

300mA High PSRR, Low Noise, Low Power LDO

Features

- Input Voltage Range: 2V to 5.5V
- Output Voltage Range: 1.1V to 4.5V
- Output Voltage Tolerance: $\pm 2\%$
- Ultra-Low Shutdown Current: 0.1 μ A (Typ.)
- Ultra-Low Quiescent Current: 1.5 μ A (Typ.)
- Low Dropout: 80mV@100mA
- High PSRR: 60dB@1KHz (Typ.)
- Over Current Protection
- Short Circuit Protection
- Thermal Shutdown Protection
- -40°C to 125°C Operating Junction Temperature
- SOT23-5/SOT23-3/DFN4-1 $\times$ 1 Package

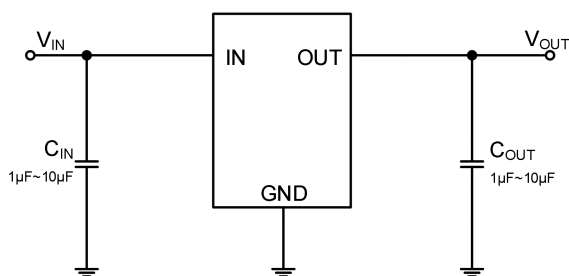
Applications

- Mobile Phones, Tablets
- Portable Medical Equipment
- Smart Meters and Field Transmitters
- IP Cameras
- Digital Cameras and Audio Devices
- Portable and Battery-Powered Equipment
- RF, PLL, VCO, and Clock Power Supplies
- Drones

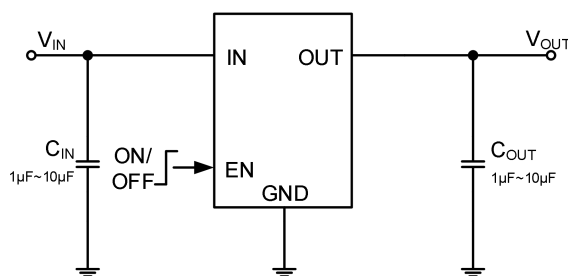
General Description

The GP2101 is a high PSRR, low noise, ultra-low power LDO that can supply up to 300mA output current. Designed to meet the requirements of IOT, wearable and battery powered applications, the GP2101 device provides low noise, high PSRR, ultra-low quiescent current, and low line or load transient response figures. Using new innovative design techniques, the GP2101 offers class-leading noise performance without a noise bypass capacitor. This device is available with fixed output voltages from 1.1 V to 4.5 V in 50-mV steps. The GP2101 series are available in SOT23-3, SOT23-5, DFN4-1 $\times$ 1 package.

Typical Application Circuit



SOT23-3 Typical Application Circuit



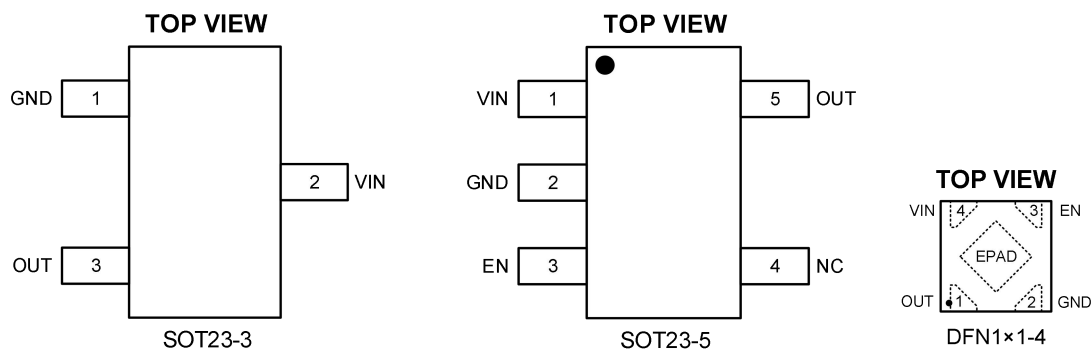
SOT23-5/DFN1 $\times$ 1-4 Typical Application Circuit



300mA High PSRR, Low Noise, Low Power LDO

Pin Description

Pin Configuration



Pin Description

SOT23-3 Pin No.	SOT23-5 Pin No.	DFN1×1-4 Pin No.	Pin Name	Function
2	1	4	VIN	Input voltage pin for the regulator.
1	2	2	GND	Ground pin.
-	3	3	EN	Enable Control (Active high), Driving EN over 0.9 V turns on the regulator. Driving EN below 0.4 V puts the regulator into shutdown mode.
-	4	-	NC	Not Connected.
3	5	1	OUT	Output voltage pin for the regulator.
-	-	EPAD	EPAD	Exposed pad should be connected directly to the GND pin.

