

Voltage References

| Mfr.'s Type |             |                | Description                                  | V <sub>ref</sub> (V) | I <sub>range</sub> | Drift (ppm/°C) | V Tolerance (%) | No. of Leads | Temperature Range (°C) |
|-------------|-------------|----------------|----------------------------------------------|----------------------|--------------------|----------------|-----------------|--------------|------------------------|
| Metal Can   | SOIC        | TO-92          |                                              |                      |                    |                |                 |              |                        |
| LM113H      | —           | —              | Reference Diode                              | 1.20                 | 500 µA to 20 mA    | 100            | ±5.0            | H2           | −55 to +125            |
| LM138AH-2.5 | —           | —              | Reference Diode                              | 2.50                 | 400 µA to 10 mA    | 72             | ±1.0            | H3/4         | −55 to +125            |
| LM138H-2.5  | —           | —              | Reference Diode                              | 2.50                 | 400 µA to 10 mA    | 72             | ±2.0            | H3/4         | −55 to +125            |
| LM238AH-5.0 | —           | —              | Reference Diode                              | 5.00                 | 400 µA to 10 mA    | 72             | ±1.0            | H3/4         | −40 to +85             |
| LM236H-2.5  | —           | —              | Reference Diode                              | 2.50                 | 400 µA to 10 mA    | 72             | ±2.0            | H3/4         | −40 to +85             |
| —           | —           | LM285BXZ-2.5   | Micropower Voltage Reference Diode           | 2.50                 | 10 µA to 20 mA     | 30             | ±1.0            | Z3           | −40 to +85             |
| —           | —           | LM285BYZ-2.5   | Micropower Voltage Reference Diode           | 2.50                 | 10 µA to 20 mA     | 50             | ±1.0            | Z3           | −40 to +85             |
| —           | LM285M-1.2  | —              | Micropower Voltage Reference Diode           | 1.20                 | 10 µA to 20 mA     | 150            | ±1.0            | M8           | −55 to +125            |
| LM313H      | —           | —              | Reference Diode                              | 1.20                 | 500 µA to 20 mA    | 1100           | ±5.0            | H2           | −40 to +85             |
| —           | —           | LM329BZ        | Precision Reference                          | 6.90                 | 600 µA to 15 mA    | 20             | ±5.0            | Z3           | 0 to +70               |
| —           | —           | LM329CZ        | Precision Reference                          | 6.90                 | 600 µA to 15 mA    | 50             | ±5.0            | Z3           | 0 to +70               |
| —           | —           | LM329DZ        | Precision Reference                          | 6.90                 | 600 µA to 15 mA    | 100            | ±5.0            | Z3           | 0 to +70               |
| —           | LM336BM-2.5 | LM336BZ-2.5    | Reference Diode                              | 2.50                 | 400 µA to 10 mA    | 54             | ±2.0            | M8, Z3       | 0 to +70               |
| —           | LM336BM-5.0 | LM336BZ-5.0    | Reference Diode                              | 5.00                 | 400 µA to 10 mA    | 54             | ±2.0            | M8, Z3       | 0 to +70               |
| —           | —           | LM336Z-2.5     | Reference Diode                              | 2.50                 | 400 µA to 10 mA    | 54             | ±4.0            | Z3           | 0 to +70               |
| —           | LM336M-5.0  | LM336Z-5.0     | Reference Diode                              | 5.00                 | 400 µA to 10 mA    | 54             | ±4.0            | M8, Z3       | 0 to +70               |
| —           | —           | LM385BZ-1.2    | Micropower Voltage Reference Diode           | 1.20                 | 10 µA to 20 mA     | 150            | ±1.0            | Z3           | 0 to +70               |
| —           | LM385BM-2.5 | LM385BZ-2.5    | Micropower Voltage Reference Diode           | 2.50                 | 10 µA to 20 mA     | 150            | ±1.0            | M8, Z3       | 0 to +70               |
| —           | —           | LM385M         | Adjustable Micropower Voltage Reference      | 1.24 to 5.3          | 10 µA to 20 mA     | 150            | ±1.0            | M8, Z3       | 0 to +70               |
| —           | LM385M-1.2  | LM385Z-1.2     | Micropower Voltage Reference Diode           | 1.20                 | 10 µA to 20 mA     | 150            | ±1.0            | M8, Z3       | 0 to +70               |
| —           | LM385M-2.5  | LM385Z-2.5     | Micropower Voltage Reference Diode           | 2.50                 | 10 µA to 20 mA     | 150            | ±1.0            | M8, Z3       | 0 to +70               |
| LM399H      | —           | —              | Precision Reference                          | 7.00                 | 500 µA to 15 mA    | 2, 5, 50       | ±5.0            | H4           | 0 to +70               |
| —           | —           | LM4040AIZ-10.0 | Precision Micropower Shunt Voltage Reference | 10.00                | 60 µA to 15 mA     | 100            | ±0.1            | Z3           | −40 to +85             |
| —           | —           | LM4040AIZ-2.5  | Precision Micropower Shunt Voltage Reference | 2.50                 | 60 µA to 15 mA     | 100            | ±0.1            | Z3           | −40 to +85             |
| —           | —           | LM4040AIZ-5.0  | Precision Micropower Shunt Voltage Reference | 5.00                 | 60 µA to 15 mA     | 100            | ±0.1            | Z3           | −40 to +85             |

