



# THE DATASHEET OF ADP1720TRMZ5-EP-R7

### FEATURES

- Wide input voltage range: 4 V to 28 V
- Maximum output current: 50 mA
- Low light load current
  - 28  $\mu$ A at 0  $\mu$ A load
  - 35  $\mu$ A at 100  $\mu$ A load
- Low shutdown current: 0.7  $\mu$ A
- Low dropout voltage: 275 mV @ 50 mA load
- Initial accuracy:  $\pm 0.5\%$
- Accuracy over line, load, and temperature:  $\pm 2\%$
- Stable with small 1  $\mu$ F ceramic output capacitor
- Fixed 3.3 V and 5.0 V output voltage options
- Adjustable output voltage option: 1.225 V to 5.0 V
- Current limit and thermal overload protection
- Logic controlled enable
- Space-saving MSOP package

### ENHANCED PRODUCT FEATURES

Enhanced processing (EP) for  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  operation

### APPLICATIONS

- DC-to-dc post regulation
- PCMCIA regulation
- Keep-alive power in portable equipment
- Industrial applications
- Aeronautic and military operating temperature environment

### GENERAL DESCRIPTION

The ADP1720-EP is a high voltage, micropower, low dropout linear regulator. Operating over a very wide input voltage range of 4 V to 28 V, the ADP1720-EP can provide up to 50 mA of output current. With just 28  $\mu$ A of quiescent supply current and a micropower shutdown mode, this device is ideal for applications that require low quiescent current.

The ADP1720-EP is available in fixed output voltages of 3.3 V and 5.0 V. An adjustable version is also available, which allows the output to be set anywhere between 1.225 V and 5.0 V. An enable function that allows external circuits to turn on and turn off the ADP1720 output is available. For automatic startup, the enable (EN) pin can be connected directly to the input rail.

### TYPICAL APPLICATION CIRCUITS

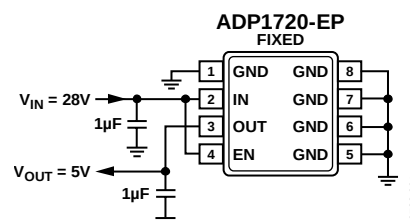


Figure 1. ADP1720-EP with Fixed Output Voltage, 5.0 V

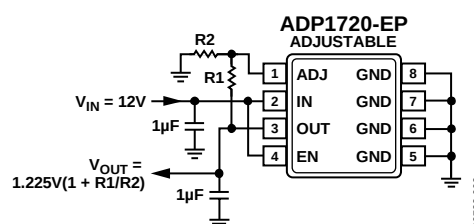


Figure 2. ADP1720-EP with Adjustable Output Voltage, 1.225 V to 5.0 V

The ADP1720-EP is optimized for stable operation with small 1  $\mu$ F ceramic output capacitors, allowing for good transient performance while occupying minimal board space.

The ADP1720-EP operates from  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  and uses current limit protection and thermal overload protection circuits to prevent damage to the device in adverse conditions.

Available in a small MSOP package, the ADP1720-EP provides a compact solution with low thermal resistance.

Additional application and technical information can be found in the [ADP1720](#) data sheet.

#### Rev. A

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REVISION HISTORY

6/12—Rev. 0 to Rev. A

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2/11—Revision 0: Initial Version

## SPECIFICATIONS

$V_{IN} = 12\text{ V}$ ,  $I_{OUT} = 100\text{ }\mu\text{A}$ ,  $C_{IN} = C_{OUT} = 1\text{ }\mu\text{F}$ ,  $T_A = 25^\circ\text{C}$ , unless otherwise noted.

Table 1.