Order Information (1)

GP2101-①②③④

Designat or	Symbol	Description
①②	Integer	Output Voltage
③	T3	SOT23-3



300mA High PSRR, Low Noise, Low Power LDO

	T5	SOT23-5		
	D4	DFN1×1-4		
④	R	RoHS / Pb Free		
Part No.	Model	Description	Package	T/R Qty
70606601	GP2101-11T3R	GP2101-11T3R High PSRR, Ultra Low Power LDO, 1.1V, 300mA, SOT23-3	SOT23-3	3000PCS
70606602	GP2101-12T3R	GP2101-12T3R High PSRR, Ultra Low Power LDO, 1.2V, 300mA, SOT23-3	SOT23-3	3000PCS
70606603	GP2101-13T3R	GP2101-13T3R High PSRR, Ultra Low Power LDO, 1.3V, 300mA, SOT23-3	SOT23-3	3000PCS
70606604	GP2101-1BT3R	GP2101-1BT3R High PSRR, Ultra Low Power LDO, 1.35V, 300mA, SOT23-3	SOT23-3	3000PCS
70606605	GP2101-15T3R	GP2101-15T3R High PSRR, Ultra Low Power LDO, 1.5V, 300mA, SOT23-3	SOT23-3	3000PCS
70606606	GP2101-18T3R	GP2101-18T3R High PSRR, Ultra Low Power LDO, 1.8V, 300mA, SOT23-3	SOT23-3	3000PCS
70606607	GP2101-25T3R	GP2101-25T3R High PSRR, Ultra Low Power LDO, 2.5V, 300mA, SOT23-3	SOT23-3	3000PCS
70606608	GP2101-28T3R	GP2101-28T3R High PSRR, Ultra Low Power LDO, 2.8V, 300mA, SOT23-3	SOT23-3	3000PCS
70606609	GP2101-2CT3R	GP2101-2CT3R High PSRR, Ultra Low Power LDO, 2.85V, 300mA, SOT23-3	SOT23-3	3000PCS
70606610	GP2101-29T3R	GP2101-29T3R High PSRR, Ultra Low Power LDO, 2.9V, 300mA, SOT23-3	SOT23-3	3000PCS
70606611	GP2101-2DT3R	GP2101-2DT3R High PSRR, Ultra Low Power LDO, 2.95V, 300mA, SOT23-3	SOT23-3	3000PCS
70606612	GP2101-30T3R	GP2101-30T3R High PSRR, Ultra Low Power LDO, 3.0V, 300mA, SOT23-3	SOT23-3	3000PCS
70606613	GP2101-33T3R	GP2101-33T3R High PSRR, Ultra Low Power LDO, 3.3V, 300mA, SOT23-3	SOT23-3	3000PCS
70606614	GP2101-36T3R	GP2101-36T3R High PSRR, Ultra Low Power LDO, 3.6V, 300mA, SOT23-3	SOT23-3	3000PCS
70606615	GP2101-38T3R	GP2101-38T3R High PSRR, Ultra Low Power LDO, 3.8V, 300mA, SOT23-3	SOT23-3	3000PCS
70606616	GP2101-40T3R	GP2101-40T3R High PSRR, Ultra Low Power LDO, 4.0V, 300mA, SOT23-3	SOT23-3	3000PCS



300mA High PSRR, Low Noise, Low Power LDO

70606617	GP2101-42T3R	GP2101-42T3R High PSRR, Ultra Low Power LDO, 4.2V, 300mA, SOT23-3	SOT23-3	3000PCS
70606618	GP2101-45T3R	GP2101-45T3R High PSRR, Ultra Low Power LDO, 4.5V, 300mA, SOT23-3	SOT23-3	3000PCS
70606621	GP2101-11T5R	GP2101-11T5R High PSRR, Ultra Low Power LDO, 1.1V, 300mA, SOT23-5	SOT23-5	3000PCS
70606622	GP2101-12T5R	GP2101-12T5R High PSRR, Ultra Low Power LDO, 1.2V, 300mA, SOT23-5	SOT23-5	3000PCS
70606623	GP2101-13T5R	GP2101-13T5R High PSRR, Ultra Low Power LDO, 1.3V, 300mA, SOT23-5	SOT23-5	3000PCS
70606624	GP2101-1BT5R	GP2101-1BT5R High PSRR, Ultra Low Power LDO, 1.35V, 300mA, SOT23-5	SOT23-5	3000PCS
70606625	GP2101-15T5R	GP2101-15T5R High PSRR, Ultra Low Power LDO, 1.5V, 300mA, SOT23-5	SOT23-5	3000PCS
70606626	GP2101-18T5R	GP2101-18T5R High PSRR, Ultra Low Power LDO, 1.8V, 300mA, SOT23-5	SOT23-5	3000PCS
70606627	GP2101-25T5R	GP2101-25T5R High PSRR, Ultra Low Power LDO, 2.5V, 300mA, SOT23-5	SOT23-5	3000PCS
70606628	GP2101-28T5R	GP2101-28T5R High PSRR, Ultra Low Power LDO, 2.8V, 300mA, SOT23-5	SOT23-5	3000PCS
70606629	GP2101-2CT5R	GP2101-2CT5R High PSRR, Ultra Low Power LDO, 2.85V, 300mA, SOT23-5	SOT23-5	3000PCS
70606630	GP2101-29T5R	GP2101-29T5R High PSRR, Ultra Low Power LDO, 2.9V, 300mA, SOT23-5	SOT23-5	3000PCS
70606631	GP2101-2DT5R	GP2101-2DT5R High PSRR, Ultra Low Power LDO, 2.95V, 300mA, SOT23-5	SOT23-5	3000PCS
70606632	GP2101-30T5R	GP2101-30T5R High PSRR, Ultra Low Power LDO, 3.0V, 300mA, SOT23-5	SOT23-5	3000PCS
70606633	GP2101-33T5R	GP2101-33T5R High PSRR, Ultra Low Power LDO, 3.3V, 300mA, SOT23-5	SOT23-5	3000PCS
70606634	GP2101-36T5R	GP2101-36T5R High PSRR, Ultra Low Power LDO, 3.6V, 300mA, SOT23-5	SOT23-5	3000PCS
70606635	GP2101-38T5R	GP2101-38T5R High PSRR, Ultra Low Power LDO, 3.8V, 300mA, SOT23-5	SOT23-5	3000PCS
70606636	GP2101-40T5R	GP2101-40T5R High PSRR, Ultra Low Power LDO, 4.0V, 300mA, SOT23-5	SOT23-5	3000PCS



