# Microprocessor Reset Circuits

# ADM1810-ADM1813/ADM1815-ADM1818

## FEATURES

- **Reliable low cost voltage monitor with reset output**
- **Suitable for monitoring 2.5 V, 3 V, 3.3 V, and 5 V power supply voltages**
- **Reset threshold levels: 4.62 V, 4.35 V, 3.06 V, 2.88 V, 2.55 V, 2.31 V, and 2.18 V typical**
- **Active high and low push-pull output choices: ADM1810, ADM1812, ADM1815, and ADM1817**
- **Open-drain output choices: ADM1811, ADM1813, ADM1816, and ADM1818**
- **Can be used with a manual push-button to generate a reset: ADM1813, ADM1818**
- **Initialization of microprocessor systems with added safety**
- **Available in 3-lead SOT-23 and SC70 packages**

## APPLICATIONS

- **Microprocessor systems**
- **Computers**
- **Controllers**
- **Intelligent instruments**
- **Automotive systems**

## GENERAL DESCRIPTION

The ADM181x range of voltage monitoring circuits is used in any application where an electronic system needs to be reset when a voltage increases above or below a predetermined value.

Because of the reset delay time incorporated into the ADM181x series, these devices provide a safe startup for electronic systems. Before a system initializes, the power supply must stabilize. Using the ADM181x series ensures that there are typically 150 ms for the power supply to stabilize before the system resets and safe system initialization begins.

The ADM181x series of microprocessor reset circuits are available in low cost, space-saving SOT-23 and SC70 packages.

## FUNCTIONAL BLOCK DIAGRAMS

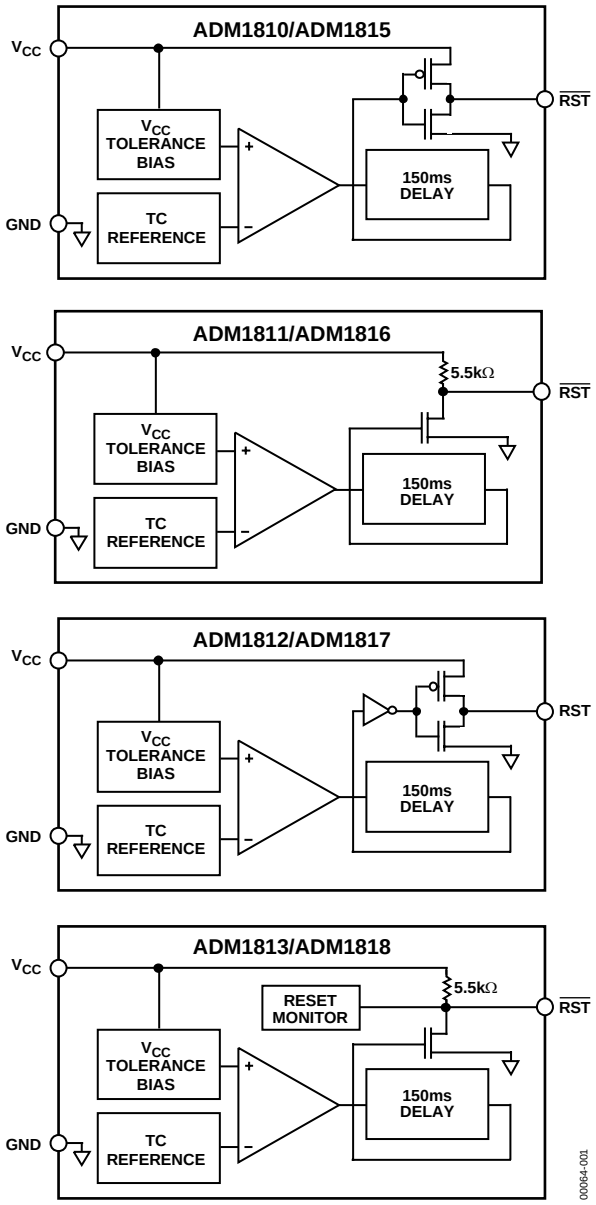



*Figure 1.*

**Rev. D**

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## REVISION HISTORY

**10/05—Rev. C to Rev. D**

Updated Format ..... Universal
Added Figure 3 ..... 5
Changes to Table 3 ..... 5
Updated Outline Dimensions ..... 8
Changes to Ordering Guide ..... 9

**9/03—REV. B to REV. C.**

Added SC70 ..... Universal
Edits to SPECIFICATIONS ..... 2
Edits to ORDERING GUIDE ..... 4
Updated OUTLINE DIMENSIONS ..... 7

**2/03—REV. A to REV. B.**

Edits to FEATURES ..... 1
Deleted Table I ..... 1
Edits to SPECIFICATIONS ..... 2
Edits to ABSOLUTE MAXIMUM RATINGS ..... 3
Edits to ORDERING GUIDE ..... 3
Added Typical Performance Characteristics ..... 4
Edits to ADM1813 AND ADM1818 section ..... 5
Edits to ADM1810, ADM1812, ADM1815, AND ADM1817 section ..... 5
Edits to ADM1811 AND ADM1816 section ..... 5
Updated OUTLINE DIMENSIONS ..... 6

**3/02—REV. 0 to REV. A.**

Addition of Table ..... 1
Edits to ORDERING GUIDE ..... 3
Addition of new text to ADM1813 and ADM1818 section ..... 4

# SPECIFICATIONS

$V_{CC}$ = full operating range, $T_A$ = −40°C to +105°C, unless otherwise noted.