| Parameter                                       | Symbol                          | Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Min                        | Typ                           | Max                             | Unit                                                                                               |
|-------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------|
| INPUT VOLTAGE RANGE                             | $V_{IN}$                        | $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4                          |                               | 28                              | V                                                                                                  |
| OPERATING SUPPLY CURRENT                        | $I_{GND}$                       | $I_{OUT} = 0\text{ }\mu\text{A}$<br>$I_{OUT} = 0\text{ }\mu\text{A}$ , $V_{IN} = V_{OUT} + 0.5\text{ V}$ or $4\text{ V}$ (whichever is greater), $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$<br>$I_{OUT} = 100\text{ }\mu\text{A}$<br>$I_{OUT} = 100\text{ }\mu\text{A}$ , $V_{IN} = V_{OUT} + 0.5\text{ V}$ or $4\text{ V}$ (whichever is greater), $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$<br>$I_{OUT} = 1\text{ mA}$<br>$I_{OUT} = 1\text{ mA}$ , $V_{IN} = V_{OUT} + 0.5\text{ V}$ or $4\text{ V}$ (whichever is greater), $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$<br>$I_{OUT} = 10\text{ mA}$<br>$I_{OUT} = 10\text{ mA}$ , $V_{IN} = V_{OUT} + 0.5\text{ V}$ or $4\text{ V}$ (whichever is greater), $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$<br>$100\text{ }\mu\text{A} < I_{OUT} < 50\text{ mA}$ , $V_{IN} = V_{OUT} + 0.5\text{ V}$ or $4\text{ V}$ (whichever is greater), $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$ |                            | 28<br>35<br>74<br>300<br>1185 | 80<br>120<br>340<br>900<br>2115 | $\mu\text{A}$<br>$\mu\text{A}$<br>$\mu\text{A}$<br>$\mu\text{A}$<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| SHUTDOWN CURRENT                                | $I_{GND-SD}$                    | $EN = \text{GND}$<br>$EN = \text{GND}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            | 0.7                           | 1.7                             | $\mu\text{A}$<br>$\mu\text{A}$                                                                     |
| OUTPUT                                          |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                               |                                 |                                                                                                    |
| Fixed Output Voltage Accuracy                   | $V_{OUT}$                       | $I_{OUT} = 100\text{ }\mu\text{A}$<br>$100\text{ }\mu\text{A} < I_{OUT} < 50\text{ mA}$<br>$100\text{ }\mu\text{A} < I_{OUT} < 50\text{ mA}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -0.5<br>-1<br>-2           |                               | +0.5<br>+1<br>+2                | %<br>%<br>%                                                                                        |
| Adjustable Output <sup>1</sup> Voltage Accuracy | $V_{OUT}$                       | $I_{OUT} = 100\text{ }\mu\text{A}$<br>$100\text{ }\mu\text{A} < I_{OUT} < 50\text{ mA}$<br>$100\text{ }\mu\text{A} < I_{OUT} < 50\text{ mA}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.2188<br>1.2127<br>1.2005 | 1.2250                        | 1.2311<br>1.2372<br>1.2495      | V<br>V<br>V                                                                                        |
| Noise (10 Hz to 100 kHz)                        | $OUT_{NOISE}$                   | $V_{OUT} = 1.6\text{ V}$ , $C_{OUT} = 1\text{ }\mu\text{F}$<br>$V_{OUT} = 1.6\text{ V}$ , $C_{OUT} = 10\text{ }\mu\text{F}$<br>$V_{OUT} = 5\text{ V}$ , $C_{OUT} = 1\text{ }\mu\text{F}$<br>$V_{OUT} = 5\text{ V}$ , $C_{OUT} = 10\text{ }\mu\text{F}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            | 146<br>124<br>340<br>266      |                                 | $\mu\text{V rms}$<br>$\mu\text{V rms}$<br>$\mu\text{V rms}$<br>$\mu\text{V rms}$                   |
| REGULATION                                      |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                               |                                 |                                                                                                    |
| Line Regulation                                 | $\Delta V_{OUT}/\Delta V_{IN}$  | $V_{IN} = (V_{OUT} + 0.5\text{ V})$ to $28\text{ V}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -0.02                      |                               | +0.02                           | %/V                                                                                                |
| Load Regulation <sup>2</sup>                    | $\Delta V_{OUT}/\Delta I_{OUT}$ | $1\text{ mA} < I_{OUT} < 50\text{ mA}$<br>$1\text{ mA} < I_{OUT} < 50\text{ mA}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            | 0.001                         |                                 | %/mA                                                                                               |
| DROPOUT VOLTAGE <sup>3</sup>                    | $V_{DROPOUT}$                   | $I_{OUT} = 10\text{ mA}$<br>$I_{OUT} = 10\text{ mA}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$<br>$I_{OUT} = 50\text{ mA}$<br>$I_{OUT} = 50\text{ mA}$ , $T_J = -55^\circ\text{C}$ to $+125^\circ\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            | 55<br>275                     | 105<br>480                      | mV<br>mV<br>mV<br>mV                                                                               |
| START-UP TIME <sup>4</sup>                      | $t_{START-UP}$                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            | 200                           |                                 | $\mu\text{s}$                                                                                      |
| CURRENT LIMIT THRESHOLD <sup>5</sup>            | $I_{LIMIT}$                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 55                         | 90                            | 140                             | mA                                                                                                 |
| THERMAL CHARACTERISTICS                         |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                               |                                 |                                                                                                    |
| Thermal Shutdown Threshold                      | $TS_{SD}$                       | $T_J$ rising                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            | 150                           |                                 | $^\circ\text{C}$                                                                                   |
| Thermal Shutdown Hysteresis                     | $TS_{SD-HYS}$                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            | 15                            |                                 | $^\circ\text{C}$                                                                                   |
| EN CHARACTERISTICS                              |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                               |                                 |                                                                                                    |
| EN Input Logic High                             | $V_{IH}$                        | $4\text{ V} \leq V_{IN} \leq 28\text{ V}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.8                        |                               |                                 | V                                                                                                  |
| Logic Low                                       | $V_{IL}$                        | $4\text{ V} \leq V_{IN} \leq 28\text{ V}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                               | 0.4                             | V                                                                                                  |
| Leakage Current                                 | $V_{I-LEAKAGE}$                 | $EN = \text{GND}$<br>$EN = \text{IN}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            | 0.1<br>0.5                    | 1<br>1                          | $\mu\text{A}$<br>$\mu\text{A}$                                                                     |
| ADJ INPUT BIAS CURRENT (ADP1720-EP ADJUSTABLE)  | $ADJ_{I-BIAS}$                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            | 30                            | 100                             | nA                                                                                                 |