300mA High PSRR, Low Noise, Low Power LDO

70606637	GP2101-42T5R	GP2101-42T5R High PSRR, Ultra Low Power LDO, 4.2V, 300mA, SOT23-5	SOT23-5	3000PCS
70606638	GP2101-45T5R	GP2101-45T5R High PSRR, Ultra Low Power LDO, 4.5V, 300mA, SOT23-5	SOT23-5	3000PCS
70606641	GP2101-11D4R	GP2101-11D4R High PSRR, Ultra Low Power LDO, 1.1V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606642	GP2101-12D4R	GP2101-12D4R High PSRR, Ultra Low Power LDO, 1.2V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606643	GP2101-13D4R	GP2101-13D4R High PSRR, Ultra Low Power LDO, 1.3V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606644	GP2101-1BD4R	GP2101-1BD4R High PSRR, Ultra Low Power LDO, 1.35V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606645	GP2101-15D4R	GP2101-15D4R High PSRR, Ultra Low Power LDO, 1.5V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606646	GP2101-18D4R	GP2101-18D4R High PSRR, Ultra Low Power LDO, 1.8V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606647	GP2101-25D4R	GP2101-25D4R High PSRR, Ultra Low Power LDO, 2.5V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606648	GP2101-28D4R	GP2101-28D4R High PSRR, Ultra Low Power LDO, 2.8V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606649	GP2101-2CD4R	GP2101-2CD4R High PSRR, Ultra Low Power LDO, 2.85V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606650	GP2101-29D4R	GP2101-29D4R High PSRR, Ultra Low Power LDO, 2.9V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606651	GP2101-2DD4R	GP2101-2DD4R High PSRR, Ultra Low Power LDO, 2.95V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606652	GP2101-30D4R	GP2101-30D4R High PSRR, Ultra Low Power LDO, 3.0V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606653	GP2101-33D4R	GP2101-33D4R High PSRR, Ultra Low Power LDO, 3.3V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606654	GP2101-36D4R	GP2101-36D4R High PSRR, Ultra Low Power LDO, 3.6V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606655	GP2101-38D4R	GP2101-38D4R High PSRR, Ultra Low Power LDO, 3.8V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606656	GP2101-40D4R	GP2101-40D4R High PSRR, Ultra Low Power LDO, 4.0V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS



300mA High PSRR, Low Noise, Low Power LDO

70606657	GP2101-42D4R	GP2101-42D4R High PSRR, Ultra Low Power LDO, 4.2V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS
70606658	GP2101-45D4R	GP2101-45D4R High PSRR, Ultra Low Power LDO, 4.5V, 300mA, DFN4-1×1	DFN1×1-4	10000PCS

Note (1): All GP2101 parts are Pb-Free and adhere to the RoHS directive.

Marking Rule SOT23-3/SOT23-5

Voltage (V)	Mark	Voltage (V)	Mark
1.1	Q11 <u>YL</u>	2.9	Q29 <u>YL</u>
1.2	Q12 <u>YL</u>	2.95	Q2D <u>YL</u>
1.3	Q13 <u>YL</u>	3.0	Q30 <u>YL</u>
1.35	Q1B <u>YL</u>	3.3	Q33 <u>YL</u>
1.5	Q15 <u>YL</u>	3.6	Q36 <u>YL</u>
1.8	Q18 <u>YL</u>	3.8	Q38 <u>YL</u>
2.5	Q25 <u>YL</u>	4.0	Q40 <u>YL</u>
2.8	Q28 <u>YL</u>	4.2	Q42 <u>YL</u>
2.85	Q2C <u>YL</u>	4.5	Q45 <u>YL</u>

Represents product series

Mark	Product Series
Q	GP2101

Represents production lot number

Mark	Lot Number
<u>Y</u>	The year code. "A" stands for 2017, "G" stands for 2023.
<u>L</u>	The week of manufacturing. "A" stands for week 1, "Z" stands for week 26, "a" stands for week 27, "z" stands for week 52.