**Table 1.**

| Parameter | Min | Typ | Max | Unit | Conditions/Note |
|---|---|---|---|---|---|
| SUPPLY | | | | | |
| Voltage | 1 | | 5.5 | V | $T_A$ = 0°C to 105°C |
| | 1.2 | | 5.5 | V | $T_A$ = −40°C to +105°C |
| Current | | 9 | 16 | µA | $V_{CC}$ = 5.5 V, $V_{CC}$ > $V_{TH}$, no load |
| | | 4 | 10 | µA | $V_{CC}$ = 3.6 V, $V_{CC}$ > $V_{TH}$, no load |
| OUTPUT CURRENT | | | | | |
| $\overline{RST}$ Output Source Current | | 350 | | µA | $V_{CC}$ ≥ $V_{TH}$ (max), reset not asserted (ADM1810/ADM1815) |
| RST Output Source Current | | 350 | | µA | $V_{CC}$ ≤ $V_{TH}$ (min), reset asserted (ADM1812/ADM1817) |
| $\overline{RST}$ Output Sink Current | 8 | | | mA | $V_{CC}$ ≥ 2.7 V, reset asserted, $V_{OUT}$ = 0.4 V (ADM1810/ADM1811/ADM1813/ ADM1815/ADM1816/ADM1818) |
| RST Output Sink Current | 8 | | | mA | $V_{CC}$ ≥ 2.7 V, reset not asserted, $V_{OUT}$ = 0.4 V (ADM1812/ADM1817) |
| OUTPUT VOLTAGE | $V_{CC}$ − 0.5 | $V_{CC}$ − 0.1 | | V | (ADM1810/ADM1812/ADM1815/ADM1817) @ 0 µA to 500 µA |
| $V_{CC}$ TRIP POINT | | | | | |
| ADM1810-5, ADM1811-5, ADM1812-5, ADM1813-5 | 4.50 | 4.62 | 4.75 | V | |
| ADM1810-10, ADM1811-10, ADM1812-10, ADM1813-10 | 4.25 | 4.35 | 4.49 | V | |
| ADM1815-5, ADM1816-5, ADM1817-5, ADM1818-5 | 2.98 | 3.06 | 3.15 | V | |
| ADM1815-10, ADM1816-10, ADM1817-10, ADM1818-10 | 2.80 | 2.88 | 2.97 | V | |
| ADM1815-20, ADM1816-20, ADM1817-20, ADM1818-20 | 2.47 | 2.55 | 2.64 | V | |
| ADM1815-R23, ADM1816-R23, ADM1817-R23, ADM1818-R23 | 2.25 | 2.31 | 2.37 | V | |
| ADM1815-R22, ADM1816-R22, ADM1817-R22, ADM1818-R22 | 2.12 | 2.18 | 2.25 | V | |
| INTERNAL PULL-UP RESISTOR | | | | | |
| ADM1811/ADM1816 | 3.5 | 5.5 | 7.5 | kΩ | |
| ADM1813/ADM1818 | 3.1 | 5.5 | 7.5 | kΩ | |
| OUTPUT CAPACITANCE | | | 10 | pF | |
| RESET ACTIVE TIME | 100 | 150 | 250 | ms | |
| $V_{CC}$ DETECT TO RESET | | | | | |
| Falling | | 10 | | µs | (ADM1810/ADM1811/ADM1812/ADM1813) |
| | | 10 | | µs | (ADM1815/ADM1816/ADM1817/ADM1818) |
| Rising | 100 | 150 | 250 | ms | $t_R$ = 5 µs |
| PUSH-BUTTON DETECT TO $\overline{RST}$ | 1 | | | µs | (ADM1813/ADM1818) |
| PUSH-BUTTON RESET | 100 | 150 | 250 | ms | (ADM1813/ADM1818) |

# ABSOLUTE MAXIMUM RATINGS

$T_A$ = 25°C, unless otherwise noted.

**Table 2.**

| Parameter | Rating |
|---|---|
| $V_{CC}$ | −0.3 V to +6.0 V |
| Input Current | 20 mA |
| Operating Temperature Range | −40°C to +105°C |
| $\theta_{JA}$ Thermal Impedance, SOT-23 | 270°C/W |
| $\theta_{JA}$ Thermal Impedance, SC70 | 146°C/W |
| Lead Temperature (Soldering, 10 sec) | 300°C |
| Vapor Phase (60 sec) | 215°C |
| Infrared (15 sec) | 220°C |
| Storage Temperature Range | −65°C to +150°C |

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 listed in the operational sections of this specification is not implied. Exposure to absolute maximum ratings for extended periods of time may affect device reliability.

## ESD CAUTION

ESD (electrostatic discharge) sensitive device. Electrostatic charges as high as 4000 V readily accumulate on the human body and test equipment and can discharge without detection. Although this product features proprietary ESD protection circuitry, permanent damage may occur on devices subjected to high energy electrostatic discharges. Therefore, proper ESD precautions are recommended to avoid performance degradation or loss of functionality.



# PIN CONFIGURATIONS AND FUNCTION DESCRIPTIONS

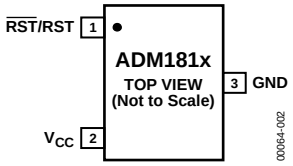



*Figure 2. 3-Lead SOT Pin Configuration*

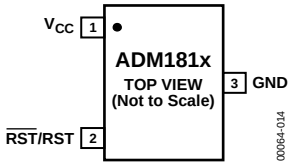



*Figure 3. 3-Lead SC70 Pin Configuration*

**Table 3. Pin Function Descriptions**

| Pin No. (SOT) | Pin No. (SC70) | Mnemonic | Function |
|---|---|---|---|
| 1 | 2 | $\overline{\text{RST}}$/RST | Reset Output. $\overline{\text{RST}}$/RST remains active while $V_{CC}$ is below the reset threshold and remains active for 150 ms typical after $V_{CC}$ rises above the reset threshold. |
| 2 | 1 | $V_{CC}$ | Supply Voltage Being Monitored. |
| 3 | 3 | GND | 0 V Ground Reference for All Signals. |

