

R1162D Series

Manual Mode Shift 150mA LDO

The R1162D Series are CMOS-based manual mode switching LDO regulators with ECO pin featuring 150mA output. By inputting control signals to the ECO pin, the mode of the regulator can be switched to low power mode or fast response mode, thus making both active and sleep modes available for the system. The CE pin can switch the regulator into standby mode. The version with the auto-discharge function is also available. Ceramic capacitors can be used.

FEATURES

- Supply Current (Iss1) ------Typ. 70μA (Fast mode, VIN=VSET+1.0V)
- Supply Current (Iss2)Typ. 5.5μA (Low power mode, same as above)
- Standby Current (Istandby)Typ. 0.1μA (Same as above, CE="L")
- Dropout Voltage (VDIF)Typ. 0.25V (Fast mode, lour=150mA, VSET=2.8V)
 Typ. 0.25V (Low power mode, lour=150mA, VSET=2.8V)
- Ripple Rejection (RR)-----Typ. 70dB (f=1kHz, Fast mode)
- Input Voltage Range (V_{IN})·······2.0V to 6.0V
- Output Voltage Range (Vo∪т)········· 1.5V to 4.0V (Internally fixed)

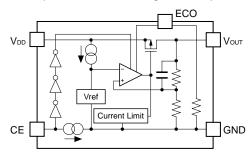
- Output Voltage Accuracy -----± 2% (Fast mode)
 ± 3% (Low power mode)
- Temp. coeff. of Output VoltageTyp. ± 100ppm/°C
- Line RegulationTyp. 0.02%/V (Fast mode)
- Fold-back Protection Circuit------Current limit Typ. 40mA
- Auto-discharge Function D Version
- Package -----SON1612-6
- Ceramic Capacitor can be used. $C_{IN}=1\mu F$ or more,

Cout=0.47µF or more

BLOCK DIAGRAMS

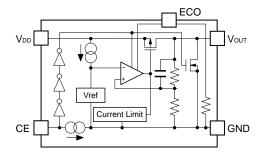
R1162Dxx1B

(Without Auto-discharge function)



R1162Dxx1D

(With Auto-discharge function)



SELECTION GUIDE

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	SON1612-6	4,000 pcs	R1162Dxx1*-TR-FE

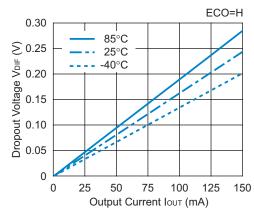
- xx: Specify the output voltage within the range of 1.5V (15) to 4.0V (40) in 0.1V steps.
 - Select from (B) without auto-discharge function or (D) with auto-discharge function.

PACKAGE (Top View)

SON1612-6 6 5 4 1 CE 2 GND 3 VDD 4 VOUT 5 GND 6 ECO

TYPICAL CHARACTERISTIC

R1162D281x Dropout Voltage vs. Output Current (Fast Response Mode)



APPLICATIONS

- Power source for hand-held communication equipment, cameras, and VCRs
- Power source for battery-powered equipment
- Very stable voltage reference

No.EK-110-121001 CMOS LDO Regulator



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For the conservation of the global environment, Ricoh is advancing the decrease of the negative environmental impact material. After Apr. 1, 2006, we will ship out the lead free products only. Thus, all products that will be shipped from now on comply with RoHS Directive. Basically after Apr. 1, 2012, we will ship out the Power Management ICs of the Halogen Free products only. (Ricoh Halogen Free products are also Antimony Free.)

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