Marking Rule DFN1×1-4

Voltage (V)	Mark	Voltage (V)	Mark
1.1	QAY <u>L</u>	2.9	QJ <u>YL</u>
1.2	QB <u>YL</u>	2.95	QK <u>YL</u>



1.3	QCYL	3.0	QLYL
1.35	QDYL	3.3	QMYL
1.5	QEYL	3.6	QNYL
1.8	QFYL	3.8	QOYL
2.5	QGYL	4.0	QPYL
2.8	QHYL	4.2	QQYL
2.85	QIYL	4.5	QRYL

Mark	Product Series
Q	GP2101

Mark	Lot Number
<u>Y</u>	The year code. "A" stands for 2017, "G" stands for 2023.
<u>L</u>	The week of manufacturing. "A" stands for week 1, "Z" stands for week 26, "a" stands for week 27, "z" stands for week 52.

[illegible]

GU QIAO MICROELECTRONICS (SHENZHEN) CO., LTD



300mA High PSRR, Low Noise, Low Power LDO

Specifications

Absolute Maximum Ratings ^{(1) (2)}

Item	Min	Max	Unit
V _{IN} voltage	2	6	V
V _{OUT} voltage	1	5	V
Output Current ⁽³⁾	350		mA
Power dissipation ⁽⁴⁾	Internally Limited		
Operating Ambient Temperature	-40	85	°C
Maximum junction temperature		150	°C
Storage temperature, T _{stg}	-50	85	°C
Lead Temperature (Soldering, 10sec.)		260	°C

Note (1): Exceeding these ratings may damage the device.

Note (2): The device is not guaranteed to function outside of its operating conditions.

Note (3): $I_{OUT} = P_D / (V_{IN} - V_{OUT})$

Note (4): The maximum allowable power dissipation is a function of the maximum junction temperature, T_{J(MAX)}, the junction-to-ambient thermal resistance, R_{θJA}, and the ambient temperature, T_A. The maximum allowable power dissipation at any ambient temperature is calculated using: $P_{D(MAX)} = (T_{J(MAX)} - T_A) / R_{θJA}$. Exceeding the maximum allowable power dissipation causes excessive die temperature, and the regulator goes into thermal shutdown. Internal thermal shutdown circuitry protects the device from permanent damage. Thermal shutdown engages at T_J=155°C (typical) and disengages at T_J= 140°C (typical).

Recommended Operating Conditions

Item	Min	Max	Unit
Operating junction temperature ⁽¹⁾	-40	125	°C
Operating temperature range	-40	85	°C
Input voltage V _{IN}	2	5.5	V
Output current	0	300	mA

Note (1): All limits specified at room temperature (T_A = 25°C) unless otherwise specified. All room temperature limits are 100% production tested. All limits at temperature extremes are ensured through correlation using standard Statistical Quality Control (SQC) methods. All limits are used to calculate Average Outgoing Quality Level (AOQL).



300mA High PSRR, Low Noise, Low Power LDO

Thermal Information

Item	Description	SOT23 3 Pin	SOT23 5 Pin	DFN1×1 4 Pin	Unit
R _{θJA}	Junction-to-ambient thermal resistance ⁽¹⁾⁽²⁾	208	195	216	°C/W
R _{θJC(top)}	Junction-to-case (top) thermal resistance	112	102	161	°C/W
R _{θJB}	Junction-to-board thermal resistance	56	46	162	°C/W
ψ _{JT}	Junction-to-top characterization parameter	9.2	8.5	5.1	°C/W
ψ _{JB}	Junction-to-board characterization parameter	52	45	162	°C/W
R _{θJC(bot)}	Junction-to-case (bottom) thermal resistance	N/A	N/A	123	°C/W

Note (1): The package thermal impedance is calculated in accordance to JESD 51-7.

Note (2): Thermal Resistances were simulated on a 4-layer, JEDEC board

Electrical Characteristics ⁽¹⁾

T_A = 25°C, unless otherwise noted.

Parameter	Symbol	Test Conditions		Min	Typ.	Max	Units
Input Voltage	V _{IN}			2		5.5	V
Output Voltage	V _{OUT}	V _{IN} =V _{OUT} +1V I _{OUT} =1mA to 300mA		V _{OUT} ×0.98		V _{OUT} ×1.02	V
Output Current	I _{OUT}	V _{IN} ≥V _{OUT(S)} +0.5V			300		mA
Dropout Voltage	V _{drop}	I _{OUT} =100 mA		-	80		mV
		I _{OUT} =250 mA		-		250	
Line Regulations	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \times V_{OUT}}$	(V _{OUT(S)} +1V) ≤V _{IN} ≤5.5V I _{OUT} =1mA		-	0.10		%/V
Load Regulation	ΔV _{OUT}	V _{IN} =V _{OUT(S)} +1.0 V I _{OUT} = 1mA to 300mA		-	50	100	mV
Output Voltage Temperature Characteristics	$\frac{\Delta V_{OUT}}{T_A \times V_{OUT}}$	V _{IN} =V _{OUT(S)} +1.0V, I _{OUT} =10mA -40°C≤T _A ≤85°C		-	±100	-	ppm/ °C
Quiescent current	I _{SS1}	V _{IN} =V _{OUT(S)} +1.0 V		-	1.5		μA
Shutdown Current	I _{SD}	V _{EN} =0.3V (Disable)			0.1	1	μA
Power Supply Rejection Ratio	PSRR	I _{OUT} =20 mA	f = 100Hz	-	70	-	dB
			f = 1kHz		60	-	dB
Output Noise Voltage	e _N	BW=10Hz to 100kHz, C _{OUT} =10μ	I _{OUT} =1mA		20		μV _{RMS}
			I _{OUT} =300mA		12		



