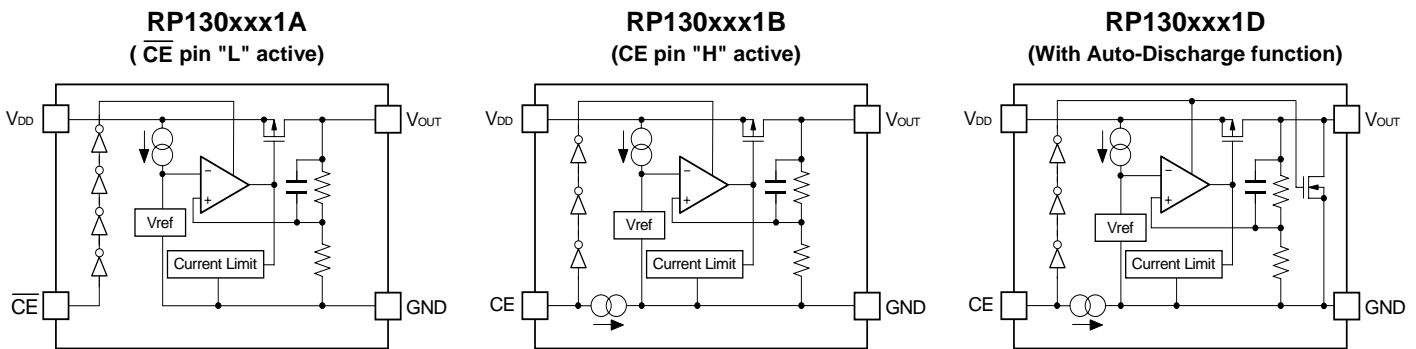


The RP130x Series are CMOS-based LDO regulators featuring 150mA output. The RP130x features an excellent line transient response, a high ripple rejection at 80dB, and ultra low noise. The polarity of the CE pin can be selected. The version with auto-discharge function is also available. Compared to existing high-speed lines, the RP130x provides low supply current at Typ. 38 μ A. The series covers a wide voltage range, including the input voltage range of 1.7V to 6.5V and the output voltage range of 1.2V to 5.0V. Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 38 μ A ($V_{IN}=\text{SET } V_{OUT}+1\text{V}$)
 - Standby Current ($I_{standby}$) Typ. 0.1 μ A (Same as above, in standby)
 - Dropout Voltage (V_{DIF}) Typ. 0.32V ($I_{OUT}=150\text{mA}, V_{OUT}=2.8\text{V}$)
 - Ripple Rejection (RR) Typ. 80dB ($f=1\text{kHz}$)
 - Input Voltage Range (V_{IN}) 1.7V to 6.5V
 - Output Voltage Range (V_{OUT}) 1.2V to 5.0V (internally fixed)
 - Output Voltage Accuracy $\pm 1\%$
 - Temp. coeff. of Output Voltage Typ. $\pm 20\text{ppm}/^\circ\text{C}$
 - Line Regulation Typ. 0.02%/V
 - Fold-back Protection Circuit Current limit Typ. 40mA
 - Auto-Discharge function D Version
 - Packages DFN(PLP)1010-4, SC-82AB, SOT-23-5
 - Ceramic capacitors can be used. ...0.47 μ F or more
- (The above shows specification at $T_{opt}=25^\circ\text{C}$. Design assurance value at $-40^\circ\text{C} \leq T_{opt} \leq 85^\circ\text{C}$ is also available. For details, please refer to the datasheet.)

BLOCK DIAGRAMS

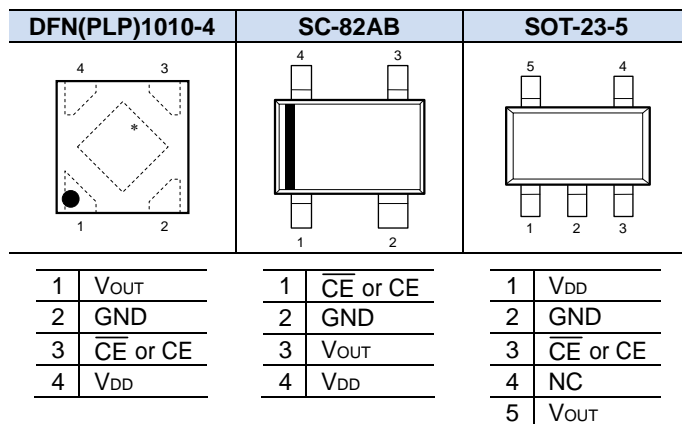


SELECTION GUIDES

Package	Quantity per Reel	Part No.
DFN(PLP)1010-4	10,000 pcs	RP130Kxx1*-TR
SC-82AB	3,000 pcs	RP130Qxx1*-TR-F
SOT-23-5	3,000 pcs	RP130Nxx1*-TR-F

- xx : Specify the output voltage within the range 1.2V (12) to 5.0V (50) in 0.1V steps.
- * : Select the polarity of the CE pin from (A) "L" active, (B) "H" active or (D) "H" active with auto-discharge function.

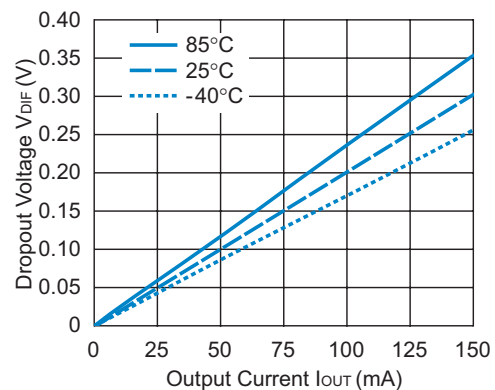
PACKAGES (Top View)



*) The tab is substrate level (GND).

TYPICAL CHARACTERISTIC

RP130x281x 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-operated devices
- Voltage reference