

High-Precision LDO 60mA C-MOS Voltage Regulator with Standby

■ GENERAL DESCRIPTION

The NJU7241 series are high precision $\pm 2\%$, 60mA output, C-MOS voltage regulators with standby function, which contains internal accurate voltage reference, error amplifier, control transistor, output voltage setting resistor, short current protection circuit and standby circuit.

The fixed regulation voltages of internal circuits are as following line-up.

The NJU7241 series packed MTP5 and suitable for battery-operated items, battery back-up systems, and especially control block of cellular phone system because of low operating current and low dropout voltage.

■ FEATURES

- High Precision Output Voltage $\pm 2\%$
- Low Operating Current $20\mu A$ typ.
- Low Standby Current $0.1\mu A$ typ.
- Low Dropout Voltage $0.2V$ typ. $V_{OUT}=3V$
- Ripple Rejection $55dB$ typ. @1kHz
- Standby Function
- Small Temperature Coefficient of Output Voltage
- Wide Operating Voltage Range
- Package Outline MTP-5
- C-MOS Technology

■ PACKAGE OUTLINE



NJU7241F

■ OUTPUT VOLTAGE LINE-UP

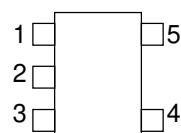
Output Voltage	Type	Output Voltage	Type
1.8V	NJU7241F18	3.4V	NJU7250F34
2.4V	NJU7241F24	3.5V	NJU7241F35
2.5V	NJU7241F25	3.6V	NJU7241F36
2.55V	NJU7241F255	4.0V	NJU7241F40
2.8V	NJU7241F28	4.5V	NJU7241F45
2.85V	NJU7241F285	5.0V	NJU7241F50
2.9V	NJU7241F29	5.9V	NJU7241F59
3.0V	NJU7241F30	6.0V	NJU7241F60
3.3V	NJU7250F33	-	-

Planning Voltage: 2.4V, 3.5V, 3.6V, 4.0V and 6.0V

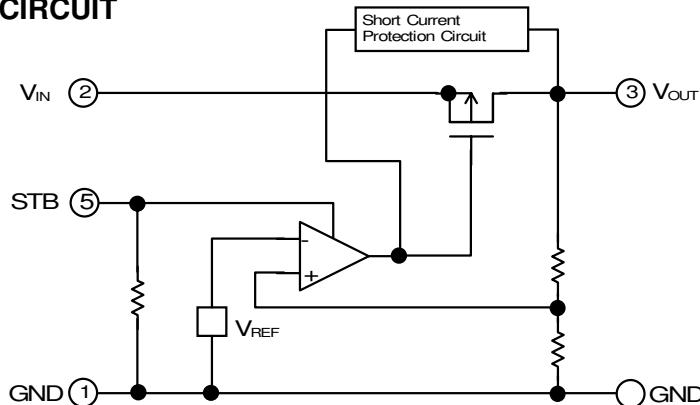
■ TERMINAL DESCRIPTION

No.	Symbol	Function
1	GND	GND
2	V_{IN}	Input
3	V_{OUT}	Output
4	NC	None Connection
5	STB	Standby: Internal Pull-down H: Regulation L: Standby, Output off

■ PIN CONFIGURATION



■ EQUIVALENT CIRCUIT



■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Parameter	Symbol	Ratings	Unit
Input Voltage	V _{IN}	15	V
Input Voltage	V _{STB}	GND-0.3 ~ V _{IN} +0.3	V
Output Voltage	V _{OUT}	GND-0.3 ~ V _{IN} +0.3	V
Output Current	I _{OUT}	120	mA
Power Dissipation	P _D	200	mW
Operating Temperature	T _{OPR}	-40 ~ +85	°C
Storage Temperature	T _{STG}	-40 ~ +125	°C