300mA High PSRR, Low Noise, Low Power LDO

		F					
Short-Circuit Current Limit	I_{SC}			100	-	mA	
High Input Threshold	V_{ENH}	VEN rising until the output is enabled	0.9			V	
Low Input Threshold	V_{ENL}	VEN falling until the output is disabled			0.4	V	
Input Current at EN pin	I_{EN}	$V_{EN}=3.3V$ and $V_{IN}=3.3V$		0.5		μA	
		$V_{EN}=0V$ and $V_{IN}=3.3V$		0.001		μA	
Turn On Time	t_{ON}			80	150	μS	
Thermal Shutdown Temperature	T_{SD}	T_J rising		155		$^{\circ}C$	
Thermal Shutdown Hysteresis	ΔT_{SD}	T_J falling from shutdown		15		$^{\circ}C$	

Note (1): All of specification is verified by design.

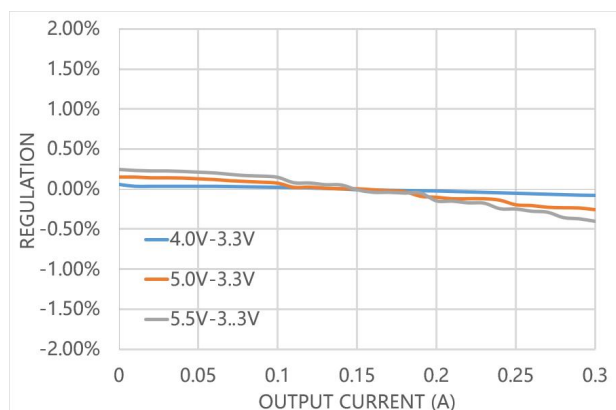
Typical Performance Characteristics

Note (1): Typical performance characteristics below based on $T_A = 25^{\circ}C$, unless otherwise noted.

Note (2): $V_{OUT}=3.3V$, $V_{IN}=V_{OUT}+2V$, $C_{IN}=10\mu F$, $C_{OUT}=10\mu F$, unless otherwise noted

