TECH PUBLIC
台舟电子

XC6202P Series

Low voltage differential high current linear regulator

WWW.SOT23.COM.TW

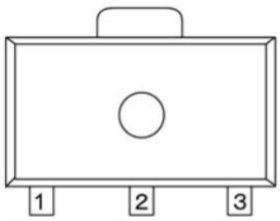
Features

- 2μA Current at no Load
- ±2% Output Accuracy
- 150mA Output Current
- Current Limit Protection

Applications

- Industrial Controls
- Home Automation
- Low Power Microcontrollers
- Portable, Battery Powered Equipment

PIN CONFIGURATION



SOT89-3

Pin Name	Pin Function
VOUT	Output of the Regulator
GND	Ground
VIN	Input of Supply Voltage

Ordering Information

XC6202P332PR

PACKAGE TYPE
PR :SOT89-3

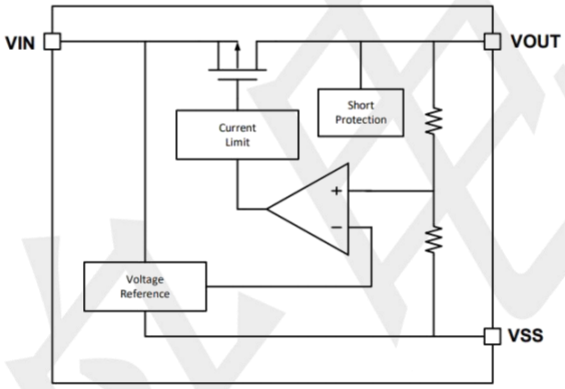
OUTPUT VOLTAGE
12: 1.2V
15: 1.5V
18: 1.8V
25: 2.5V
30: 3.0V
33: 3.3V
45: 4.5V
50: 5.0V

Absolute Maximum Ratings

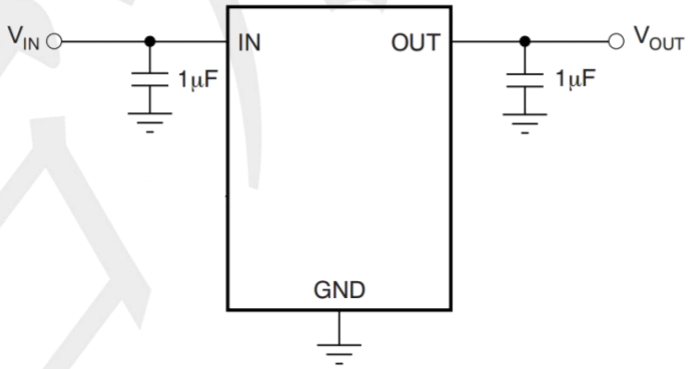
over operating free-air temperature range (unless otherwise noted)

		MIN	MAX	UNIT
VIN	Continuous input voltage range	-0.3	22	V
VOUT	Output voltage range	-0.3	VOUT+0.3	
IOUT	Output pin current	Internally limited		mA
Temperature	Operating junction, TJ	-25	80	℃
	Storage, Tstg	-40	125	

BLOCK DIAGRAM



Typical Application Circuit



Electrical Characteristics

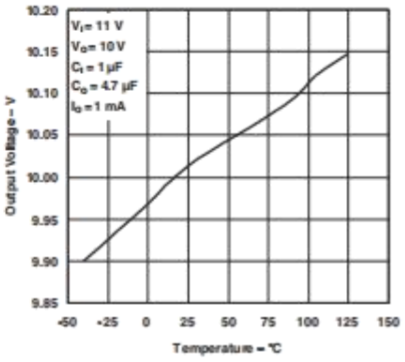
(VIN=7V, TA=25℃, unless otherwise specified)

