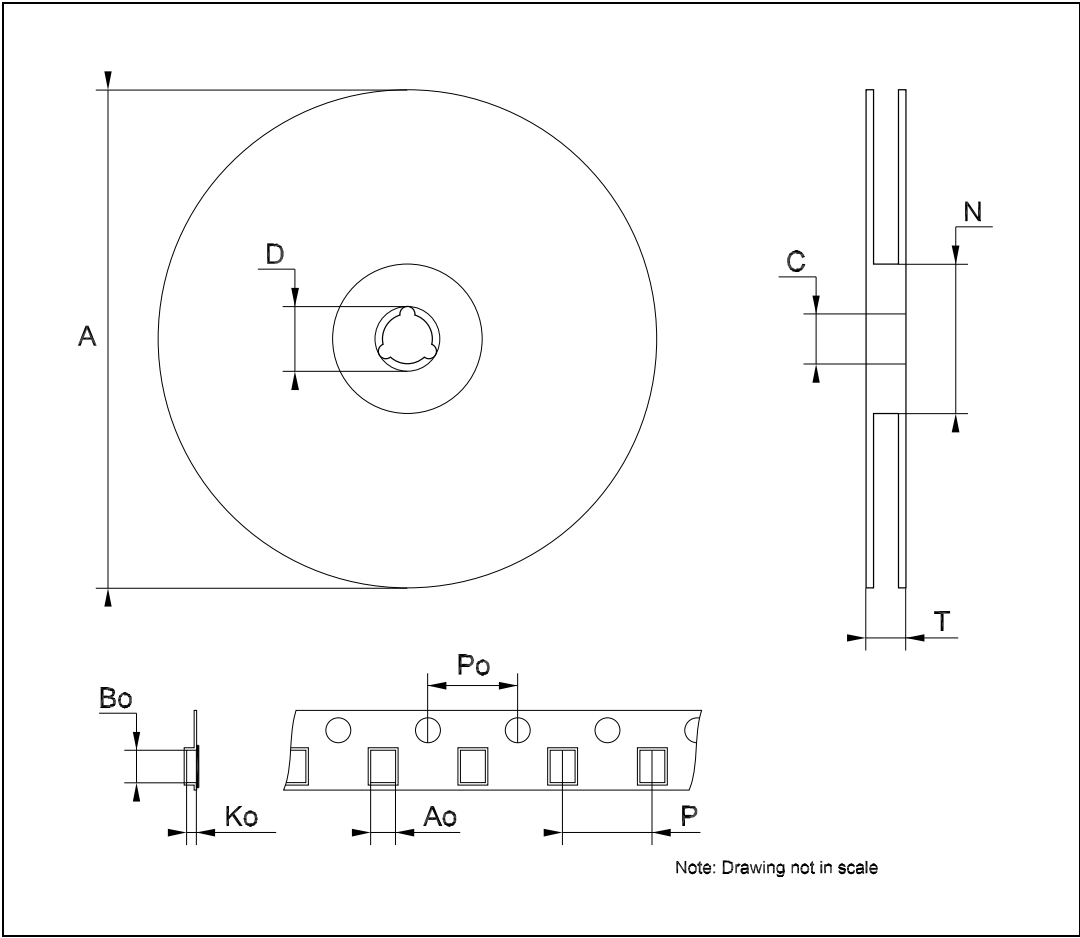


Table 9. SOT23-5L tape and reel mechanical data

| Dim. | mm   |      |      |
|------|------|------|------|
|      | Min. | Typ. | Max. |
| A    |      |      | 180  |
| C    | 12.8 | 13.0 | 13.2 |
| D    | 20.2 |      |      |
| N    | 60   |      |      |
| T    |      |      | 14.4 |
| Ao   | 3.13 | 3.23 | 3.33 |
| Bo   | 3.07 | 3.17 | 3.27 |
| Ko   | 1.27 | 1.37 | 1.47 |
| Po   | 3.9  | 4.0  | 4.1  |
| P    | 3.9  | 4.0  | 4.1  |

Table 10. SOT323-xL tape and reel mechanical data

| Dim. | mm   |      |      |
|------|------|------|------|
|      | Min. | Typ. | Max. |
| A    | 175  | 180  | 185  |
| C    | 12.8 | 13   | 13.2 |
| D    | 20.2 |      |      |
| N    | 59.5 | 60   | 60.5 |
| T    |      |      | 14.4 |
| Ao   |      | 2.25 |      |
| Bo   |      | 3.17 |      |
| Ko   |      | 1.2  |      |
| Po   | 3.9  | 4.0  | 4.1  |
| P    | 3.9  | 4.0  | 4.2  |