# TYPICAL PERFORMANCE CHARACTERISTICS

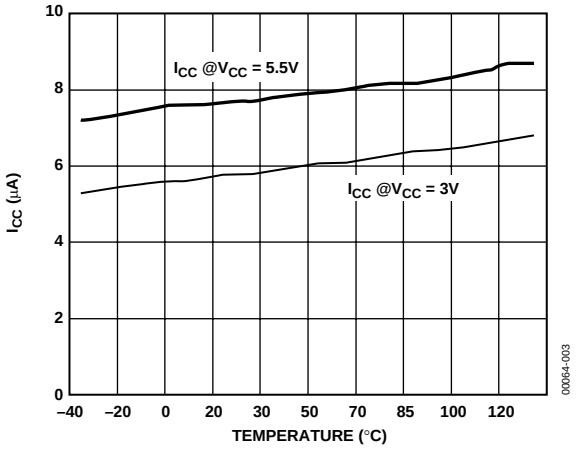



*Figure 4. Supply Current vs. Temperature*

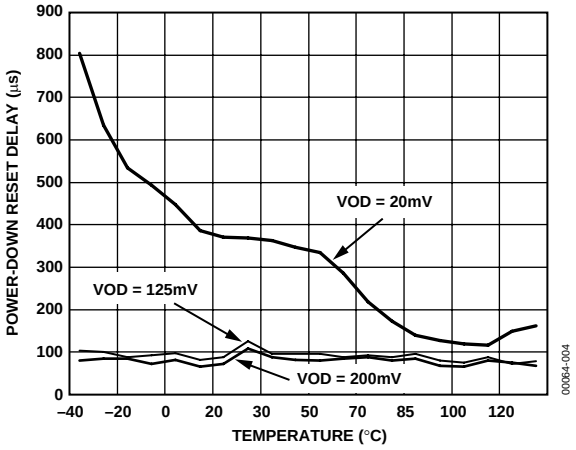



*Figure 5. Power-Down Reset Delay vs. Temperature*

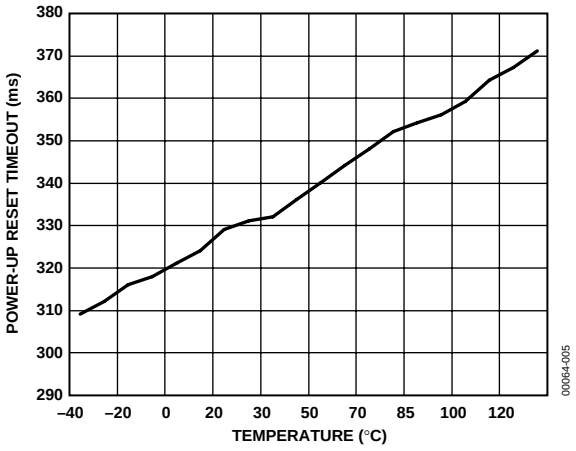



*Figure 6. Power-Up Reset Timeout vs. Temperature*

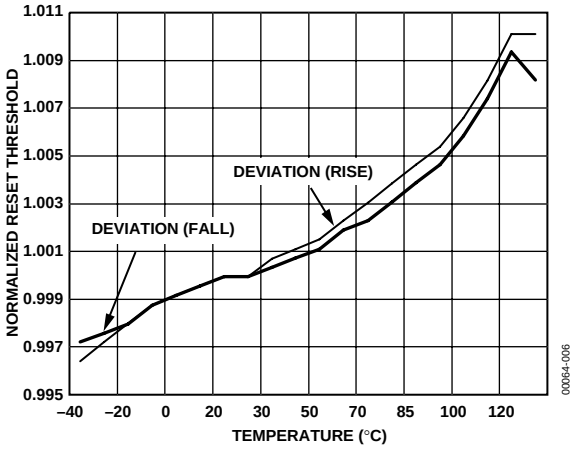



*Figure 7. Normalized Reset Threshold vs. Temperature*

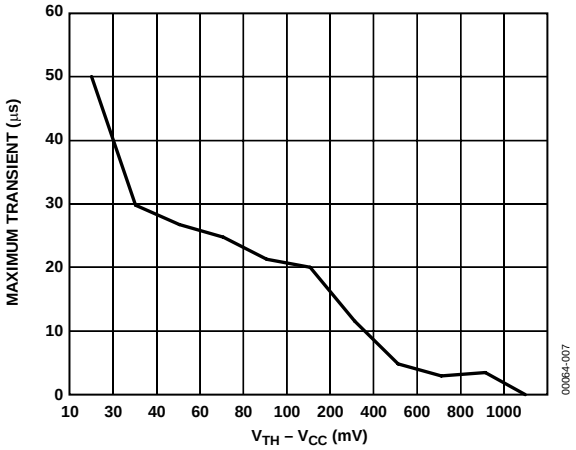



*Figure 8. Maximum Transient Duration Without Causing a Reset Pulse vs. Reset Comparator Overdrive*

# THEORY OF OPERATION

## TIMING DIAGRAMS FOR ALL DEVICES

The following two timing diagrams are valid for ADM1810, ADM1811, ADM1812, ADM1813, ADM1815, ADM1816, ADM1817, and ADM1818.

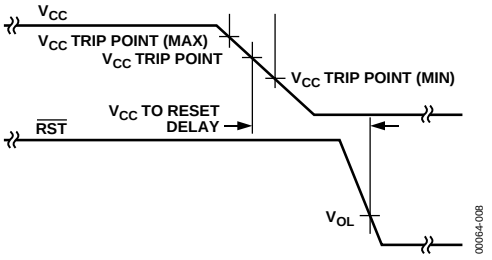



*Figure 9. Power-Down Timing Diagram*

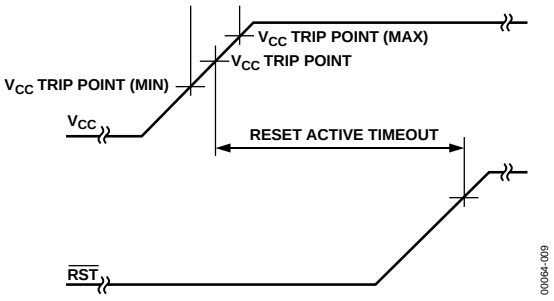



*Figure 10. Power-Up Timing Diagram*

## ADM1813 AND ADM1818

The ADM1813 and ADM1818 are low cost voltage monitoring devices featuring an open-drain output and optional push-button reset function.