■ ELECTRICAL CHARACTERISTICS

• V_O=1.8V(C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =2.8V, I _O =30mA	1.764	1.800	1.836	V
Dropout Voltage	ΔV _{IO}	I _O =15mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =2.8V, V _{STB} =V _{IN} , No Load	20	40		μA
Standby Current	I _{DD2}	V _{IN} =2.8V, V _{STB} =GND	0.1	1.0		μA
Input Current	I _{STB}	V _{IN} =2.8V, V _{STB} =V _{IN}	0.56	1.12		μA
Load Regulation	ΔV _O /ΔI _O	V _{IN} =2.8V, 1mA≤I _O ≤60mA	200	300		mV
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =2.8V~12V	0.10			%/V
Ripple Rejection	RR	V _{IN} =2.8V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• V_O=2.4V(C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.4V, I _O =30mA	2.352	2.400	2.448	V
Dropout Voltage	ΔV _{IO}	I _O =30mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.4V, V _{STB} =V _{IN} , No Load	20	40		μA
Standby Current	I _{DD2}	V _{IN} =3.4V, V _{STB} =GND	0.1	1.0		μA
Input Current	I _{STB}	V _{IN} =3.4V, V _{STB} =V _{IN}	0.9	1.8		μA
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.4V, 1mA≤I _O ≤60mA	200	300		mV
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.4V~12V	0.10			%/V
Ripple Rejection	RR	V _{IN} =3.4V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=2.5V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.5V, I _O =30mA	2.450	2.500	2.550	V
Dropout Voltage	ΔV _{IO}	I _O =50mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.5V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =3.5V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =3.5V, V _{STB} =V _{IN}	1.0	2.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.5V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.5V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =3.5V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=2.55V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.55V, I _O =30mA	2.499	2.550	2.601	V
Dropout Voltage	ΔV _{IO}	I _O =50mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.55V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =3.55V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =3.55V, V _{STB} =V _{IN}	1.05	2.1	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.55V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.55V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =3.55V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=2.8V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.8V, I _O =30mA	2.744	2.800	2.856	V
Dropout Voltage	ΔV _{IO}	I _O =50mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.8V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =3.8V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =3.8V, V _{STB} =V _{IN}	1.3	2.6	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.8V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.8V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =3.8V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=2.85V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.85V, I _O =30mA	2.793	2.850	2.907	V
Dropout Voltage	ΔV _{IO}	I _O =50mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.85V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =3.85V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =3.85V, V _{STB} =V _{IN}	1.35	2.70	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.85V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.85V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =3.85V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=2.9V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =3.9V, I _O =30mA	2.842	2.900	2.958	V
Dropout Voltage	ΔV _{IO}	I _O =50mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =3.9V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =3.9V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =3.9V, V _{STB} =V _{IN}	1.4	2.8	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =3.9V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =3.9V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =3.9V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=3.0V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =4.0V, I _O =30mA	2.940	3.000	3.060	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =4.0V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =4.0V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =4.0V, V _{STB} =V _{IN}	1.5	3.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =4.0V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =4.0V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =4.0V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=3.3V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =4.3V, I _O =30mA	3.234	3.300	3.366	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =4.3V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =4.3V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =4.3V, V _{STB} =V _{IN}	1.8	3.6	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =4.3V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =4.3V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =4.3V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=3.4V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =4.4V, I _O =30mA	3.332	3.400	3.468	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =4.4V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =4.4V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =4.4V, V _{STB} =V _{IN}	1.9	3.8	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =4.4V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =4.4V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =4.4V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=3.5V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =4.5V, I _O =30mA	3.430	3.500	3.570	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =4.5V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =4.5V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =4.5V, V _{STB} =V _{IN}	2.0	4.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =4.5V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =4.5V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =4.5V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=3.6V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =4.6V, I _O =30mA	3.528	3.600	3.672	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =4.6V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =4.6V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =4.6V, V _{STB} =V _{IN}	2.1	4.2	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =4.6V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =4.6V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =4.6V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=4.0V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =5.0V, I _O =30mA	3.920	4.000	4.080	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =5.0V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =5.0V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =5.0V, V _{STB} =V _{IN}	2.5	5.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =5.0V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =5.0V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =5.0V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=4.5V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =5.5V, I _O =30mA	4.410	4.500	4.590	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =5.5V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =5.5V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =5.5V, V _{STB} =V _{IN}	3.0	6.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =5.5V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =5.5V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =5.5V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=5.0V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =6.0V, I _O =30mA	4.900	5.000	5.100	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =6.0V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =6.0V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =6.0V, V _{STB} =V _{IN}	3.5	7.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =6.0V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =6.0V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =6.0V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=5.9V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