| Parameter                    | Symbol | Conditions                                                                        | Min | Typ | Max | Unit |
|------------------------------|--------|-----------------------------------------------------------------------------------|-----|-----|-----|------|
| POWER SUPPLY REJECTION RATIO | PSRR   | $f = 120 \text{ Hz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 1.6 \text{ V}$ |     | -90 |     | dB   |
|                              |        | $f = 1 \text{ kHz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 1.6 \text{ V}$  |     | -80 |     | dB   |
|                              |        | $f = 10 \text{ kHz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 1.6 \text{ V}$ |     | -60 |     | dB   |
|                              |        | $f = 120 \text{ Hz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 5 \text{ V}$   |     | -83 |     | dB   |
|                              |        | $f = 1 \text{ kHz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 5 \text{ V}$    |     | -70 |     | dB   |
|                              |        | $f = 10 \text{ kHz}, V_{\text{IN}} = 8 \text{ V}, V_{\text{OUT}} = 5 \text{ V}$   |     | -50 |     | dB   |

<sup>1</sup> Accuracy when OUT is connected directly to ADJ. When OUT voltage is set by external feedback resistors, absolute accuracy in adjust mode depends on the tolerances of resistors used.

<sup>2</sup> Based on an end-point calculation using 1 mA and 50 mA loads. See Figure 6 for typical load regulation performance for loads less than 1 mA.

<sup>3</sup> Dropout voltage is defined as the input-to-output voltage differential when the input voltage is set to the nominal output voltage. This applies only for output voltages above 4 V.

<sup>4</sup> Start-up time is defined as the time between the rising edge of EN to OUT being at 95% of its nominal value.

<sup>5</sup> Current limit threshold is defined as the current at which the output voltage drops to 90% of the specified typical value. For example, the current limit for a 5.0 V output voltage is defined as the current that causes the output voltage to drop to 90% of 5.0 V, or 4.5 V.

## ABSOLUTE MAXIMUM RATINGS

Table 2.

| Parameter                               | Rating                                      |
|-----------------------------------------|---------------------------------------------|
| IN to GND                               | –0.3 V to +30 V                             |
| OUT to GND                              | –0.3 V to IN or +6 V<br>(whichever is less) |
| EN to GND                               | –0.3 V to +30 V                             |
| ADJ to GND                              | –0.3 V to +6 V                              |
| Storage Temperature Range               | –65°C to +150°C                             |
| Operating Junction<br>Temperature Range | –55°C to +125°C                             |
| Soldering Conditions                    | JEDEC J-STD-020                             |

Stresses above those listed under Absolute Maximum Ratings may cause permanent damage to the device. This is a stress rating only; functional operation of the device at these or any other conditions above those indicated in the operational section of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

## THERMAL RESISTANCE

$\theta_{JA}$  is specified for the worst-case conditions, that is, a device soldered in a circuit board for surface-mount packages.

Table 3. Thermal Resistance

| Package Type | $\theta_{JA}$ | $\theta_{JC}$ | Unit |
|--------------|---------------|---------------|------|
| 8-Lead MSOP  | 246           | 66            | °C/W |

## ESD CAUTION



**ESD (electrostatic discharge) sensitive device.** Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

PIN CONFIGURATIONS AND FUNCTION DESCRIPTIONS

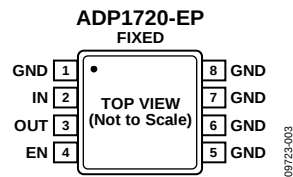


Figure 3. 8-Lead MSOP Pin Configuration—Fixed Output Voltage

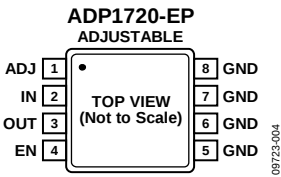


Figure 4. 8-Lead MSOP Pin Configuration—Adjustable Output Voltage

Table 4. Pin Function Descriptions

| Pin No. |            |          |                                                                                                                                        |
|---------|------------|----------|----------------------------------------------------------------------------------------------------------------------------------------|
| Fixed   | Adjustable | Mnemonic | Description                                                                                                                            |
| 1       | N/A        | GND      | This pin is internally connected to ground.                                                                                            |
| N/A     | 1          | ADJ      | Adjust. A resistor divider from OUT to ADJ sets the output voltage.                                                                    |
| 2       | 2          | IN       | Regulator Input Supply. Bypass IN to GND with a 1 $\mu$ F or greater capacitor.                                                        |
| 3       | 3          | OUT      | Regulated Output Voltage. Bypass OUT to GND with a 1 $\mu$ F or greater capacitor.                                                     |
| 4       | 4          | EN       | Enable Input. Drive EN high to turn on the regulator; drive it low to turn off the regulator. For automatic startup, connect EN to IN. |
| 5       | 5          | GND      | Ground.                                                                                                                                |
| 6       | 6          | GND      | Ground.                                                                                                                                |
| 7       | 7          | GND      | Ground.                                                                                                                                |
| 8       | 8          | GND      | Ground.                                                                                                                                |

## TYPICAL PERFORMANCE CHARACTERISTICS

$V_{IN} = 12\text{ V}$ ,  $V_{OUT} = 5\text{ V}$ ,  $I_{OUT} = 100\text{ }\mu\text{A}$ ,  $C_{IN} = C_{OUT} = 1\text{ }\mu\text{F}$ ,  $T_A = 25^\circ\text{C}$ , unless otherwise noted.