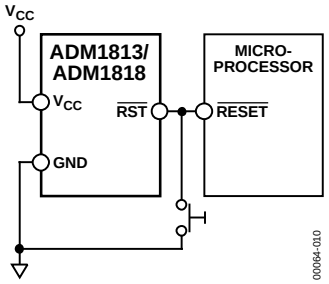



*Figure 11. ADM1813/ADM1818 Typical Application*

An optional push-button reset switch can be connected between $\overline{RST}$ and ground. Pressing this switch pulls the reset output low. If the push-button reset button pulls the $\overline{RST}$ output low for a period greater than 1 µs when the reset button releases the $\overline{RST}$ line to float high, then the $\overline{RST}$ line stays low for another 150 ms typical.

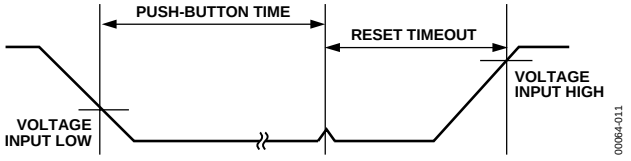



*Figure 12. Push-Button Reset Timing Diagram*

The ADM1818 range has 2.88 V and 2.55 V (typical) trip-point options that allow the user to monitor 3.3 V and 3 V supplies. For 5 V monitoring requirements, the ADM1813 range has 4.62 V and 4.35 V (typical) trip-point options.

## ADM1810, ADM1812, ADM1815, AND ADM1817

The ADM1812 is a 5 V supply monitor with an active high push-pull output and trip-point options of 4.62 V and 4.35 V typical. The ADM1810 is similar to the ADM1812, except that the ADM1810 has an active low push-pull output stage. The ADM1817 is suitable for monitoring 3.3 V, 3 V, and 2.5 V supplies, with an active high push-pull output and trip-point options of 3.06 V, 2.88 V, 2.55 V, 2.31 V, and 2.18 V typical. The ADM1815 is similar to the ADM1817, except that the ADM1815 has an active low push-pull output stage.

The ADM1810/ADM1812/ADM1815/ADM1817 can be connected directly to most microprocessor reset inputs without the need for external components.

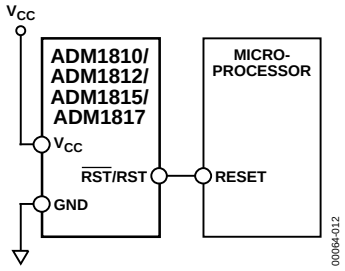



*Figure 13. ADM1810/ADM1812/ADM1815/ADM1817 Typical Application*

## ADM1811 AND ADM1816

The ADM1811 is a 5 V supply monitor with an active low open-drain output and trip-point options of 4.62 V and 4.35 V typical. The ADM1816 also has an active low open-drain output but is suitable for monitoring lower voltage supplies of 3.3 V, 3 V, and 2.5 V.

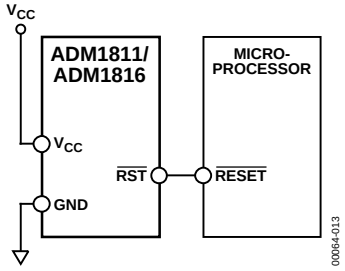



*Figure 14. ADM1811/ADM1816 Typical Application*

# OUTLINE DIMENSIONS

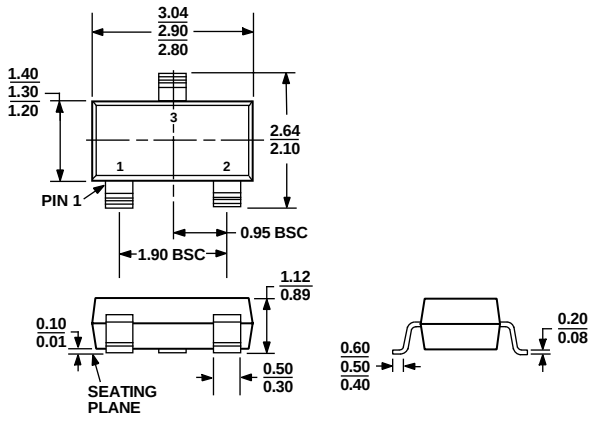



*Figure 15. 3-Lead Small Outline Transistor Package [SOT-23]*
*(RT-3)*
*Dimensions shown in millimeters*

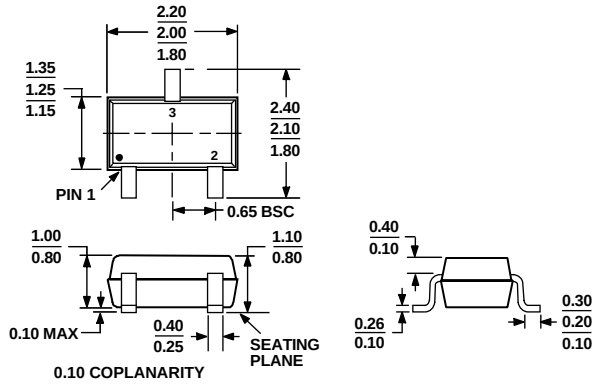



*Figure 16. 3-Lead Thin Shrink Small Outline Transistor Package [SC70]*
*(KS-3)*
*Dimensions shown in millimeters*