Temperature Sensors

| Mfr.'s Type |          | Description                             | V <sub>CC</sub> (V) | Accuracy T (min.) to T (max.) Uncalibrated | Output Scale | No. of Leads | Temperature Range (°C) |
|-------------|----------|-----------------------------------------|---------------------|--------------------------------------------|--------------|--------------|------------------------|
| Metal Can   | TO-92    |                                         |                     |                                            |              |              |                        |
| LM34CH      | LM34CZ   | Precision Fahrenheit Temperature Sensor | 5 to 30             | ±3.0°F                                     | 10 mV/°F     | H3/4, Z3     | −40° to 230°F          |
| LM34CAH     | LM34CAZ  | Precision Fahrenheit Temperature Sensor | 5 to 30             | ±2.0°F                                     | 10 mV/°F     | H3/4, Z3     | −40° to 230°F          |
| LM34DH      | LM34DZ   | Precision Fahrenheit Temperature Sensor | 5 to 30             | ±4.0°F                                     | 10 mV/°F     | H3/4, Z3     | 32° to 212°F           |
| LM35CH      | LM35CZ   | Precision Centigrade Temperature Sensor | 5 to 30             | ±1.5°C                                     | 10 mV/°F     | H3/4, Z3     | −40° to 110°C          |
| —           | LM35CAZ  | Precision Centigrade Temperature Sensor | 5 to 30             | ±1.0°C                                     | 10 mV/°F     | Z3           | −40° to 110°C          |
| LM35DH      | LM35DZ   | Precision Centigrade Temperature Sensor | 4 to 10             | ±2.0°C                                     | 10 mV/°F     | H3/4, Z3     | 0° to 100°C            |
| LM135H      | —        | Precision Centigrade Temperature Sensor | 1 to 40             | ±1.3°C                                     | 10 mV/°K     | H3/4         | −55° to 150°C          |
| LM135AH     | —        | Precision Centigrade Temperature Sensor | 1 to 40             | ±1.3°C                                     | 10 mV/°K     | H3/4         | −55° to 150°C          |
| —           | LM234Z-3 | 3-Terminal Adjustable Current Source    | 5 to 40             | ±3.0°C                                     | {(TFMV)}     | Z3           | −25° to 100°C          |
| LM334H      | LM334Z   | 3-Terminal Adjustable Current Source    | 5 to 40             | ±3.0°C                                     | {(TFMV)}     | H3/4, Z3     | 0° to 70°C             |
| LM335AH     | LM335AZ  | Precision Temperature Sensor            | 1 to 40             | ±1.3°C                                     | 10 mV/°K     | H3/4, Z3     | −40° to 100°C          |
| —           | LM335Z   | Precision Temperature Sensor            | 1 to 40             | ±1.3°C                                     | 10 mV/°K     | Z3           | −40° to 100°C          |

