Rx5RZ Series

100mA 8V Input LDO

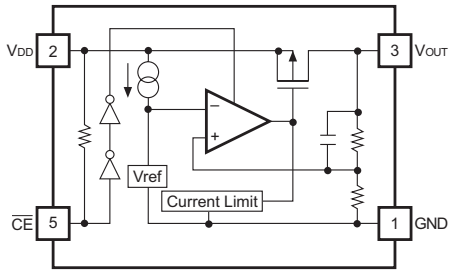
The Rx5RZ Series are CMOS-based LDO regulators featuring 100mA output. The input voltage (V_{IN}) can be set up to Max. 8V (absolute maximum rating at 9V) and output voltage (V_{OUT}) up to 6V. The SOT-23-5 package allows the user to select the polarity of the CE pin. The SOT-89 package does not include the CE pin.

FEATURES

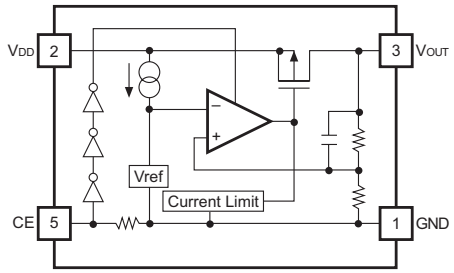
- Supply Current (I_{SS}) ····· Typ. 20μA (V_{IN}=V_{SET}+1.0V)
- Standby Current ($I_{standby}$) ····· Typ. 0.1μA (Same as above, In standby)
- Dropout Voltage (V_{DIF}) ····· Typ. 0.2V (I_{OUT}=60mA)
- Ripple Rejection (RR) ····· Typ. 55dB (f=1kHz)
- Input Voltage Range (V_{IN}) ····· Max. 8.0V (Absolute maximum rating: 9.0V)
- Output Voltage Range (V_{OUT}) ····· 2.0V to 6.0V (Internally fixed)
- Output Voltage Accuracy ····· ± 2%
- Temp. coeff. of Output Voltage ····· Typ. ± 100ppm/°C
- Line Regulation ····· Typ. 0.05%/V
- Fold-back Protection Circuit ····· Current limit Typ. 50mA
- Packages ····· SOT-23-5, SOT-89

BLOCK DIAGRAMS

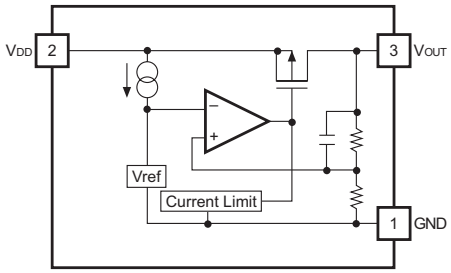
RN5RZxxAA
($\overline{CE}$ pin"L" active)



RN5RZxxBA
(CE pin "H" active)



RH5RZxxCA
(Without CE pin, SOT-89)



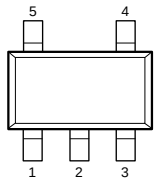
SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	SOT-23-5	3,000 pcs	RN5RZxx∗A-TR-FE
H/F	SOT-89	1,000 pcs	RH5RZxxCA-T1-FE

xx : Specify the output voltage within the range of 2.0V (20) to 6.0V (60) in 0.1V steps.
∗ : Select the polarity of the CE pin from (A)"L" active, or (B)"H" active or (C) without CE pin.

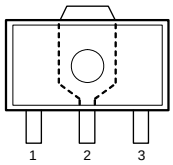
PACKAGES (Top View)

SOT-23-5



1	GND
2	V_{DD}
3	V_{OUT}
4	NC
5	$\overline{CE}$ or CE

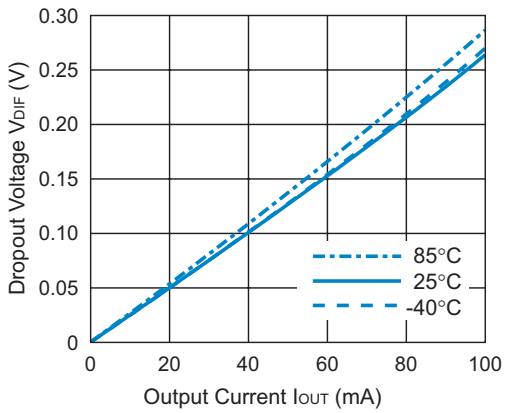
SOT-89



1	GND
2	V_{DD}
3	V_{OUT}

TYPICAL CHARACTERISTIC

Rx5RZ30xA Dropout Voltage vs. Output Current



APPLICATIONS

- Power source for hand-held communication equipment, cameras, and VCRs
- Power source for home appliances
- Power source for battery-powered equipment

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