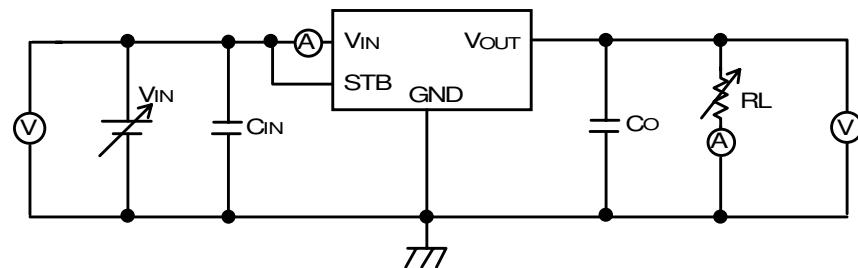
Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =6.9V, I _O =30mA	5.782	5.900	6.018	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =6.9V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =6.9V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =6.9V, V _{STB} =V _{IN}	4.4	8.8	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =6.9V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =6.9V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =6.9V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

• $V_O=6.0V$ (C_{IN}=0.1μF, C_O=10μF, Ta=25°C)

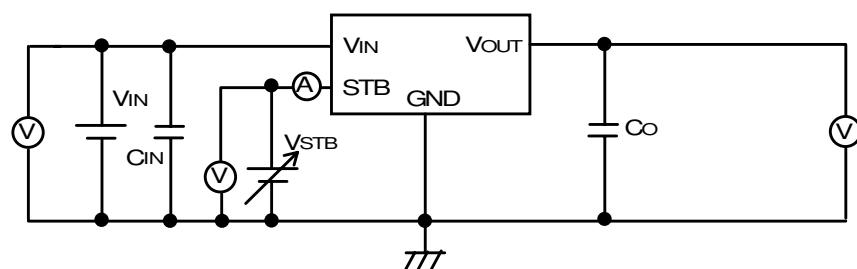
Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	V _O	V _{IN} =7.0V, I _O =30mA	5.880	6.000	6.120	V
Dropout Voltage	ΔV _{IO}	I _O =60mA		0.2	0.3	V
Input Voltage	V _{IN}				14	V
Operating Current	I _{DD1}	V _{IN} =7.0V, V _{STB} =V _{IN} , No Load	20	40	μA	
Standby Current	I _{DD2}	V _{IN} =7.0V, V _{STB} =GND	0.1	1.0	μA	
Input Current	I _{STB}	V _{IN} =7.0V, V _{STB} =V _{IN}	4.5	9.0	μA	
Load Regulation	ΔV _O /ΔI _O	V _{IN} =7.0V, 1mA≤I _O ≤60mA	35	120	mV	
Line Regulation	ΔV _O /ΔV _{IN}	V _{IN} =7.0V~12V	0.10		%/V	
Ripple Rejection	RR	V _{IN} =7.0V, ein=0.5Vp-p, 1kHz	55			dB
H Level Input Voltage	V _{STBH}		1.5		V _{IN}	V
L Level Input Voltage	V _{STBL}		0		0.25	V

■ MEASUREMENT CIRCUIT

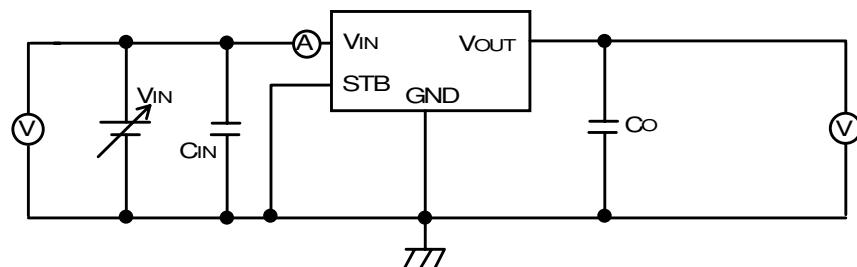
- Standard Test Circuit



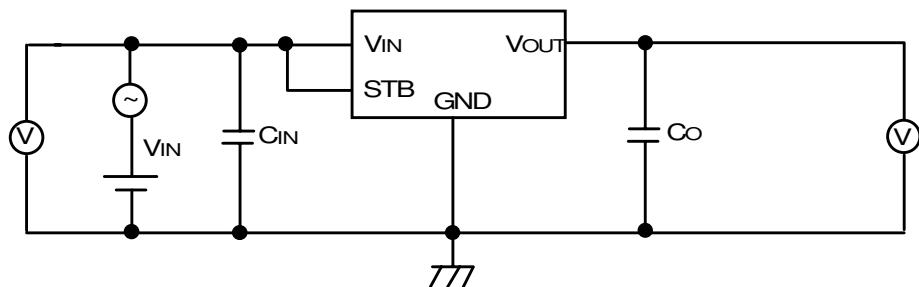
- Standby Input Voltage Test Circuit



- Standby Input Current Test Circuit



- Ripple Rejection Test Circuit



[CAUTION]

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