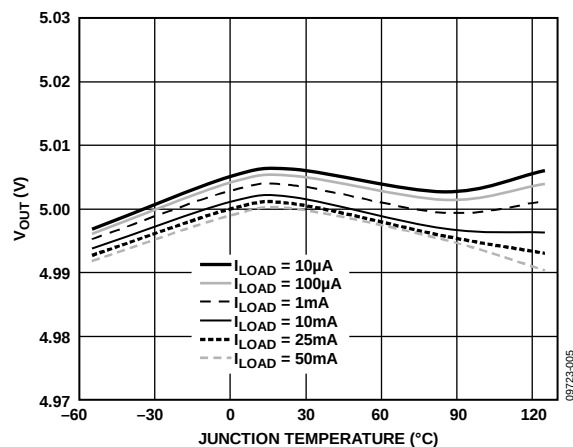


Figure 5. Output Voltage vs. Junction Temperature

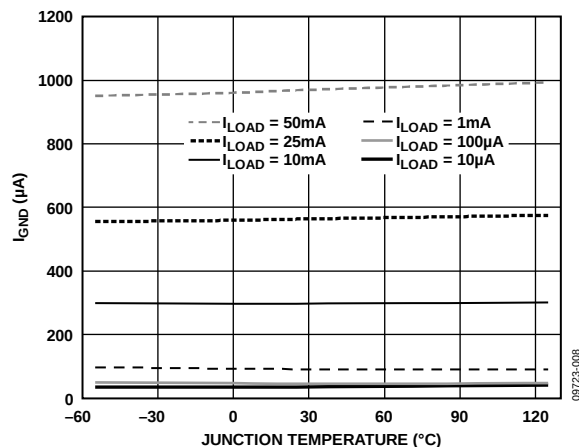


Figure 8. Ground Current vs. Junction Temperature

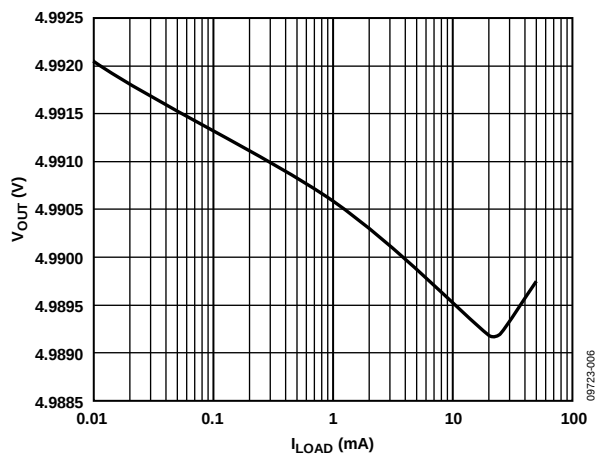


Figure 6. Output Voltage vs. Load Current

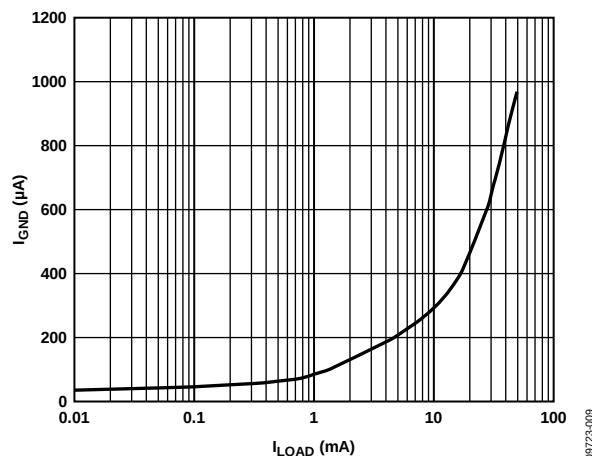


Figure 9. Ground Current vs. Load Current

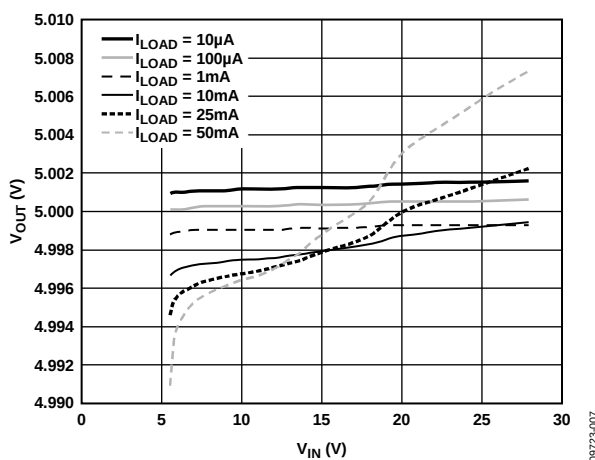


Figure 7. Output Voltage vs. Input Voltage

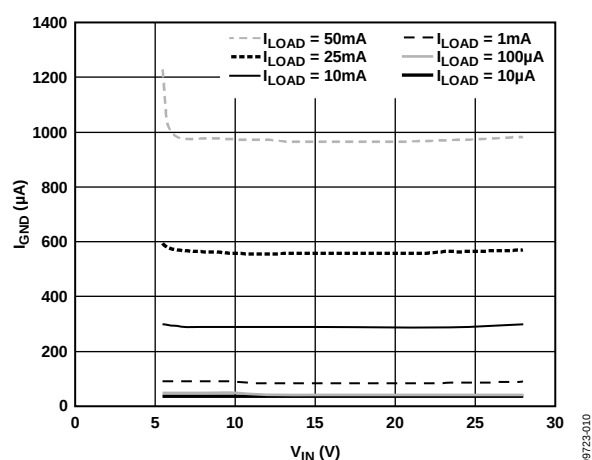


Figure 10. Ground Current vs. Input Voltage