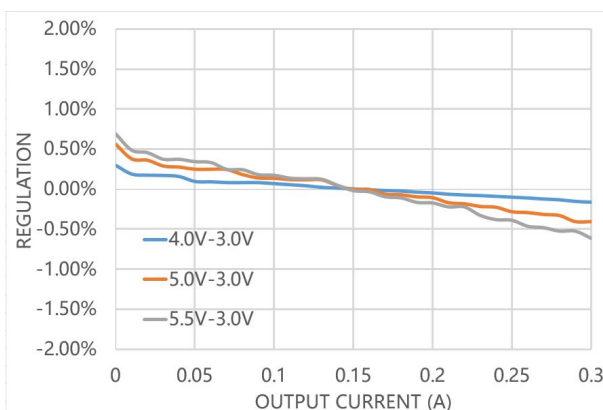
Load Regulation

$V_{OUT}=3.3V$



Load Regulation

$V_{OUT}=3.0V$



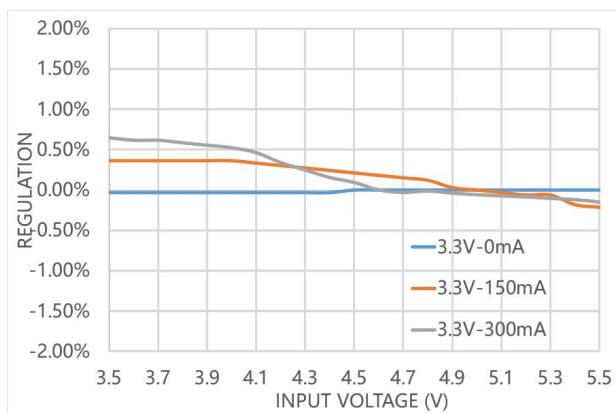
Load Regulation

Load Regulation

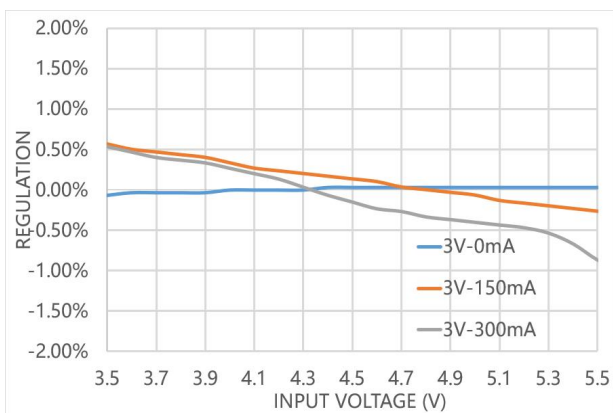


300mA High PSRR, Low Noise, Low Power LDO

VOUT=3.3V

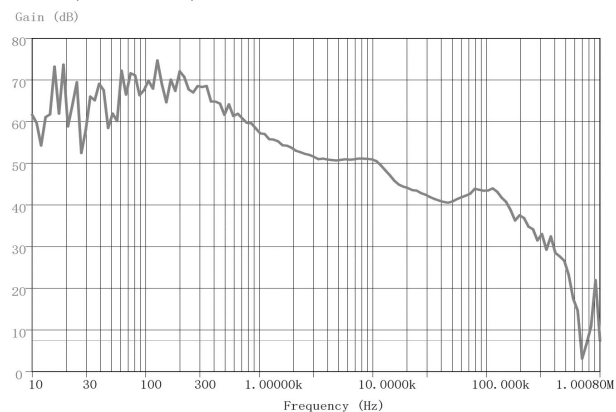


VOUT=3.0V



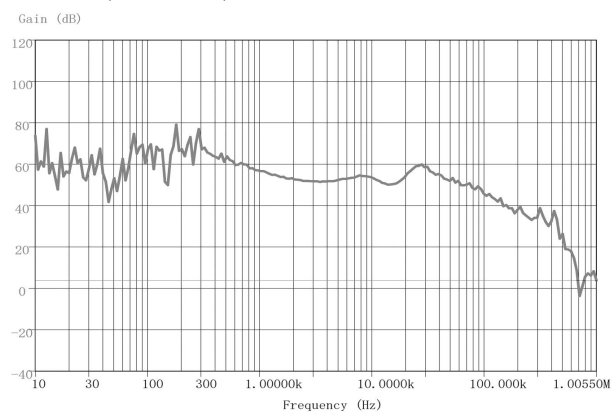
Power Supply Rejection Ratio

VIN=5V, VOUT=3.3V, IOUT=20mA



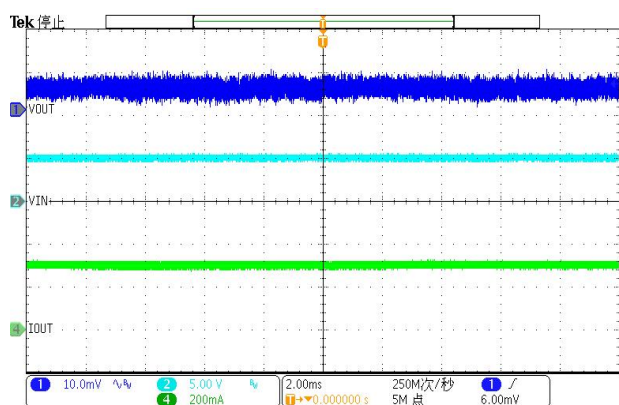
Power Supply Rejection Ratio

VIN=5V, VOUT=3.0V, IOUT=20mA



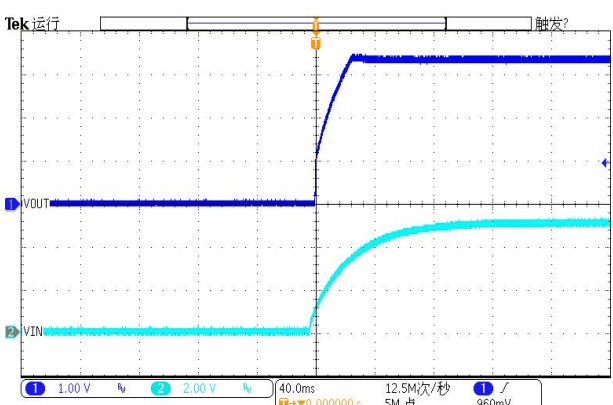
Steady State

VIN=5V, VOUT=3.3V, IOUT=300mA



Vin Start Up

VIN=5V, VOUT=3.3V, IOUT=1mA



300mA High PSRR, Low Noise, Low Power LDO

Applications Information

Internal Current Limit and Short-Circuit Protection

The GP2101 has an internal foldback current limit that helps to protect the regulator during fault conditions. The current supplied by the device is gradually throttled down as the output voltage decreases. When the output is shorted, the LDO supplies a 30% of typical output current. Output voltage is not regulated when the device is in current limit, and is $V_{OUT} = I_{CL} \times R_{LOAD}$. The advantage of foldback current limit is that the I_{CL} value is less than the fixed current limit. Therefore, the power that the PMOS pass transistor dissipates $[(V_{IN} - V_{OUT}) \times I_{CL}]$ is much less.

Thermal Shutdown Protection (T_{SD})

Thermal shutdown disables the output when the junction temperature rises to approximately 160°C which allows the device to cool. When the junction temperature cools to approximately 145°C, the output circuitry enables. Based on power dissipation, thermal resistance, and ambient temperature, the thermal protection circuit may cycle on and off. This thermal cycling limits the dissipation of the regulator and protects it from damage as a result of overheating.

The thermal shutdown circuitry of the GP2101 has been designed to protect against temporary thermal overload conditions. The T_{SD} circuitry was not intended to replace proper heat-sinking. Continuously running the GP2101 device into thermal shutdown may degrade device reliability.

Enable (EN pin)

The EN pin voltage must be higher than the V_{ENH} threshold to ensure that the device is fully enabled under all operating conditions. The EN pin voltage must be lower than the V_{ENL} threshold to ensure that the device is fully disabled and the automatic output discharge is activated.