## ORDERING GUIDE

| Model[1] | Trip Point | Package Option | Brand |
|---|---|---|---|
| ADM1810-5AKS-REEL | 4.62 V | KS-3 (SC70) | MZV |
| ADM1810-5AKS-REEL7 | 4.62 V | KS-3 (SC70) | MZV |
| ADM1810-5AKSZ-REEL[2] | 4.62 V | KS-3 (SC70) | M4Y |
| ADM1810-5AKSZ-RL7[2] | 4.62 V | KS-3 (SC70) | M4Y |
| ADM1810-5ART-REEL | 4.62 V | RT-3 (SOT-23) | MZV |
| ADM1810-5ART-REEL7 | 4.62 V | RT-3 (SOT-23) | MZV |
| ADM1810-5ARTZ-REEL[2] | 4.62 V | RT-3 (SOT-23) | M4Y |
| ADM1810-5ARTZ-RL7[2] | 4.62 V | RT-3 (SOT-23) | M4Y |
| ADM1810-10AKS-REEL | 4.35 V | KS-3 (SC70) | MZT |
| ADM1810-10AKS-REEL7 | 4.35 V | KS-3 (SC70) | MZT |
| ADM1810-10AKSZ-RL[2] | 4.35 V | KS-3 (SC70) | M4Z |
| ADM1810-10AKSZ-RL7[2] | 4.35 V | KS-3 (SC70) | M4Z |
| ADM1810-10ART-REEL | 4.35 V | RT-3 (SOT-23) | MZT |
| ADM1810-10ART-REEL7 | 4.35 V | RT-3 (SOT-23) | MZT |
| ADM1810-10ARTZ-RL[2] | 4.35 V | RT-3 (SOT-23) | M4Z |
| ADM1810-10ARTZ-RL7[2] | 4.35 V | RT-3 (SOT-23) | M4Z |
| ADM1811-5AKS-REEL | 4.62 V | KS-3 (SC70) | M1V |
| ADM1811-5AKS-RL7 | 4.62 V | KS-3 (SC70) | M1V |
| ADM1811-5AKSZ-REEL[2] | 4.62 V | KS-3 (SC70) | M6Z |
| ADM1811-5AKSZ-RL7[2] | 4.62 V | KS-3 (SC70) | M6Z |
| ADM1811-5ART-REEL | 4.62 V | RT-3 (SOT-23) | M1V |
| ADM1811-5ART-REEL7 | 4.62 V | RT-3 (SOT-23) | M1V |
| ADM1811-5ARTZ-REEL[2] | 4.62 V | RT-3 (SOT-23) | M6Z |
| ADM1811-5ARTZ-RL7[2] | 4.62 V | RT-3 (SOT-23) | M6Z |
| ADM1811-10AKS-REEL | 4.35 V | KS-3 (SC70) | M1T |
| ADM1811-10AKS-RL7 | 4.35 V | KS-3 (SC70) | M1T |
| ADM1811-10AKSZ-RL[2] | 4.35 V | KS-3 (SC70) | M70 |
| ADM1811-10AKSZ-RL7[2] | 4.35 V | KS-3 (SC70) | M70 |
| ADM1811-10ART-REEL | 4.35 V | RT-3 (SOT-23) | M1T |
| ADM1811-10ART-RL7 | 4.35 V | RT-3 (SOT-23) | M1T |
| ADM1811-10ARTZ-RL[2] | 4.35 V | RT-3 (SOT-23) | M70 |
| ADM1811-10ARTZ-RL7[2] | 4.35 V | RT-3 (SOT-23) | M70 |
| ADM1812-5AKS-REEL | 4.62 V | KS-3 (SC70) | MTV |
| ADM1812-5AKS-RL7 | 4.62 V | KS-3 (SC70) | MTV |
| ADM1812-5AKSZ-REEL[2] | 4.62 V | KS-3 (SC70) | M72 |
| ADM1812-5AKSZ-RL7[2] | 4.62 V | KS-3 (SC70) | M72 |
| ADM1812-5ART-REEL | 4.62 V | RT-3 (SOT-23) | MTV |
| ADM1812-5ART-REEL7 | 4.62 V | RT-3 (SOT-23) | MTV |
| ADM1812-5ARTZ-REEL[2] | 4.62 V | RT-3 (SOT-23) | M72 |
| ADM1812-5ARTZ-RL7[2] | 4.62 V | RT-3 (SOT-23) | M72 |
| ADM1812-10AKS-REEL | 4.35 V | KS-3 (SC70) | MTT |
| ADM1812-10AKS-RL7 | 4.35 V | KS-3 (SC70) | MTT |
| ADM1812-10AKSZ-RL[2] | 4.35 V | KS-3 (SC70) | M71 |
| ADM1812-10AKSZ-RL7[2] | 4.35 V | KS-3 (SC70) | M71 |
| ADM1812-10ART-REEL | 4.35 V | RT-3 (SOT-23) | MTT |
| ADM1812-10ART-RL7 | 4.35 V | RT-3 (SOT-23) | MTT |
| ADM1812-10ARTZ-RL[2] | 4.35 V | RT-3 (SOT-23) | M71 |
| ADM1812-10ARTZ-RL7[2] | 4.35 V | RT-3 (SOT-23) | M71 |