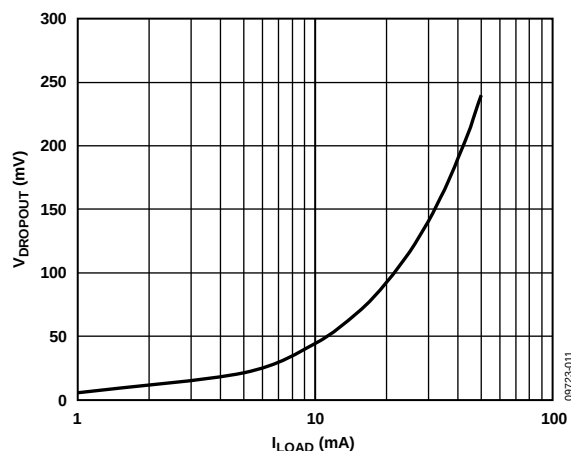


Figure 11. Dropout Voltage vs. Load Current

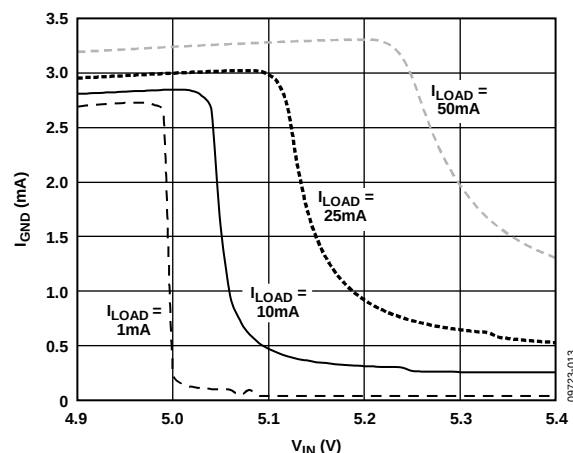


Figure 13. Ground Current vs. Input Voltage (in Dropout)

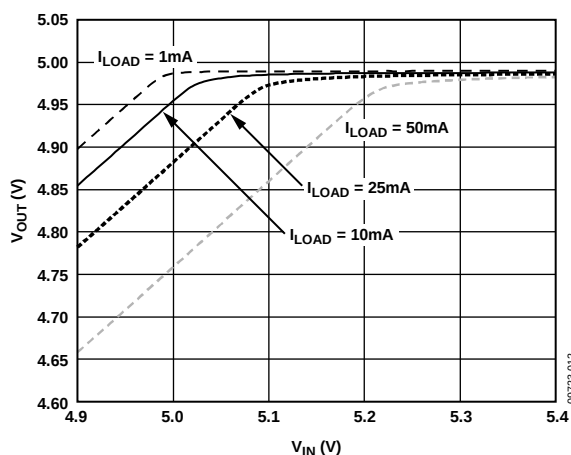


Figure 12. Output Voltage vs. Input Voltage (in Dropout)

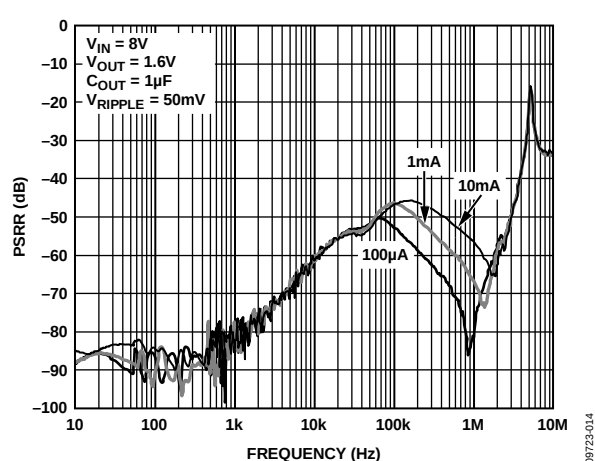


Figure 14. Power Supply Rejection Ratio vs. Frequency (1.6 V Adjustable Output)

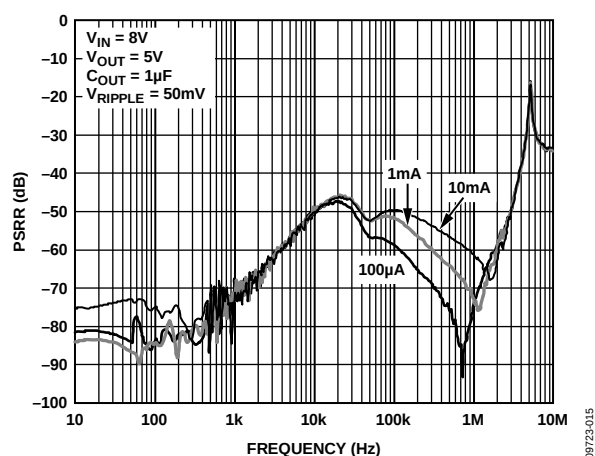


Figure 15. Power Supply Rejection Ratio vs. Frequency  
(5.0 V Fixed Output)

