Low Dropout Voltage Regulator

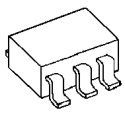
■ GENERAL DESCRIPTION

The NJU7250 series is low dropout voltage and high precision positive voltage regulator with ON/OFF control.

This IC is suitable for the battery items because of low operating current and 150mA output current.

Furthermore, this series is packaged with MTP5.

■ PACKAGE OUTLINE

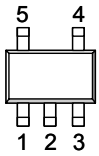


NJU7250F

■ FEATURES

- Low Operating Current 35μA
- Output Current 150mA
- High Precision Output Vo±2%
- Low Dropout Voltage 0.2V typ. @Io=100mA, 2.8≤Vo≤3.3V
- Standby Function Active High
- Short Current Protection
- C-MOS Tecnology
- Package Outline SOT-23-5

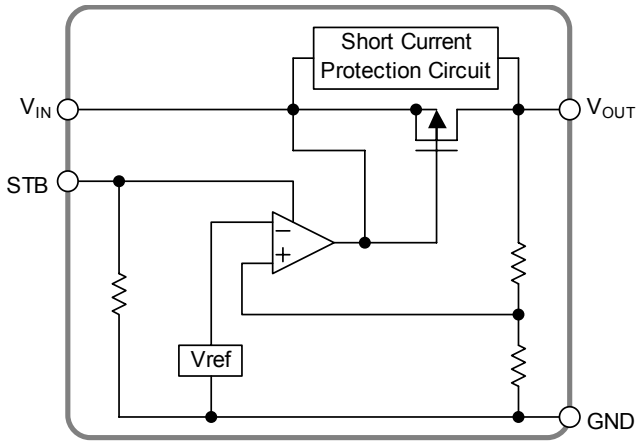
■ PIN CONFIGURATION



NJU7250F

Pin Function
1. V_{IN}
2. GND
3. STB(Active High)
4. NC
5. V_{OUT}

■ EQUIVALENT CIRCUIT



■ OUTPUT VOLTAGE RANK LIST

Device Name	Output Voltage
NJU7250F25	2.5V
NJU7250F27	2.7V
NJU7250F28	2.8V
NJU7250F29	2.9V
NJU7250F30	3.0V
NJU7250F32	3.2V
NJU7250F33	3.3V

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Input Voltage	V_{IN}	+9	V
Control Voltage	V_{CONT}	GND-0.3~ V_{IN}+0.3	V
Output Voltage	V_O	GND-0.3~ V_{IN}+0.3	V
Output Current	I_O	200	mA
Power Dissipation	P_D	250(*1)	mW
		500(*2)	
Operating Temperature	Topr	- 40~+85	°C
Storage Temperature	Tstg	- 40~+150	°C

(*1): Device itself.

(*2): Mounted on glass epoxy board based on EIA/JEDEC. (114.3x76.2x1.6mm: 2Layers)

■ ELECTRICAL CHARACTERISTICS (C_{IN}=0.1µF, C_O=2.2µF, Ta=25°C)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Output Voltage	Vo	V_{IN} = Vo +1V, 1mA≤Io≤30mA	-2.0%	-	+2.0%	V
Output Current	I_O	1.5≤Vo≤1.7, V_{IN} = Vo +1V	100	-	-	mA
		1.8≤Vo≤5.0, V_{IN} = Vo +1V	150	-	-	
Dropout Voltage	ΔV_{IO}	2.5≤Vo≤2.7, Io=100mA	-	0.24	0.35	
		2.8≤Vo≤3.3, Io=100mA	-	0.20	0.30	
Operating Current	I_Q	V_{IN} = Vo +1V, $V_{CONT(ON)}$ = V_{IN}	-	35	70	µA
Standby Current	$I_{Q(OFF)}$	V_{IN} = Vo +1V, $V_{CONT(OFF)}$ = GND	-	0.1	1.0	µA
Load Regulation	$\Delta Vo/\Delta Io$	V_{IN} = Vo +1V, 1mA≤Io≤80mA	-	12	40	mV
Line Regulation	$\Delta Vo/(\Delta V_{IN} \cdot Vo)$	V_{IN}=Vo+0.5V~8V, Io=30mA	-	0.05	0.20	%/V
Output Voltage Temperature Coefficient	$\Delta Vo/\Delta T$	-40≤Ta≤+85°C, Io=10mA	-	±100	-	ppm/°C
Input Voltage	V_{IN}		-	-	8	V
Short Current Limit	I_{LIM}	Vo=0V	-	50	-	mA
Pull-down Resistance	RPD		2.5	5	10	MΩ
H Level Control Voltage	$V_{CONT(ON)}$		1.5	-	V_{IN}	V
L Level Control Voltage	$V_{CONT(OFF)}$		0	-	0.25	V
Output Noise Voltage	V_{NO}	f=10Hz	-	30	-	µV/rms

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Parça koduyla arama

Üretici parça numarasını yazın; stok ve fiyatı hemen görün.

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Ürün kategorileri

Entegreden kapasitöre tüm elektronik komponent kategorileri.

Kategorilere göz atın

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Üreticileri görün

Toplu alım ve teklif

Listede olmayan ya da yüksek adetli parçalar için teklif isteyin.

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