| Model[1] | Trip Point | Package Option | Brand |
|---|---|---|---|
| ADM1813-5AKS-REEL | 4.62 V | KS-3 (SC70) | M3V |
| ADM1813-5AKS-RL7 | 4.62 V | KS-3 (SC70) | M3V |
| ADM1813-5AKSZ-REEL[2] | 4.62 V | KS-3 (SC70) | M6X |
| ADM1813-5AKSZ-RL7[2] | 4.62 V | KS-3 (SC70) | M6X |
| ADM1813-5ART-RL | 4.62 V | RT-3 (SOT-23) | M3V |
| ADM1813-5ART-RL7 | 4.62 V | RT-3 (SOT-23) | M3V |
| ADM1813-5ARTZ-RL[2] | 4.62 V | RT-3 (SOT-23) | M6X |
| ADM1813-5ARTZ-RL7[2] | 4.62 V | RT-3 (SOT-23) | M6X |
| ADM1813-10AKS-REEL | 4.35 V | KS-3 (SC70) | M3T |
| ADM1813-10AKS-RL7 | 4.35 V | KS-3 (SC70) | M3T |
| ADM1813-10AKSZ-RL[2] | 4.35 V | KS-3 (SC70) | M6Y |
| ADM1813-10AKSZ-RL7[2] | 4.35 V | KS-3 (SC70) | M6Y |
| ADM1813-10ART-REEL | 4.35 V | RT-3 (SOT-23) | M3T |
| ADM1813-10ART-RL7 | 4.35 V | RT-3 (SOT-23) | M3T |
| ADM1813-10ARTZ-RL[2] | 4.35 V | RT-3 (SOT-23) | M6Y |
| ADM1813-10ARTZ-RL7[2] | 4.35 V | RT-3 (SOT-23) | M6Y |
| ADM1815-5AKS-REEL | 3.06 V | KS-3 (SC70) | M5K |
| ADM1815-5AKS-RL7 | 3.06 V | KS-3 (SC70) | M5K |
| ADM1815-5AKSZ-REEL[2] | 3.06 V | KS-3 (SC70) | M73 |
| ADM1815-5AKSZ-RL7[2] | 3.06 V | KS-3 (SC70) | M73 |
| ADM1815-5ART-REEL | 3.06 V | RT-3 (SOT-23) | M5K |
| ADM1815-5ART-REEL7 | 3.06 V | RT-3 (SOT-23) | M5K |
| ADM1815-5ARTZ-REEL[2] | 3.06 V | RT-3 (SOT-23) | M73 |
| ADM1815-5ARTZ-RL7[2] | 3.06 V | RT-3 (SOT-23) | M73 |
| ADM1815-10AKS-REEL | 2.88 V | KS-3 (SC70) | M5E |
| ADM1815-10AKS-RL7 | 2.88 V | KS-3 (SC70) | M5E |
| ADM1815-10AKSZ-RL[2] | 2.88 V | KS-3 (SC70) | M4F |
| ADM1815-10AKSZ-RL7[2] | 2.88 V | KS-3 (SC70) | M4F |
| ADM1815-10ART-REEL | 2.88 V | RT-3 (SOT-23) | M5E |
| ADM1815-10ART-RL7 | 2.88 V | RT-3 (SOT-23) | M5E |
| ADM1815-10ARTZ-RL[2] | 2.88 V | RT-3 (SOT-23) | M4F |
| ADM1815-10ARTZ-RL7[2] | 2.88 V | RT-3 (SOT-23) | M4F |
| ADM1815-20AKS-REEL | 2.55 V | KS-3 (SC70) | M5A |
| ADM1815-20AKS-RL7 | 2.55 V | KS-3 (SC70) | M5A |
| ADM1815-20AKSZ-RL[2] | 2.55 V | KS-3 (SC70) | M76 |
| ADM1815-20AKSZ-RL7[2] | 2.55 V | KS-3 (SC70) | M76 |
| ADM1815-20ART-RL | 2.55 V | RT-3 (SOT-23) | M5A |
| ADM1815-20ART-RL7 | 2.55 V | RT-3 (SOT-23) | M5A |
| ADM1815-20ARTZ-RL[2] | 2.55 V | RT-3 (SOT-23) | M76 |
| ADM1815-20ARTZ-RL7[2] | 2.55 V | RT-3 (SOT-23) | M76 |
| ADM1815-R22AKS-RL | 2.18 V | KS-3 (SC70) | M5B |
| ADM1815-R22AKS-RL7 | 2.18 V | KS-3 (SC70) | M5B |
| ADM1815-R22AKSZ-RL[2] | 2.18 V | KS-3 (SC70) | M74 |
| ADM1815-R22AKSZ-R7[2] | 2.18 V | KS-3 (SC70) | M74 |
| ADM1815-R22ART-RL | 2.18 V | RT-3 (SOT-23) | M5B |
| ADM1815-R22ART-RL7 | 2.18 V | RT-3 (SOT-23) | M5B |
| ADM1815-R22ARTZ-RL[2] | 2.18 V | RT-3 (SOT-23) | M74 |
| ADM1815-R22ARTZ-R7[2] | 2.18 V | RT-3 (SOT-23) | M74 |
| ADM1815-R23AKS-RL | 2.31 V | KS-3 (SC70) | M5C |
| ADM1815-R23AKS-RL7 | 2.31 V | KS-3 (SC70) | M5C |
| ADM1815-R23AKSZ-RL[2] | 2.31 V | KS-3 (SC70) | M75 |
| ADM1815-R23AKSZ-R7[2] | 2.31 V | KS-3 (SC70) | M75 |