Low Output Noise

Any internal noise at the GP2101 reference voltage is reduced by a first order low-pass RC filter before it is passed to the output buffer stage.

Layout Guidelines

The dynamic performance of the GP2101 is dependent on the layout of the PCB.

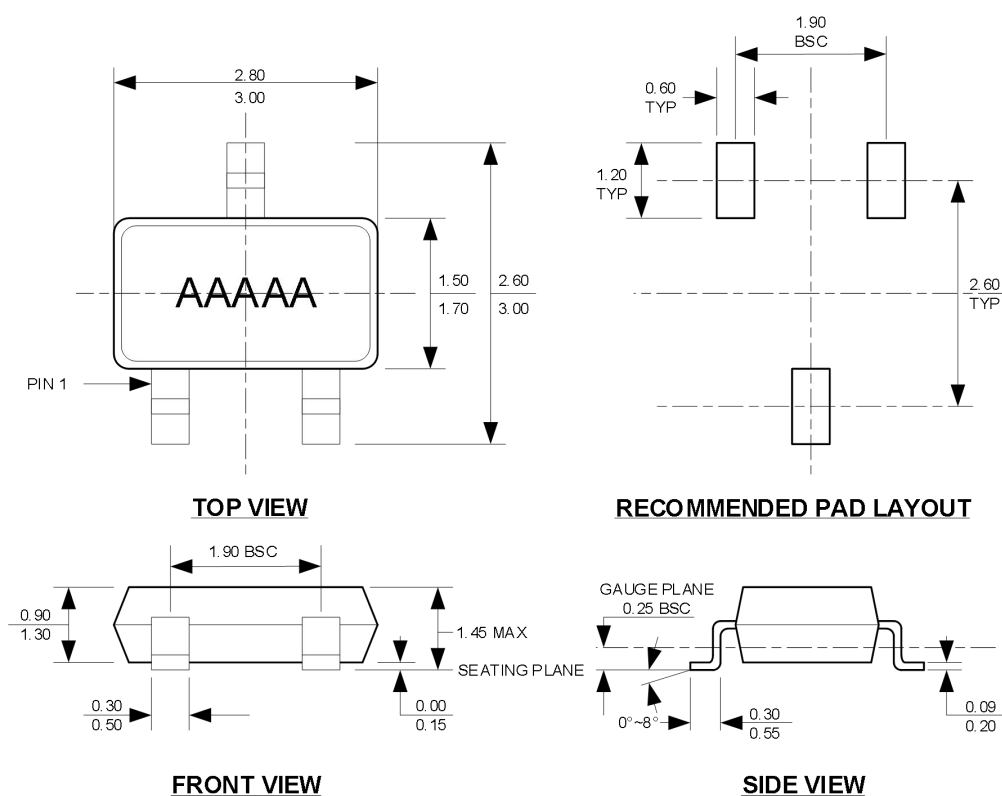
1. Best performance is achieved by placing C_{IN} and C_{OUT} as close to the IC as possible.
2. The ground connections for C_{IN} and C_{OUT} must be back to the IC's GND pin using as wide and short a copper trace as is practical.
3. Connections using long trace lengths, narrow trace widths, and/or connections through vias must be avoided. These add parasitic inductances and resistance that results in inferior performance especially during transient conditions.



300mA High PSRR, Low Noise, Low Power LDO

Packaging Information

3-Pin SOT23 Outline Dimensions

SOT23-3**NOTE:**

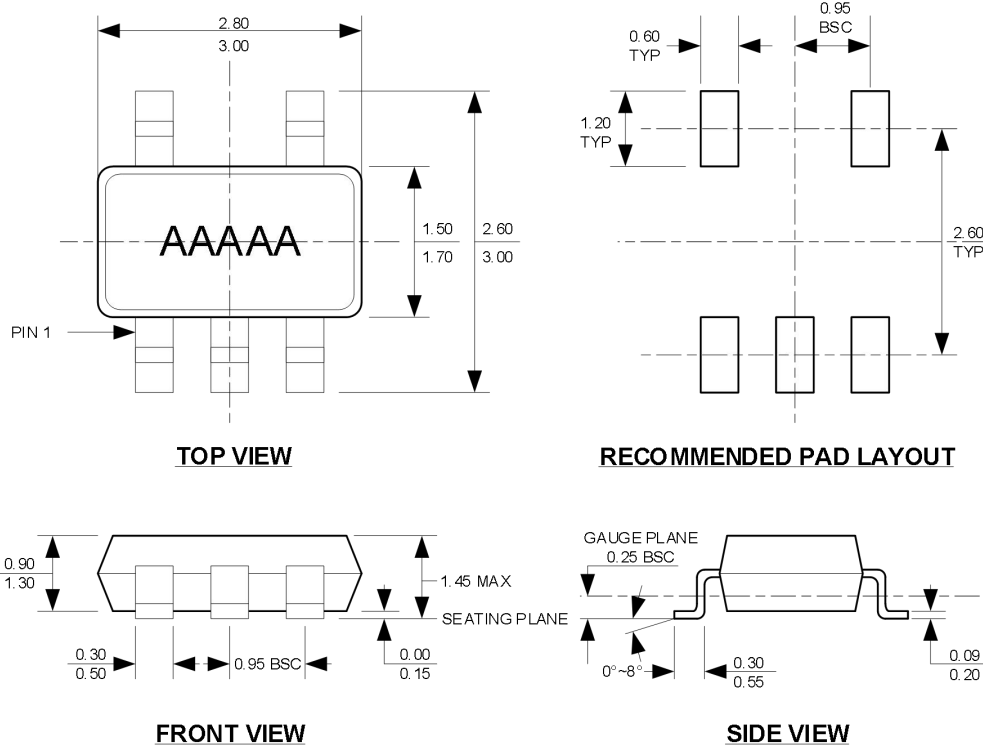
1. CONTROL DIMENSION IS IN INCHES. DIMENSION IN BRACKET IS IN MILLIMETERS.
2. PACKAGE LENGTH DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
3. PACKAGE WIDTH DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS.
4. LEAD COPLANARITY (BOTTOM OF LEADS AFTER FORMING) SHALL BE 0.004" INCHES MAX.
5. DRAWING CONFORMS TO JEDEC MS-012, VARIATION BA.
6. DRAWING IS NOT TO SCALE.



