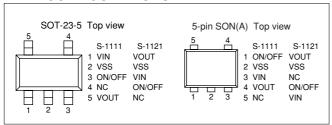
HIGH RIPPLE REJECTION AND LOW DROPOUT VOLTAGE REGULATOR

S-1111/1121 series

The S-1111/1121 series is a positive voltage regulator that features low dropout voltage, high output voltage accuracy, and low current consumption, and has been developed using CMOS technology. Since a low on-resistance transistor is incorporated, the dropout voltage is small, and a large output current can be obtained. A built-in overcurrent protection circuit prevents the load current from exceeding the current capacitance of the output transistor. Moreover, the battery life can be extended by using the power-on/off circuit. Small SOT-23-5 and 5-pin SON(A) packages realize high-density mounting. The lineup includes the S-1111 and S-1121 series, which differ in pin configuration.

■ PIN CONFIGURATIONS



■ FEATURES

- · Low current consumption
 - 35 μA typ., 65 μA max. (during operation) 0.1 μA typ., 1 μA max. (during power-off)
- Output voltage: 1.5 to 5.5 V (selectable in 0.1 V steps)
- Output voltage accuracy: ±1.0%
- · Output current
 - 150 mA capable (product with 3.0 V output, when VIN = 4 V)
- · Dropout voltage
 - 200 mV typ. (product with 3.0 V output, when IOUT = 100 mA)
- Ripple rejection rate: 70 dB typ. (f = 1 kHz, Vout = 3 V)
- Built-in power-off circuit: Selection of positive/negative logic is possible.
- · Built-in overcurrent protection circuit

■ APPLICATIONS

- · Constant voltage power supply for battery-powered devices
- · Constant voltage power supply for communication devices
- · Constant voltage power supply for household electrical appliances
- · Constant voltage power supply for cellular phones

