Dual, 300mA Low-Dropout Linear Regulators

Features

- **Two Low-Dropout-Voltage Regulators**
- **300mA Output Current for Each LDO**
- **Independent Enable Control**
- **Dropout Voltage is 100mV@ 100mA Load**
- **Over-Temperature Protection and Short-Circuit Protection**
- **1.2V to 3.3V Factory-Preset Output**
- **Max. Supply Current in Shutdown Mode < 1μA**
- **Small Ceramic Output Capacitors**
- **400Ω V_{OUT} Discharge Resistance in Shutdown**

Applications

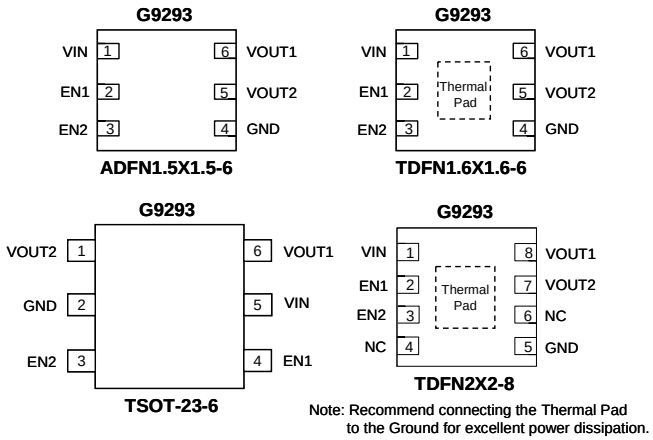
- **Notebook Computers**
- **Cellular Phones**
- **PDAs**
- **Digital still Camera and Video Recorders**
- **Hand-Held Devices**
- **Bar Code Scanners**

General Description

The G9293 is a dual, low supply current, low dropout linear regulator that comes in a space saving TSOT-23-6, ADFN1.5X1.5-6, TDFN1.6X1.6-6 and TDFN2X2-8 package. The supply current at no-load is 60μA. In the shutdown mode, the maximum supply current is less than 1μA. Output voltage range of the G9293 is from 1.2V to 3.3V. The over-current protection limit is set at 500mA typical. An over-temperature protection circuit is built-in in the G9293 to prevent thermal overload. These power saving features make the G9293 ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

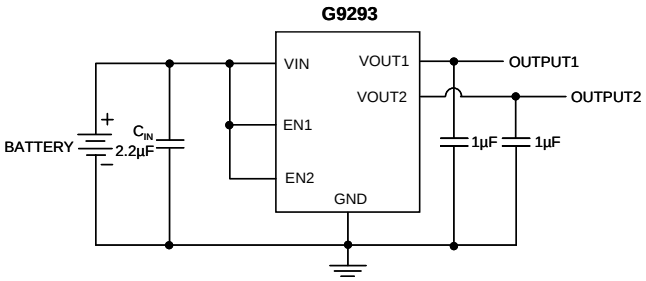
These devices feature a shutdown function and are offered in active low with auto discharge. The G9293 comes in a space saving TSOT-23-6, ADFN1.5X1.5-6, TDFN1.6X1.6-6 and TDFN2X2-8 package.

Pin Configuration



Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.

Typical Application Circuit



Ordering Information

ORDER NUMBER	MARKING	VOUT1	VOUT2	TEMP. RANGE	PACKAGE (Green)
G9293NNTP1U	9CNNx	2.8V	2.8V	-40°C~+85°C	TSOT-23-6
G9293ERA31U	ER 3x	1.2V	3.3V	-40°C~+85°C	ADFN1.5X1.5-6
G9293FRA31U	FR 3x	1.5V	3.3V	-40°C~+85°C	ADFN1.5X1.5-6
G9293HHA31U	HH 3x	1.8V	1.8V	-40°C~+85°C	ADFN1.5X1.5-6
G9293HRA31U	HR 3x	1.8V	3.3V	-40°C~+85°C	ADFN1.5X1.5-6
G9293LOA31U	LO 3x	2.5V	2.85V	-40°C~+85°C	ADFN1.5X1.5-6
G9293WOA31U	WO 3x	2.6V	2.85V	-40°C~+85°C	ADFN1.5X1.5-6
G9293OHA31U	OH 3x	2.85V	1.8V	-40°C~+85°C	ADFN1.5X1.5-6
G9293RRA3IU	RR 3x	3.3V	3.3V	-40°C~+85°C	ADFN1.5X1.5-6
G9293ENRR1U	9CA xx	1.2V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293ERRR1U	9CA Ixx	1.2V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293ZNRR1U	9CA Axx	1.3V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293FFRR1U	9CB xx	1.5V	1.5V	-40°C~+85°C	TDFN1.6X1.6-6
G9293FLRR1U	9CA Hxx	1.5V	2.5V	-40°C~+85°C	TDFN1.6X1.6-6
G9293FNRR1U	9CC xx	1.5V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293HHRR1U	9CA Mxx	1.8V	1.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293HWRR1U	9CD xx	1.8V	2.6V	-40°C~+85°C	TDFN1.6X1.6-6
G9293HRRR1U	9CE xx	1.8V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293IFRR1U	9CZ xx	1.85V	1.5V	-40°C~+85°C	TDFN1.6X1.6-6
G9293IIRR1U	9CA Dxx	1.85V	1.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293MKRR1U	9CA Lxx	2.1V	2.0V	-40°C~+85°C	TDFN1.6X1.6-6
G9293MLRR1U	9CA Jxx	2.1V	2.5V	-40°C~+85°C	TDFN1.6X1.6-6
G9293LHRR1U	9CX xx	2.5V	1.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293LNRR1U	9CV xx	2.5V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293LORR1U	9CU xx	2.5V	2.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293LQRR1U	9CL xx	2.5V	3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293LRRR1U	9CM xx	2.5V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6

Ordering Information (continued)

ORDER NUMBER	MARKING	VOUT1	VOUT2	TEMP. RANGE	PACKAGE (Green)
G9293WORR1U	9CH xx	2.6V	2.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293WRRR1U	9CA Gxx	2.6V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293NGRR1U	9CA Bxx	2.8V	1.6V	-40°C~+85°C	TDFN1.6X1.6-6
G9293NHRR1U	9CN xx	2.8V	1.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293NNRR1U	9CO xx	2.8V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293NQRR1U	9CP xx	2.8V	3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293NRRR1U	9CQ xx	2.8V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293OHRR1U	9CR xx	2.85V	1.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293OIRR1U	9CS xx	2.85V	1.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293OORR1U	9CT xx	2.85V	2.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293QHRR1U	9CK xx	3V	1.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293QORR1U	9CA Kxx	3V	2.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293QQRR1U	9CJ xx	3V	3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293YNRR1U	9CW xx	3.15V	2.8V	-40°C~+85°C	TDFN1.6X1.6-6
G9293RFRR1U	9CA Cxx	3.3V	1.5V	-40°C~+85°C	TDFN1.6X1.6-6
G9293RORR1U	9CF xx	3.3V	2.85V	-40°C~+85°C	TDFN1.6X1.6-6
G9293RQRR1U	9CI xx	3.3V	3V	-40°C~+85°C	TDFN1.6X1.6-6
G9293RXRR1U	9CY xx	3.3V	3.1V	-40°C~+85°C	TDFN1.6X1.6-6
G9293RRRR1U	9CG xx	3.3V	3.3V	-40°C~+85°C	TDFN1.6X1.6-6

Note:TP:TSOT-23-6 A3: ADFN1.5X1.5-6 RR: TDFN1.6X1.6-6
1: Bonding Code
U : Tape & Reel