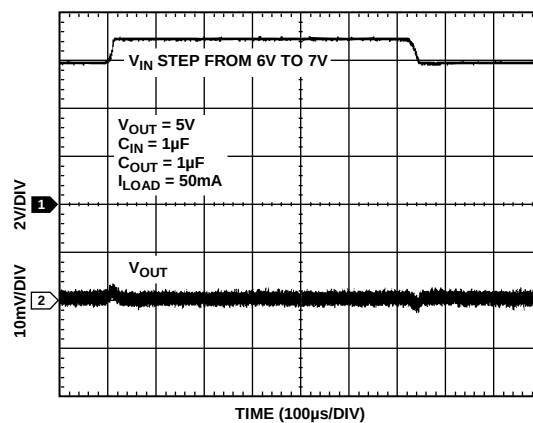


Figure 17. Line Transient Response

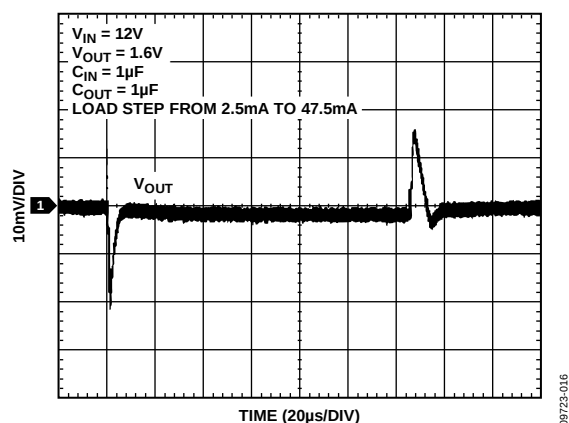


Figure 16. Load Transient Response

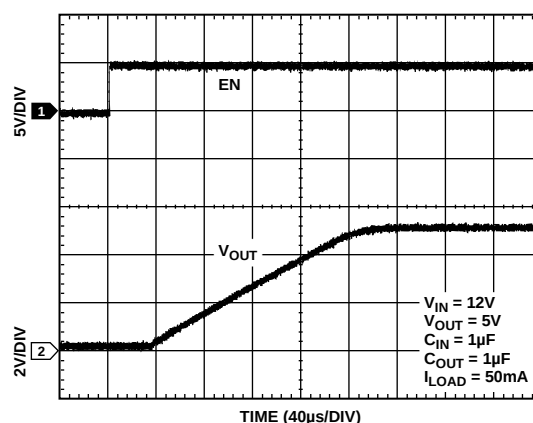


Figure 18. Start-Up Time

## APPLICATIONS INFORMATION

### THERMAL CONSIDERATIONS

To guarantee reliable operation, the junction temperature of the ADP1720-EP must not exceed 125°C. To ensure that the junction temperature stays below this maximum value, the user needs to be aware of the parameters that contribute to junction temperature changes. These parameters include ambient temperature, power dissipation in the power device, and thermal resistances between the junction and ambient air ( $\theta_{JA}$ ). The  $\theta_{JA}$  number is dependent on the package assembly compounds used and the amount of copper to which the GND pins of the package are soldered on the PCB. Table 5 shows typical  $\theta_{JA}$  values of the 8-lead MSOP package for various PCB copper sizes.

**Table 5. Typical  $\theta_{JA}$  Values for ADP1720-EP**

| Copper Size (mm <sup>2</sup> ) | $\theta_{JA}$ (°C/W) |
|--------------------------------|----------------------|
| 25                             | 246                  |
| 50                             | 216                  |
| 100                            | 186                  |
| 300                            | 178                  |
| 500                            | 169                  |

The junction temperature of the ADP1720-EP can be calculated from the following equation:

$$T_J = T_A + (P_D \times \theta_{JA}) \quad (3)$$

where:

$T_A$  is the ambient temperature.

$P_D$  is the power dissipation in the die, given by

$$P_D = [(V_{IN} - V_{OUT}) \times I_{LOAD}] + (V_{IN} \times I_{GND}) \quad (4)$$

where:

$I_{LOAD}$  is the load current.

$I_{GND}$  is the ground current.

$V_{IN}$  and  $V_{OUT}$  are input and output voltages, respectively.

Power dissipation due to ground current is quite small and can be ignored. Therefore, the junction temperature equation simplifies to the following:

$$T_J = T_A + \{[(V_{IN} - V_{OUT}) \times I_{LOAD}] \times \theta_{JA}\} \quad (5)$$

As shown in Equation 5, for a given ambient temperature, input-to-output voltage differential, and continuous load current, there exists a minimum copper size requirement for the PCB to ensure that the junction temperature does not rise above 125°C. Figure 19 to Figure 24 show junction temperature calculations for different ambient temperatures, load currents,  $V_{IN}$  to  $V_{OUT}$  differentials, and areas of PCB copper for the ADP1720-EP.