| Model[1] | Trip Point | Package Option | Brand |
|---|---|---|---|
| ADM1815-R23ART-RL | 2.31 V | RT-3 (SOT-23) | M5C |
| ADM1815-R23ART-RL7 | 2.31 V | RT-3 (SOT-23) | M5C |
| ADM1815-R23ARTZ-RL[2] | 2.31 V | RT-3 (SOT-23) | M75 |
| ADM1815-R23ARTZ-R7[2] | 2.31 V | RT-3 (SOT-23) | M75 |
| ADM1816-5AKS-REEL | 3.06 V | KS-3 (SC70) | M6K |
| ADM1816-5AKS-REEL7 | 3.06 V | KS-3 (SC70) | M6K |
| ADM1816-5AKSZ-REEL[2] | 3.06 V | KS-3 (SC70) | M77 |
| ADM1816-5AKSZ-RL7[2] | 3.06 V | KS-3 (SC70) | M77 |
| ADM1816-5ART-REEL | 3.06 V | RT-3 (SOT-23) | M6K |
| ADM1816-5ART-REEL7 | 3.06 V | RT-3 (SOT-23) | M6K |
| ADM1816-5ARTZ-REEL[2] | 3.06 V | RT-3 (SOT-23) | M77 |
| ADM1816-5ARTZ-RL7[2] | 3.06 V | RT-3 (SOT-23) | M77 |
| ADM1816-10AKS-REEL | 2.88 V | KS-3 (SC70) | M6E |
| ADM1816-10AKS-RL7 | 2.88 V | KS-3 (SC70) | M6E |
| ADM1816-10AKSZ-RL[2] | 2.88 V | KS-3 (SC70) | M54 |
| ADM1816-10AKSZ-RL7[2] | 2.88 V | KS-3 (SC70) | M54 |
| ADM1816-10ART-REEL | 2.88 V | RT-3 (SOT-23) | M6E |
| ADM1816-10ART-RL7 | 2.88 V | RT-3 (SOT-23) | M6E |
| ADM1816-10ARTZ-RL[2] | 2.88 V | RT-3 (SOT-23) | M54 |
| ADM1816-10ARTZ-RL7[2] | 2.88 V | RT-3 (SOT-23) | M54 |
| ADM1816-20AKS-REEL | 2.55 V | KS-3 (SC70) | M6A |
| ADM1816-20AKS-RL7 | 2.55 V | KS-3 (SC70) | M6A |
| ADM1816-20AKSZ-RL[2] | 2.55 V | KS-3 (SC70) | M6H |
| ADM1816-20AKSZ-RL7[2] | 2.55 V | KS-3 (SC70) | M6H |
| ADM1816-20ART-REEL | 2.55 V | RT-3 (SOT-23) | M6A |
| ADM1816-20ART-RL7 | 2.55 V | RT-3 (SOT-23) | M6A |
| ADM1816-20ARTZ-RL[2] | 2.55 V | RT-3 (SOT-23) | M6H |
| ADM1816-20ARTZ-RL7[2] | 2.55 V | RT-3 (SOT-23) | M6H |
| ADM1816-R22AKS-RL | 2.18 V | KS-3 (SC70) | M6B |
| ADM1816-R22AKS-RL7 | 2.18 V | KS-3 (SC70) | M6B |
| ADM1816-R22AKSZ-RL[2] | 2.18 V | KS-3 (SC70) | M78 |
| ADM1816-R22AKSZ-R7[2] | 2.18 V | KS-3 (SC70) | M78 |
| ADM1816-R22ART-RL | 2.18 V | RT-3 (SOT-23) | M6B |
| ADM1816-R22ART-RL7 | 2.18 V | RT-3 (SOT-23) | M6B |
| ADM1816-R22ARTZ-RL[2] | 2.18 V | RT-3 (SOT-23) | M78 |
| ADM1816-R22ARTZ-R7[2] | 2.18 V | RT-3 (SOT-23) | M78 |
| ADM1816-R23AKS-RL | 2.31 V | KS-3 (SC70) | M6C |
| ADM1816-R23AKS-RL7 | 2.31 V | KS-3 (SC70) | M6C |
| ADM1816-R23AKSZ-RL[2] | 2.31 V | KS-3 (SC70) | M79 |
| ADM1816-R23AKSZ-R7[2] | 2.31 V | KS-3 (SC70) | M79 |
| ADM1816-R23ART-RL | 2.31 V | RT-3 (SOT-23) | M6C |
| ADM1816-R23ART-RL7 | 2.31 V | RT-3 (SOT-23) | M6C |
| ADM1816-R23ARTZ-RL[2] | 2.31 V | RT-3 (SOT-23) | M79 |
| ADM1816-R23ARTZ-R7[2] | 2.31 V | RT-3 (SOT-23) | M79 |
| ADM1817-5AKS-REEL | 3.06 V | KS-3 (SC70) | M7K |
| ADM1817-5AKS-REEL7 | 3.06 V | KS-3 (SC70) | M7K |
| ADM1817-5AKSZ-REEL[2] | 3.06 V | KS-3 (SC70) | M7F |
| ADM1817-5AKSZ-RL7[2] | 3.06 V | KS-3 (SC70) | M7F |
| ADM1817-5ART-REEL | 3.06 V | RT-3 (SOT-23) | M7K |
| ADM1817-5ART-REEL7 | 3.06 V | RT-3 (SOT-23) | M7K |
| ADM1817-5ARTZ-REEL[2] | 3.06 V | RT-3 (SOT-23) | M7F |
| ADM1817-5ARTZ-RL7[2] | 3.06 V | RT-3 (SOT-23) | M7F |