## 9 Order codes

Table 11. Order codes

| Package    |             |             | Output voltage |
|------------|-------------|-------------|----------------|
| SOT323-5L  | SOT23-5L    | DFN6L       |                |
| LDK120C-R  | LDK120M-R   | LDK120PU-R  | ADJ            |
| LDK120C08R | LDK120M08R  | LDK120PU08R | 0.8 V          |
| LDK120C10R | LDK120M10R  | LDK120PU10R | 1.0 V          |
| LDK120C11R | LDK120M11R  |             | 1.1 V          |
| LDK120C12R | LDK120M12R  | LDK120PU12R | 1.2 V          |
| LDK120C15R | LDK120M15R  |             | 1.5 V          |
| LDK120C18R | LDK120M18R  | LDK120PU18R | 1.8 V          |
| LDK120C25R | LDK120M25R  | LDK120PU25R | 2.5 V          |
| LDK120C28R | LDK120M28R  |             | 2.8 V          |
| LDK120C29R | LDK120M29R  | LDK120PU29R | 2.9 V          |
| LDK120C30R | LDK120M30R  | LDK120PU30R | 3.0 V          |
| LDK120C31R | LDK120M31R  |             | 3.1 V          |
| LDK120C32R | LDK120M32R  | LDK120PU32R | 3.2 V          |
|            | LDK120DM33R |             | 3.3 V          |
| LDK120C33R | LDK120M33R  | LDK120PU33R | 3.3 V          |
| LDK120C35R |             |             | 3.5 V          |

Table 12. Marking

| Order codes | Package   | Output voltage | Marking |
|-------------|-----------|----------------|---------|
| LDK120DMxxR | SOT23-5L  | xx V           | Dxx     |
| LDK120MxxR  | SOT23-5L  | xx V           | Kxx     |
| LDK120CxxR  | SOT323-5L | xx V           | Kxx     |
| LDK120PUxxR | DFN-6L    | xx V           | xx      |
| LDK120M-R   | SOT23-5L  | Adj            | KAD     |
| LDK120C-R   | SOT323-5L | Adj            | KAD     |
| LDK120PU-R  | DFN-6L    | Adj            | AD      |

## 10 Revision history

**Table 13. Document revision history**

| Date        | Revision | Changes                                                                                                                                                                                                                                                                                                                         |
|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 26-Nov-2012 | 1        | Initial release                                                                                                                                                                                                                                                                                                                 |
| 31-Jan-2013 | 2        | Added new part number LDK120PU32R<br>Updated Table 11: Order codes                                                                                                                                                                                                                                                              |
| 18-Oct-2013 | 3        | RPN LDK120xx changed to LDK120.<br>Updated the Features and the Description in cover page.<br>Cancelled Table1: Device summary.<br>Updated Section 7: Package mechanical data, Table 2: Absolute maximum ratings and Table 11: Order codes.<br>Added Section 8: Packaging mechanical data..<br>Minor text changes.              |
| 10-Mar-2014 | 4        | Updated Table 11: Order codes.                                                                                                                                                                                                                                                                                                  |
| 29-Apr-2014 | 5        | Updated Table 1: Pin description (SOT23-5L, SOT323-5L), Table 4: Electrical characteristics for LDK120 (fixed version), Table 5: Electrical characteristics for LDK120 (adjustable version), Table 11: Order codes and Table 12: Marking.<br>Added Figure 4: Typical application circuits for D version.<br>Minor text changes. |
| 29-Aug-2014 | 6        | Updated Table 6: SOT23-5L mechanical data and Table 11: Order codes.                                                                                                                                                                                                                                                            |
| 07-Oct-2014 | 7        | Updated Table 11: Order codes.<br>Minor text changes.                                                                                                                                                                                                                                                                           |
| 19-Jan-2018 | 8        | Updated: <i>Figure 23: Output noise vs. frequency (<math>V_O = 2.5\text{ V}</math>)</i> and <i>Figure 24: Output noise vs. frequency (<math>V_O = V_{ADJ}</math>)</i> .                                                                                                                                                         |

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