PARAMETER	SYMBOL	TEST Conditions	MIN	TYP	MAX	UNIT
Supply Voltage	VIN		2	--	20	V
Output current	IOUT		0	--	150	mA
DC Output Voltage Accuracy		IOUT = 0.1mA	-2	--	2	%
Dropout Voltage（VIN-VOUT）	IOUT = 100mA	VOUT = 1.5V	--	420	--	mV
		VOUT = 1.8V	--	310	--	
		VOUT = 2.8V	--	220	--	
		VOUT = 3.0V	--	183	--	
		VOUT = 3.3V	--	161	--	
		VOUT = 4.5V	--	135	--	
		VOUT = 5.0V	--	122	--	
Maximum output current	Iout max	VIN= VOUT+1V	100	--	--	mA
Ground Current (IOUT = 0mA)	IQ	VOUT = 3.3V	--	2	--	uA
Shutdown Ground Current	ISD	VOUT = 0V	--	0.01	0.5	
VOUT Shutdown Leakage Current	ILEAK		--	0.01	0.5	
Line Regulation	ΔLINE	IOUT =1mA, 2≤VIN≤20V	--	0.3	--	%
Load Regulation	ΔLOAD	10mA≤ IOUT ≤ 100mA	--	0.3	--	
Output Current Limit	ILIM	VOUT=0.9× VOUT(NOM)	150	200	250	mA
Power Supply Rejection Ratio	PSRR	VOUT =5V, IOUT =30mA, VIN = 20V, f = 1kHz	--	70	--	dB
Thermal Shutdown Temperature	TSD	IOUT =10mA	--	160	--	℃
Thermal Shutdown Hysteresis	ΔTSD		--	15	--	
Package Thermal Resistance (Note 1)	θJA	Thermal Resistance Junction-toAmbient	--	100	--	℃/W
Total Power Dissipation	P_{DTOT}	T_C=25℃	--	1.25	--	W

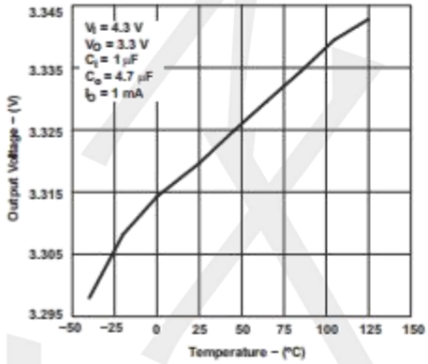
Note: 1. SOT89-3 devicesare mounted on 1"x1" FR-4 substrate PC board, with minimum recommended pad layout.

Typical Operating Characteristics (25 °C, unless otherwise noted)

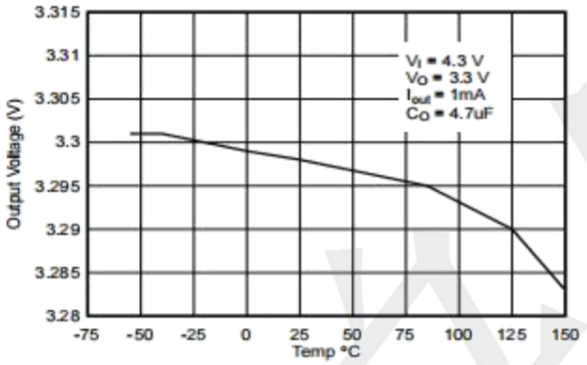
Unless otherwise specified: TA = 25℃,VIN = VO(NOM) + 1 V,COUT = 4.7μF,CIN = 1 μF all voltage options.



Output Voltage vs Temperature for Legacy Chip

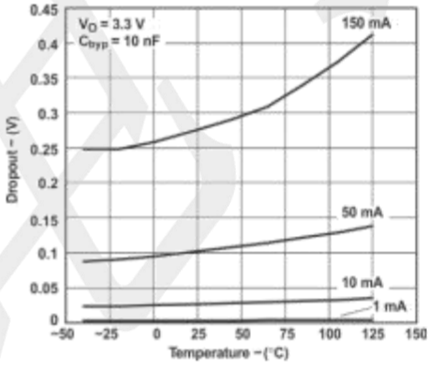


Output Voltage vs Temperature for Legacy Chip

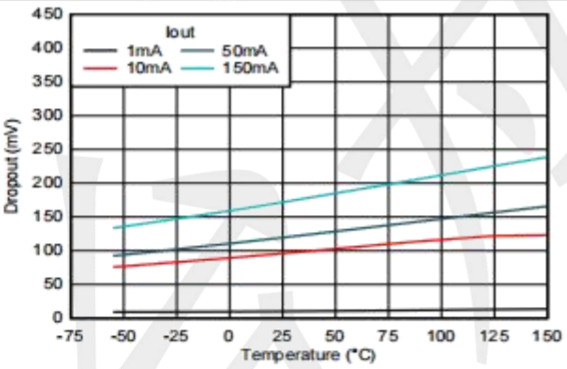


V_{IN} = 4.3 V, V_{OUT} = 3.3 V (for new chip)

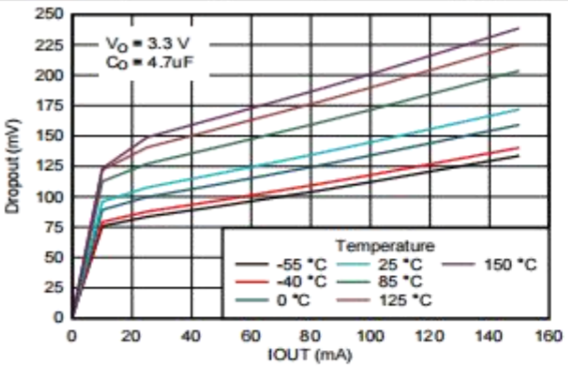
Output Voltage vs Temperature for New Chip