Simple Switcher™ Power Converters

| Mfr.'s Type   |               | Current (A) | Standard Operating Modes | Input Voltage (V) | Output Voltage (V) | Switching Frequency (kHz) | Efficiency (%) | No. of Leads | Temperature Range (T <sub>J</sub> °C) |
|---------------|---------------|-------------|--------------------------|-------------------|--------------------|---------------------------|----------------|--------------|---------------------------------------|
| PDIP          | TO-220        |             |                          |                   |                    |                           |                |              |                                       |
| LM2574HVN-5.0 | —             | 0.5         | Step-Down                | 4.0 to 60         | 5.00               | 52                        | 77 to 88       | N8           | −40 to +125                           |
| LM2574N-15    | —             | 0.5         | Step-Down                | 4.0 to 40         | 15.00              | 52                        | 77 to 88       | N8           | −40 to +125                           |
| LM2574N-5.0   | —             | 0.5         | Step-Down                | 4.0 to 40         | 5.00               | 52                        | 77 to 88       | N8           | −40 to +125                           |
| —             | LM2575HVT-12  | 1.0         | Step-Down                | 4.0 to 60         | 12.00              | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2575HVT-5.0 | 1.0         | Step-Down                | 4.0 to 60         | 5.00               | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2575HVT-ADJ | 1.0         | Step-Down                | 4.0 to 60         | 1.23 to 57         | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2575T-12    | 1.0         | Step-Down                | 4.0 to 40         | 12.00              | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2575T-15    | 1.0         | Step-Down                | 4.0 to 40         | 15.00              | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2575T-5.0   | 1.0         | Step-Down                | 4.0 to 40         | 5.00               | 52                        | 77 to 88       | N16, T5      | −40 to +125                           |
| LM2575N-ADJ   | LM2575T-ADJ   | 1.0         | Step-Down                | 4.0 to 40         | 1.23 to 37         | 52                        | 77 to 88       | N16, T5      | −40 to +125                           |
| —             | LM2576T-12    | 3.0         | Step-Down                | 4.0 to 40         | 12.00              | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2576T-5.0   | 3.0         | Step-Down                | 4.0 to 40         | 5.00               | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2576T-ADJ   | 3.0         | Step-Down                | 4.0 to 40         | 1.23 to 37         | 52                        | 77 to 88       | T5           | −40 to +125                           |
| —             | LM2577T-12    | 3.0         | Step-Up, Flyback         | 3.5 to 40         | 12.00              | 52                        | 80             | N16, T5      | −40 to +125                           |
| —             | LM2577T-15    | 3.0         | Step-Up, Flyback         | 3.5 to 40         | 15.00              | 52                        | 80             | T5           | −40 to +125                           |
| LM2577N-ADJ   | LM2577T-ADJ   | 3.0         | Step-Up, Flyback         | 3.5 to 40         | Adj.               | 52                        | 80             | N16, T5      | −40 to +125                           |

Switching Regulators

| Mfr.'s Type |           | Output Current (A) | Standard Operating Modes            | Input Voltage (V) | Output Voltage (V) | Switching Frequency (kHz) | Efficiency (%) | No. of Leads | Temperature Range (T <sub>J</sub> °C) |
|-------------|-----------|--------------------|-------------------------------------|-------------------|--------------------|---------------------------|----------------|--------------|---------------------------------------|
| SOIC        | PDIP      |                    |                                     |                   |                    |                           |                |              |                                       |
| —           | LM78S40CN | 1.50               | Step-Up, Step-Down, Invert          | 2.5 to 50         | Adjustable         | 0.1 to 100                | 75             | N16          | −40 to +125                           |
| —           | LM3578AN  | 0.75               | Step-Up, Step-Down, Flyback, Invert | 2.0 to 40         | Adjustable         | 0.001 to 100              | —              | N8           | 0 to +125                             |
| —           | LM2524DN  | 0.20               | Step-Up, Step-Down, Flyback, Invert | 55.0 to 40        | Adjustable         | 1 to 550                  | —              | N16          | −40 to +125                           |
| LM3524DM    | —         | 0.20               | Step-Up, Step-Down, Flyback, Invert | 5.0 to 40         | Adjustable         | 1 to 350                  | —              | M16          | 0 to +125                             |
| —           | LMC7660IN | 0.05               | Invert                              | 1.5 to 10         | −1.5 to −10        | 10                        | 90             | N8           | −40 to +125                           |

Sample/Hold and Voltage to Frequency Converters

| Mfr.'s Type |         | Description                              | V <sub>CC</sub> (V) | Acquisition (ns) | Accuracy (%) | No. of Leads | Temperature Range (°C) |
|-------------|---------|------------------------------------------|---------------------|------------------|--------------|--------------|------------------------|
| Metal Can   | PDIP    |                                          |                     |                  |              |              |                        |
| LF398H      | LF398N  | Monolithic Sample and Hold Circuit       | ±(5 to 18)          | 4000             | 0.02         | H8, N8       | 0 to +70               |
| —           | LF398AN | Monolithic Sample and Hold Circuit       | ±(5 to 18)          | 4000             | 0.01         | N8           | 0 to +70               |
| —           | LM231N  | Precision Voltage-to-Frequency Converter | —                   | —                | —            | N8           | −20 to +85             |
| —           | LM331N  | Precision Voltage-to-Frequency Converter | —                   | —                | —            | N8           | 0 to +70               |