300mA High PSRR, Low Noise, Low Power LDO

5-Pin SOT23 Packaging Information

SOT23-5



NOTE:

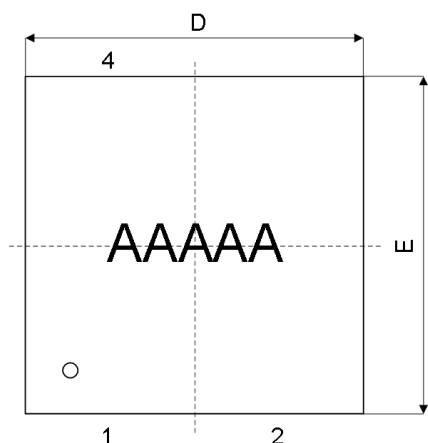
1. CONTROL DIMENSION IS IN INCHES. DIMENSION IN BRACKET IS IN MILLIMETERS.
2. PACKAGE LENGTH DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
3. PACKAGE WIDTH DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS.
4. LEAD COPLANARITY (BOTTOM OF LEADS AFTER FORMING) SHALL BE 0.004" INCHES MAX.
5. DRAWING CONFORMS TO JEDEC MS-012, VARIATION BA.
6. DRAWING IS NOT TO SCALE.



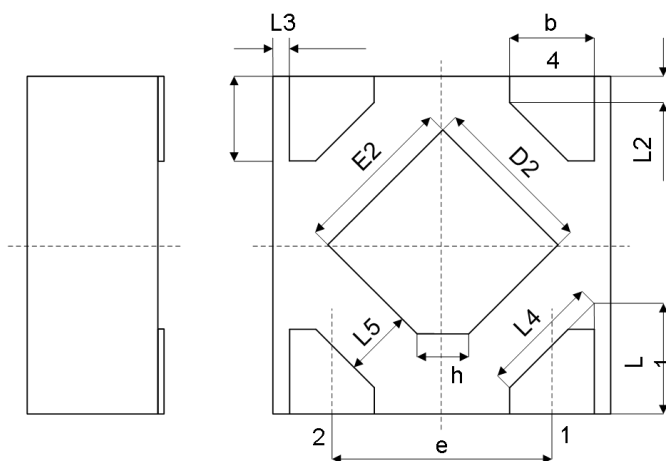
300mA High PSRR, Low Noise, Low Power LDO

4-Pin DFN1×1 Packaging Information

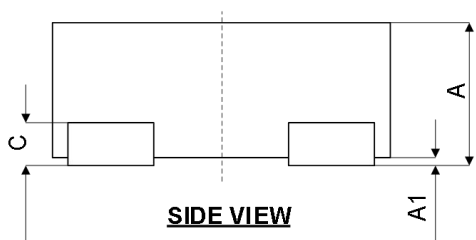
DFN1x1-4



TOP VIEW



BOTTOM VIEW



SIDE VIEW

Symbl	DIM	Min (mm)	Nom (mm)	Max (mm)
A		0.45	-	0.6
A1		0	0.02	0.05
b		0.20	0.25	0.30
c		0.02	0.07	0.17
D		0.95	1.00	1.05
D2		0.38	0.48	0.58
e		0.65BSC		
E		0.95	1.00	1.05
E2		0.38	0.48	0.58
L		0.20	0.25	0.30
L2		0.077REF		
L3		0.05REF		
L4		0.34REF		
L5		0.20REF		
h		0.12REF		

NOTE:

1. CONTROL DIMENSION IS IN INCHES. DIMENSION IN BRACKET IS IN MILLIMETERS.
2. PACKAGE LENGTH DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
3. PACKAGE WIDTH DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS.
4. LEAD COPLANARITY (BOTTOM OF LEADS AFTER FORMING) SHALL BE 0.004" INCHES MAX.
5. DRAWING CONFORMS TO JEDEC MS-012, VARIATION BA.
6. DRAWING IS NOT TO SCALE.