| Model[1] | Trip Point | Package Option | Brand |
|---|---|---|---|
| ADM1817-10AKS-REEL | 2.88 V | KS-3 (SC70) | M7E |
| ADM1817-10AKS-RL7 | 2.88 V | KS-3 (SC70) | M7E |
| ADM1817-10AKSZ-RL[2] | 2.88 V | KS-3 (SC70) | M7G |
| ADM1817-10AKSZ-RL7[2] | 2.88 V | KS-3 (SC70) | M7G |
| ADM1817-10ART-REEL | 2.88 V | RT-3 (SOT-23) | M7E |
| ADM1817-10ART-R7 | 2.88 V | RT-3 (SOT-23) | M7E |
| ADM1817-10ARTZ-RL[2] | 2.88 V | RT-3 (SOT-23) | M7G |
| ADM1817-10ARTZ-RL7[2] | 2.88 V | RT-3 (SOT-23) | M7G |
| ADM1817-20AKS-REEL | 2.55 V | KS-3 (SC70) | M7A |
| ADM1817-20AKS-RL7 | 2.55 V | KS-3 (SC70) | M7A |
| ADM1817-20AKSZ-RL[2] | 2.55 V | KS-3 (SC70) | M7H |
| ADM1817-20AKSZ-RL7[2] | 2.55 V | KS-3 (SC70) | M7H |
| ADM1817-20ART-REEL | 2.55 V | RT-3 (SOT-23) | M7A |
| ADM1817-20ART-RL7 | 2.55 V | RT-3 (SOT-23) | M7A |
| ADM1817-20ARTZ-RL[2] | 2.55 V | RT-3 (SOT-23) | M7H |
| ADM1817-20ARTZ-RL7[2] | 2.55 V | RT-3 (SOT-23) | M7H |
| ADM1817-R22AKS-RL | 2.18 V | KS-3 (SC70) | M7B |
| ADM1817-R22AKS-RL7 | 2.18 V | KS-3 (SC70) | M7B |
| ADM1817-R22AKSZ-RL[2] | 2.18 V | KS-3 (SC70) | M7J |
| ADM1817-R22AKSZ-R7[2] | 2.18 V | KS-3 (SC70) | M7J |
| ADM1817-R22ART-RL | 2.18 V | RT-3 (SOT-23) | M7B |
| ADM1817-R22ART-RL7 | 2.18 V | RT-3 (SOT-23) | M7B |
| ADM1817-R22ARTZ-RL[2] | 2.18 V | RT-3 (SOT-23) | M7J |
| ADM1817-R22ARTZ-R7[2] | 2.18 V | RT-3 (SOT-23) | M7J |
| ADM1817-R23AKS-RL | 2.31 V | KS-3 (SC70) | M7C |
| ADM1817-R23AKS-RL7 | 2.31 V | KS-3 (SC70) | M7C |
| ADM1817-R23AKSZ-RL[2] | 2.31 V | KS-3 (SC70) | M7L |
| ADM1817-R23AKSZ-R7[2] | 2.31 V | KS-3 (SC70) | M7L |
| ADM1817-R23ART-RL | 2.31 V | RT-3 (SOT-23) | M7C |
| ADM1817-R23ART-RL7 | 2.31 V | RT-3 (SOT-23) | M7C |
| ADM1817-R23ARTZ-RL[2] | 2.31 V | RT-3 (SOT-23) | M7L |
| ADM1817-R23ARTZ-R7[2] | 2.31 V | RT-3 (SOT-23) | M7L |
| ADM1818-5AKS-REEL | 3.06 V | KS-3 (SC70) | M8K |
| ADM1818-5AKS-REEL7 | 3.06 V | KS-3 (SC70) | M8K |
| ADM1818-5AKSZ-REEL[2] | 3.06 V | KS-3 (SC70) | M4T |
| ADM1818-5AKSZ-RL7[2] | 3.06 V | KS-3 (SC70) | M4T |
| ADM1818-5ART-REEL | 3.06 V | RT-3 (SOT-23) | M8K |
| ADM1818-5ART-REEL7 | 3.06 V | RT-3 (SOT-23) | M8K |
| ADM1818-5ARTZ-REEL[2] | 3.06 V | RT-3 (SOT-23) | M4T |
| ADM1818-5ARTZ-RL7[2] | 3.06 V | RT-3 (SOT-23) | M4T |
| ADM1818-10AKS-REEL | 2.88 V | KS-3 (SC70) | M8E |
| ADM1818-10AKS-RL7 | 2.88 V | KS-3 (SC70) | M8E |
| ADM1818-10AKSZ-RL[2] | 2.88 V | KS-3 (SC70) | M7P |
| ADM1818-10AKSZ-RL7[2] | 2.88 V | KS-3 (SC70) | M7P |
| ADM1818-10ART-REEL | 2.88 V | RT-3 (SOT-23) | M8E |
| ADM1818-10ART-RL7 | 2.88 V | RT-3 (SOT-23) | M8E |
| ADM1818-10ARTZ-RL7[2] | 2.88 V | RT-3 (SOT-23) | M7P |
| ADM1818-20AKS-REEL | 2.55 V | KS-3 (SC70) | M8A |
| ADM1818-20AKS-RL7 | 2.55 V | KS-3 (SC70) | M8A |
| ADM1818-20AKSZ-RL[2] | 2.55 V | KS-3 (SC70) | M59 |
| ADM1818-20AKSZ-RL7[2] | 2.55 V | KS-3 (SC70) | M59 |
| ADM1818-20ART-REEL | 2.55 V | RT-3 (SOT-23) | M8A |

| Model[1] | Trip Point | Package Option | Brand |
|---|---|---|---|
| ADM1818-20ART-RL7 | 2.55 V | RT-3 (SOT-23) | M8A |
| ADM1818-20ARTZ-RL[2] | 2.55 V | RT-3 (SOT-23) | M59 |
| ADM1818-20ARTZ-RL7[2] | 2.55 V | RT-3 (SOT-23) | M59 |
| ADM1818-R22AKS-RL | 2.18 V | KS-3 (SC70) | M8B |
| ADM1818-R22AKS-RL7 | 2.18 V | KS-3 (SC70) | M8B |
| ADM1818-R22AKSZ-RL[2] | 2.18 V | KS-3 (SC70) | M7M |
| ADM1818-R22AKSZ-R7[2] | 2.18 V | KS-3 (SC70) | M7M |
| ADM1818-R22ART-RL | 2.18 V | RT-3 (SOT-23) | M8B |
| ADM1818-R22ART-RL7 | 2.18 V | RT-3 (SOT-23) | M8B |
| ADM1818-R23AKS-RL | 2.31 V | KS-3 (SC70) | M8C |
| ADM1818-R23AKS-RL7 | 2.31 V | KS-3 (SC70) | M8C |
| ADM1818-R23AKSZ-RL[2] | 2.31 V | KS-3 (SC70) | M7N |
| ADM1818-R23AKSZ-R7[2] | 2.31 V | KS-3 (SC70) | M7N |
| ADM1818-R23ART-RL | 2.31 V | RT-3 (SOT-23) | M8C |
| ADM1818-R23ART-RL7 | 2.31 V | RT-3 (SOT-23) | M8C |

[1] Available only in reels.
[2] Z = Pb-free part.

## NOTES

## NOTES

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