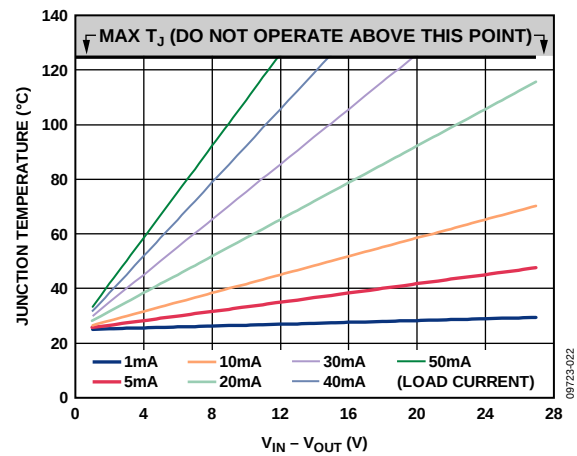


Figure 19. 500 mm<sup>2</sup> of PCB Copper,  $T_A = 25^\circ\text{C}$

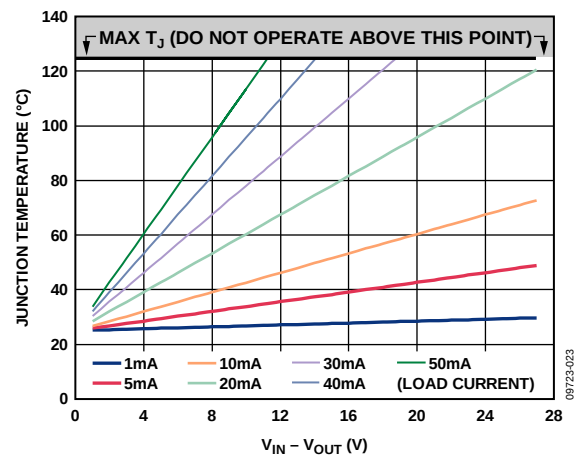


Figure 20. 300 mm<sup>2</sup> of PCB Copper,  $T_A = 25^\circ\text{C}$

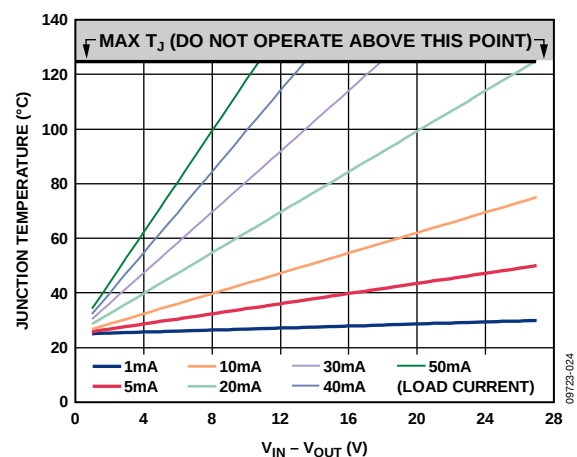
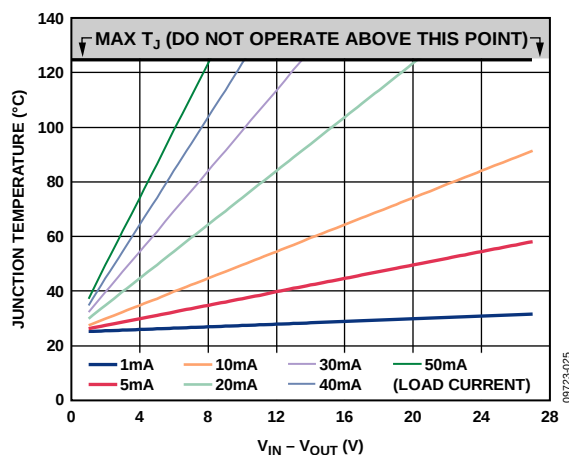
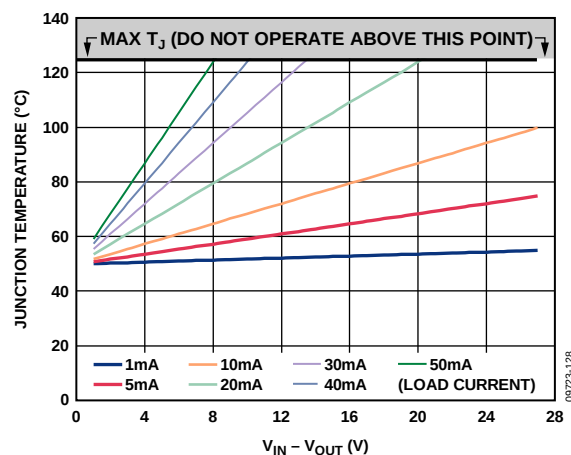
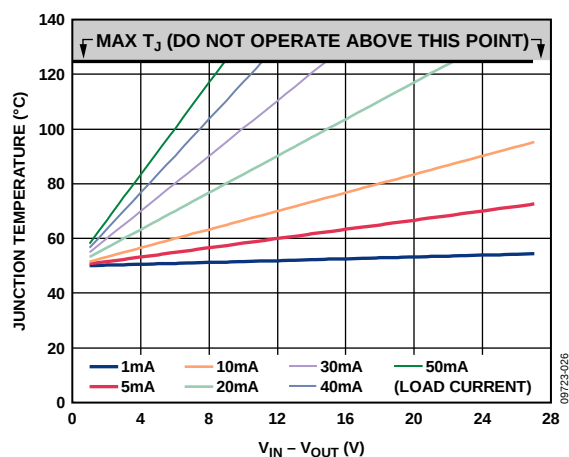
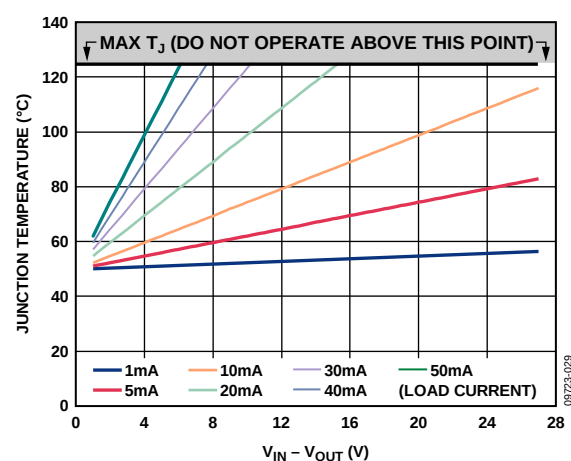
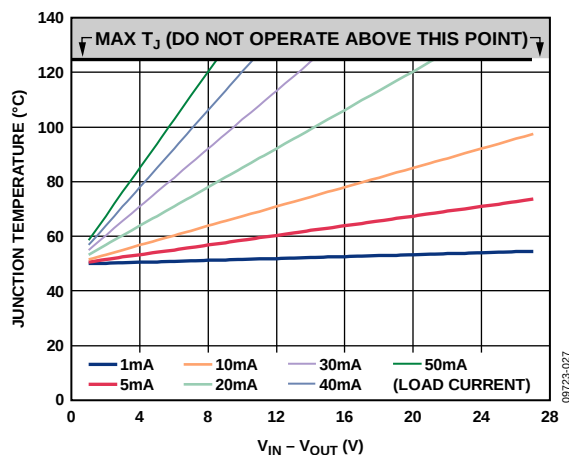