■ SELECTION GUIDE

| | S-1111 series | | S-1121 series | | Dropout voltage | Output current | Current consumption |
|----------------|--------------------|--------------------|--------------------|--------------------|-----------------|--------------------|-----------------------------|
| Output voltage | SOT-23-5 | 5-pin SON(A) | SOT-23-5 | 5-pin SON(A) | (typ.) | (min.) | during operation (typ.) |
| | (3000/reel) | (3000/reel) | (3000/reel) | (3000/reel) | (Iout=100mA) | (VIN≥VOUT(S)+1.0V) | (VIN=Vout(s)+1.0V, no load) |
| 1.5V ± 1.0% | S-1111B15MC-NYA-TF | S-1111B15PN-NYA-TF | S-1121B15MC-N2A-TF | S-1121B15PN-N2A-TF | 0.60V | 150mA | 35μΑ |
| 1.6V ± 1.0% | S-1111B16MC-NYB-TF | S-1111B16PN-NYB-TF | S-1121B16MC-N2B-TF | S-1121B16PN-N2B-TF | 0.60V | 150mA | 35μΑ |
| 1.7V ± 1.0% | S-1111B17MC-NYC-TF | S-1111B17PN-NYC-TF | S-1121B17MC-N2C-TF | S-1121B17PN-N2C-TF | 0.60V | 150mA | 35μΑ |
| 1.8V ± 1.0% | S-1111B18MC-NYD-TF | S-1111B18PN-NYD-TF | S-1121B18MC-N2D-TF | S-1121B18PN-N2D-TF | 0.60V | 150mA | 35μΑ |
| 1.9V ± 1.0% | S-1111B19MC-NYE-TF | S-1111B19PN-NYE-TF | S-1121B19MC-N2E-TF | S-1121B19PN-N2E-TF | 0.60V | 150mA | 35μΑ |
| 2.0V ± 1.0% | S-1111B20MC-NYF-TF | S-1111B20PN-NYF-TF | S-1121B20MC-N2F-TF | S-1121B20PN-N2F-TF | 0.35V | 150mA | 35μΑ |
| 2.1V ± 1.0% | S-1111B21MC-NYG-TF | S-1111B21PN-NYG-TF | S-1121B21MC-N2G-TF | S-1121B21PN-N2G-TF | 0.35V | 150mA | 35μΑ |
| 2.2V ± 1.0% | S-1111B22MC-NYH-TF | S-1111B22PN-NYH-TF | S-1121B22MC-N2H-TF | S-1121B22PN-N2H-TF | 0.35V | 150mA | 35μΑ |
| 2.3V ± 1.0% | S-1111B23MC-NYI-TF | S-1111B23PN-NYI-TF | S-1121B23MC-N2I-TF | S-1121B23PN-N2I-TF | 0.35V | 150mA | 35μΑ |
| 2.4V ± 1.0% | S-1111B24MC-NYJ-TF | S-1111B24PN-NYJ-TF | S-1121B24MC-N2J-TF | S-1121B24PN-N2J-TF | 0.35V | 150mA | 35μΑ |
| 2.5V ± 1.0% | S-1111B25MC-NYK-TF | S-1111B25PN-NYK-TF | S-1121B25MC-N2K-TF | S-1121B25PN-N2K-TF | 0.24V | 150mA | 35μΑ |
| 2.6V ± 1.0% | S-1111B26MC-NYL-TF | S-1111B26PN-NYL-TF | S-1121B26MC-N2L-TF | S-1121B26PN-N2L-TF | 0.24V | 150mA | 35μΑ |
| 2.7V ± 1.0% | S-1111B27MC-NYM-TF | S-1111B27PN-NYM-TF | S-1121B27MC-N2M-TF | S-1121B27PN-N2M-TF | 0.24V | 150mA | 35μΑ |
| 2.8V ± 1.0% | S-1111B28MC-NYN-TF | S-1111B28PN-NYN-TF | S-1121B28MC-N2N-TF | S-1121B28PN-N2N-TF | 0.20V | 150mA | 35μΑ |
| 2.9V ± 1.0% | S-1111B29MC-NYO-TF | S-1111B29PN-NYO-TF | S-1121B29MC-N2O-TF | S-1121B29PN-N2O-TF | 0.20V | 150mA | 35μΑ |
| 3.0V ± 1.0% | S-1111B30MC-NYP-TF | S-1111B30PN-NYP-TF | S-1121B30MC-N2P-TF | S-1121B30PN-N2P-TF | 0.20V | 150mA | 35μΑ |
| 3.1V ± 1.0% | S-1111B31MC-NYQ-TF | S-1111B31PN-NYQ-TF | S-1121B31MC-N2Q-TF | S-1121B31PN-N2Q-TF | 0.20V | 150mA | 35μΑ |
| 3.2V ± 1.0% | S-1111B32MC-NYR-TF | S-1111B32PN-NYR-TF | S-1121B32MC-N2R-TF | S-1121B32PN-N2R-TF | 0.20V | 150mA | 35μΑ |
| 3.3V ± 1.0% | S-1111B33MC-NYS-TF | S-1111B33PN-NYS-TF | S-1121B33MC-N2S-TF | S-1121B33PN-N2S-TF | 0.20V | 150mA | 35μΑ |