Dropout Voltage vs Temperature for Legacy Chip



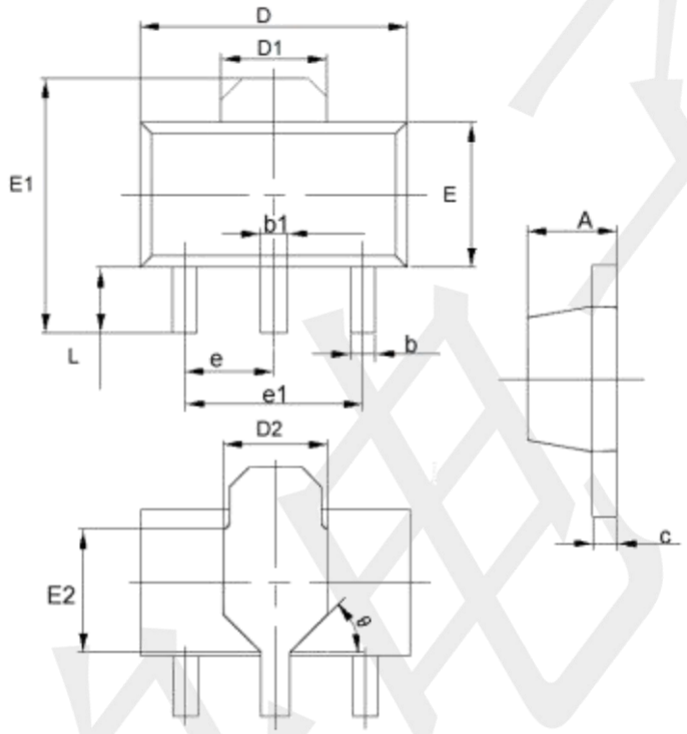
Dropout Voltage vs Temperature for New Chip



Dropout Voltage vs Load Current for New Chip

Package informantion

SOT89-3



参数	尺寸（mm）		尺寸（Inch）	
	最小值	最大值	最小值	最大值
A	1.4	1.6	0.0551	0.0630
b	0.32	0.52	0.0126	0.0205
b1	0.4	0.58	0.0157	0.0228
c	0.35	0.45	0.0138	0.0177
D	4.4	4.6	0.1732	0.1811
D1	1.55(TYP)		0.061(TYP)	
D2	1.75(TYP)		0.0689(TYP)	
e1	3.0(TYP)		0.1181(TYP)	
E	2.3	2.6	0.0906	0.1023
E1	3.94	4.4	0.1551	0.1732
E2	1.9(TYP)		0.0748(TYP)	
e	1.5(TYP)		0.0591(TYP)	
L	0.8	1.2	0.0315	0.0472
θ	45°		45°	

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LDO Voltage Regulators ***category:***

Click to view products by TECH PUBLIC ***manufacturer:***

Other Similar products are found below :

AP7363-SP-13 NCV8664CST33T3G L79M05TL-E AP7362-HA-7 PT7M8202B12TA5EX TCR3DF185,LM(CT TLF4949EJ NCP4687DH15T1G NCV8703MX30TCG LP2951CN NCV4269CPD50R2G AP7315-25W5-7 NCV47411PAAJR2G AP2111H-1.2TRG1 ZLDO1117QK50TC AZ1117ID-ADJTRG1 NCV4263-2CPD50R2G NCP114BMX075TCG MC33269T-3.5G TLE4471GXT AP7315-33SA-7 NCV4266-2CST33T3G NCP715SQ15T2G NCV8623MN-50R2G NCV563SQ18T1G NCV8664CDT33RKG NCV4299CD250R2G NCV8702MX25TCG TLE7270-2E NCV562SQ25T1G AP2213D-3.3TRG1 AP2202K-2.6TRE1 NCV8170BMX300TCG NCV8152MX300180TCG NCP700CMT45TBG AP7315-33W5-7 NCP154MX180300TAG AP2210K-3.0TRE1 AP2113AMTR-G1 NJW4104U2-33A-TE1 MP2013AGG-5-P NCV8775CDT50RKG NJM2878F3-45-TE1 S-19214B00A-V5T2U7 S-19214B50A-V5T2U7 S-19213B50A-V5T2U7 S-19214BC0A-E8T1U7*1 S-19213B00A-V5T2U7 S-19213B33A-V5T2U7 S-19213BC0A-V5T2U7