Figure 21. 100 mm<sup>2</sup> of PCB Copper,  $T_A = 25^\circ\text{C}$

Figure 22. 25 mm<sup>2</sup> of PCB Copper,  $T_A = 25^{\circ}\text{C}$ Figure 25. 100 mm<sup>2</sup> of PCB Copper,  $T_A = 50^{\circ}\text{C}$ Figure 23. 500 mm<sup>2</sup> of PCB Copper,  $T_A = 50^{\circ}\text{C}$ Figure 26. 25 mm<sup>2</sup> of PCB Copper,  $T_A = 50^{\circ}\text{C}$ Figure 24. 300 mm<sup>2</sup> of PCB Copper,  $T_A = 50^{\circ}\text{C}$

## OUTLINE DIMENSIONS

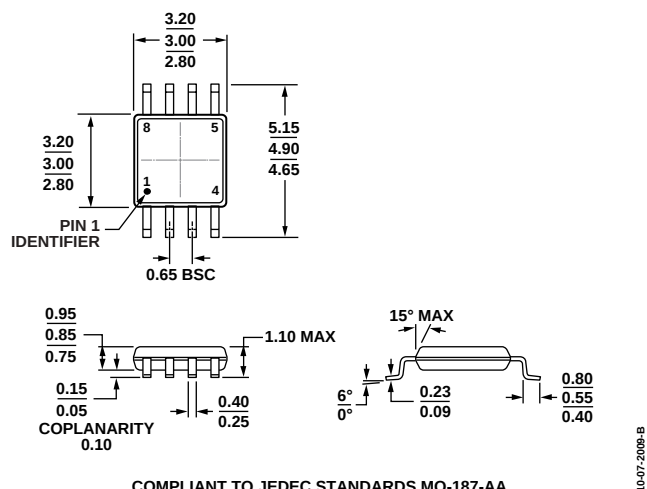


Figure 27. 8-Lead Mini Small Outline Package [MSOP]  
(RM-8)

Dimensions shown in millimeters

## ORDERING GUIDE

| Model <sup>1</sup>  | Temperature Range | Output Voltage (V) | Package Description | Package Option | Branding |
|---------------------|-------------------|--------------------|---------------------|----------------|----------|
| ADP1720TRMZ5-EP     | -55°C to +125°C   | 5                  | 8-Lead MSOP         | RM-8           | LKU      |
| ADP1720TRMZ5-EP-R7  | -55°C to +125°C   | 5                  | 8-Lead MSOP         | RM-8           | LKU      |
| ADP1720TRMZ3.3-EP   | -55°C to +125°C   | 3.3                | 8-Lead MSOP         | RM-8           | LKT      |
| ADP1720TRMZ3.3-EPR7 | -55°C to +125°C   | 3.3                | 8-Lead MSOP         | RM-8           | LKT      |
| ADP1720TRMZ-EP      | -55°C to +125°C   | 1.225 to 5         | 8-Lead MSOP         | RM-8           | LG2      |
| ADP1720TRMZ-EP-R7   | -55°C to +125°C   | 1.225 to 5         | 8-Lead MSOP         | RM-8           | LG2      |

<sup>1</sup> Z = RoHS Compliant Part.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ View [ADP1720TRMZ5-EP-R7](#) on WIN SOURCE
- ⊖ [Analog Devices Inc.](#) Information

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