| 3.4V ± 1.0% | S-1111B34MC-NYT-TF | S-1111B34PN-NYT-TF | S-1121B34MC-N2T-TF | S-1121B34PN-N2T-TF | 0.17V | 150mA | 35μΑ |
| 3.5V ± 1.0% | S-1111B35MC-NYU-TF | S-1111B35PN-NYU-TF | S-1121B35MC-N2U-TF | S-1121B35PN-N2U-TF | 0.17V | 150mA | 35μΑ |
| 3.6V ± 1.0% | S-1111B36MC-NYV-TF | S-1111B36PN-NYV-TF | S-1121B36MC-N2V-TF | S-1121B36PN-N2V-TF | 0.17V | 150mA | 35μΑ |
| 3.7V ± 1.0% | S-1111B37MC-NYW-TF | S-1111B37PN-NYW-TF | S-1121B37MC-N2W-TF | S-1121B37PN-N2W-TF | 0.17V | 150mA | 35μΑ |
| 3.8V ± 1.0% | S-1111B38MC-NYX-TF | S-1111B38PN-NYX-TF | S-1121B38MC-N2X-TF | S-1121B38PN-N2X-TF | 0.17V | 150mA | 35μΑ |
| 3.9V ± 1.0% | S-1111B39MC-NYY-TF | S-1111B39PN-NYY-TF | S-1121B39MC-N2Y-TF | S-1121B39PN-N2Y-TF | 0.17V | 150mA | 35μΑ |
| 4.0V ± 1.0% | S-1111B40MC-NYZ-TF | S-1111B40PN-NYZ-TF | S-1121B40MC-N2Z-TF | S-1121B40PN-N2Z-TF | 0.17V | 150mA | 35μΑ |
| 4.1V ± 1.0% | S-1111B41MC-NZA-TF | S-1111B41PN-NZA-TF | S-1121B41MC-N3A-TF | S-1121B41PN-N3A-TF | 0.17V | 150mA | 35μΑ |
| 4.2V ± 1.0% | S-1111B42MC-NZB-TF | S-1111B42PN-NZB-TF | S-1121B42MC-N3B-TF | S-1121B42PN-N3B-TF | 0.17V | 150mA | 35μΑ |
| 4.3V ± 1.0% | S-1111B43MC-NZC-TF | S-1111B43PN-NZC-TF | S-1121B43MC-N3C-TF | S-1121B43PN-N3C-TF | 0.17V | 150mA | 35μΑ |
| 4.4V ± 1.0% | S-1111B44MC-NZD-TF | S-1111B44PN-NZD-TF | S-1121B44MC-N3D-TF | S-1121B44PN-N3D-TF | 0.17V | 150mA | 35μΑ |
| 4.5V ± 1.0% | S-1111B45MC-NZE-TF | S-1111B45PN-NZE-TF | S-1121B45MC-N3E-TF | S-1121B45PN-N3E-TF | 0.17V | 150mA | 35μΑ |
| 4.6V ± 1.0% | S-1111B46MC-NZF-TF | S-1111B46PN-NZF-TF | S-1121B46MC-N3F-TF | S-1121B46PN-N3F-TF | 0.17V | 150mA | 35μΑ |
| 4.7V ± 1.0% | S-1111B47MC-NZG-TF | S-1111B47PN-NZG-TF | S-1121B47MC-N3G-TF | S-1121B47PN-N3G-TF | 0.17V | 150mA | 35μΑ |
| 4.75V ± 1.0% | - | - | S-1121B4HMC-N3P-TF | - | 0.17V | 150mA | 35μΑ |
| 4.8V ± 1.0% | S-1111B48MC-NZH-TF | S-1111B48PN-NZH-TF | S-1121B48MC-N3H-TF | S-1121B48PN-N3H-TF | 0.17V | 150mA | 35μΑ |
| 4.9V ± 1.0% | S-1111B49MC-NZI-TF | S-1111B49PN-NZI-TF | S-1121B49MC-N3I-TF | S-1121B49PN-N3I-TF | 0.17V | 150mA | 35μΑ |
| 5.0V ± 1.0% | S-1111B50MC-NZJ-TF | S-1111B50PN-NZJ-TF | S-1121B50MC-N3J-TF | S-1121B50PN-N3J-TF | 0.17V | 150mA | 35μΑ |
| 5.1V ± 1.0% | S-1111B51MC-NZK-TF | S-1111B51PN-NZK-TF | S-1121B51MC-N3K-TF | S-1121B51PN-N3K-TF | 0.17V | 150mA | 35μΑ |
| 5.2V ± 1.0% | S-1111B52MC-NZL-TF | S-1111B52PN-NZL-TF | S-1121B52MC-N3L-TF | S-1121B52PN-N3L-TF | 0.17V | 150mA | 35μΑ |
| 5.3V ± 1.0% | S-1111B53MC-NZM-TF | S-1111B53PN-NZM-TF | S-1121B53MC-N3M-TF | S-1121B53PN-N3M-TF | 0.17V | 150mA | 35μΑ |
| 5.4V ± 1.0% | S-1111B54MC-NZN-TF | S-1111B54PN-NZN-TF | S-1121B54MC-N3N-TF | S-1121B54PN-N3N-TF | 0.17V | 150mA | 35μΑ |
| 5.5V ± 1.0% | S-1111B55MC-NZO-TF | S-1111B55PN-NZO-TF | S-1121B55MC-N3O-TF | S-1121B55PN-N3O-TF | 0.17V | 150mA | 35μΑ |

Remark Please contact our sales office if you desire a product with an inverted ON/OFF pin logic.