

ELECTRICAL CHARACTERISTICS

(At $T_A = 25^\circ\text{C}$, $V_{in} = V_{out} (\text{nominal}) + 1\text{V}$, unless otherwise noted)

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT	TEST CIRCUIT
Output voltage accuracy Reference voltage in Adj version (Note 2)	$I_{out} = 1\text{mA}$ $I_{out} = 1 \text{ to } 600\text{mA}$	-1.5 -3		+1.5 +2	%	
Line Regulation $\Delta V_{out}/\Delta V_{in} V_{out}$	$I_{out} = 1\text{mA}$, $(V_{out} + 1\text{V}) < V_{in} < 6.5\text{V}$	-0.3	0.05	0.3	%/V	Fig.1
Load regulation (Note1)	$1\text{mA} \leq I_{out} \leq 600\text{mA}$, $C_{out} = 1\mu\text{F}$		0.5	1.5	%	Fig.2
Dropout voltage for $V_{out} > 2.8\text{V}$ $2.0\text{V} < V_{out} \leq 2.8\text{V}$ $V_{out} \leq 2.0\text{V}$	$I_{out} = 600\text{mA}$		600 800 1300	750 1000 1600	mV	
Maximum output current	$V_{out} > 0.96 \cdot V_{rating}$	600			mA	
Current limit			1300		mA	
EN exit delay	$C_{BP} = 0\mu\text{F}$, $C_{out} = 1\mu\text{F}$ $I_{out} = 100\text{mA}$		600		μsec	
EN input bias current	$V_{EN} = V_{in}$			100	nA	
EN input Low current	$V_{EN} = \text{Gnd}$	-1	-0.3		μA	
EN supply current	$V_{EN} = \text{Gnd}$		0.01	1	μA	
EN input threshold Low	$V_{in} = 2.5 \text{ to } 5.5\text{V}$			0.4	V	
EN input threshold High	$V_{in} = 2.5 \text{ to } 5.5\text{V}$	2			V	
Gnd (Ground) pin current	$I_{out} = 0\text{mA} \text{ to } 600\text{mA}$		50	85	μA	Fig.3
Over-temperature shutdown	$I_{out} = 10\text{mA}$		155		$^\circ\text{C}$	
Over-temperature hysteresis	$I_{out} = 10\text{mA}$		10		$^\circ\text{C}$	
V_{OUT} temperature coefficient	$I_{out} = 10\text{mA}$		30		ppm	
PSRR	$I_{out} = 100\text{mA}$, $C_{out} = 2.2\mu\text{F}$, $f = 100\text{Hz}$		55		dB	
Output voltage noise	$f = 20\text{Hz} \text{ to } 100\text{kHz}$ $I_{out} = 10\text{mA}$		12		μVrms	

Note:

1. The **Load regulation** is measured by using pulse techniques with the duty cycle < 5%
2. The **Reference voltage** nominal value of the adjustable version is 1.27V

TEST CIRCUITS

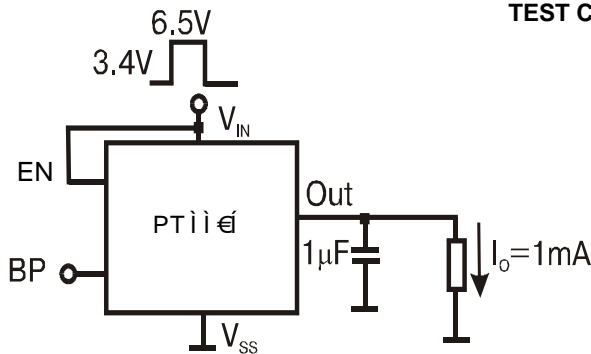


Fig.1. Line regulation

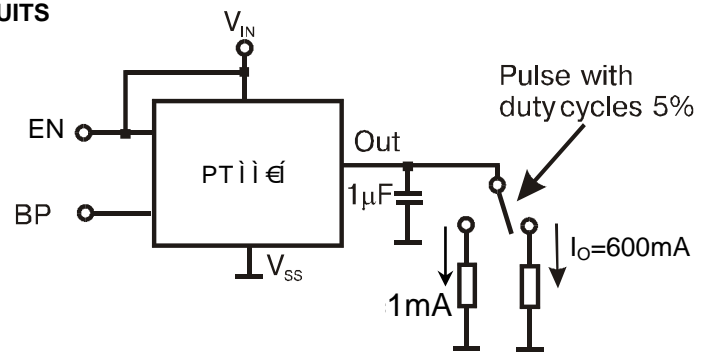


Fig.2. Load regulation

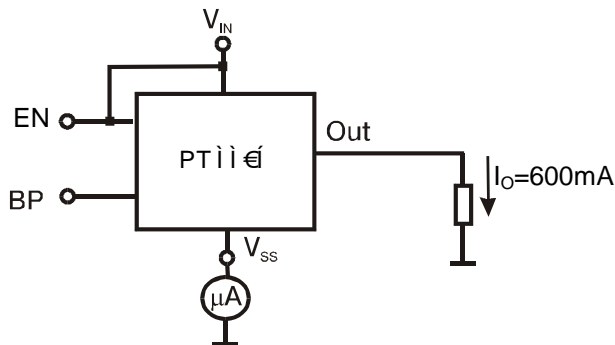
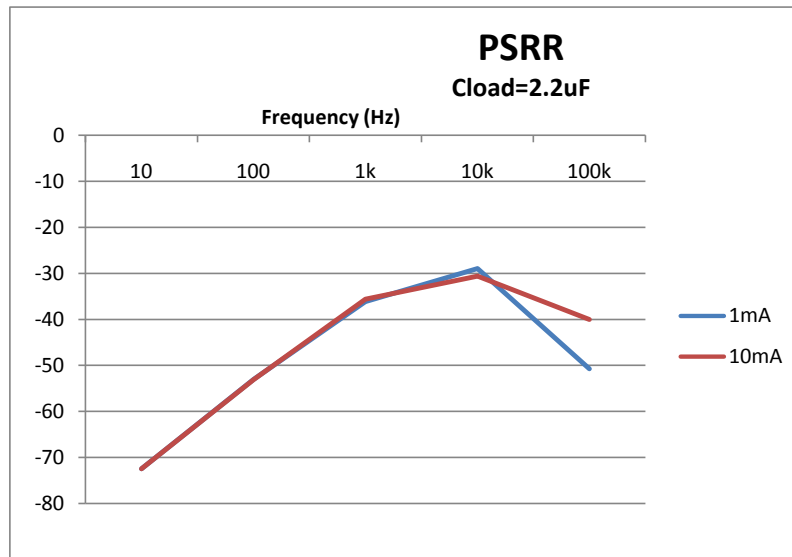
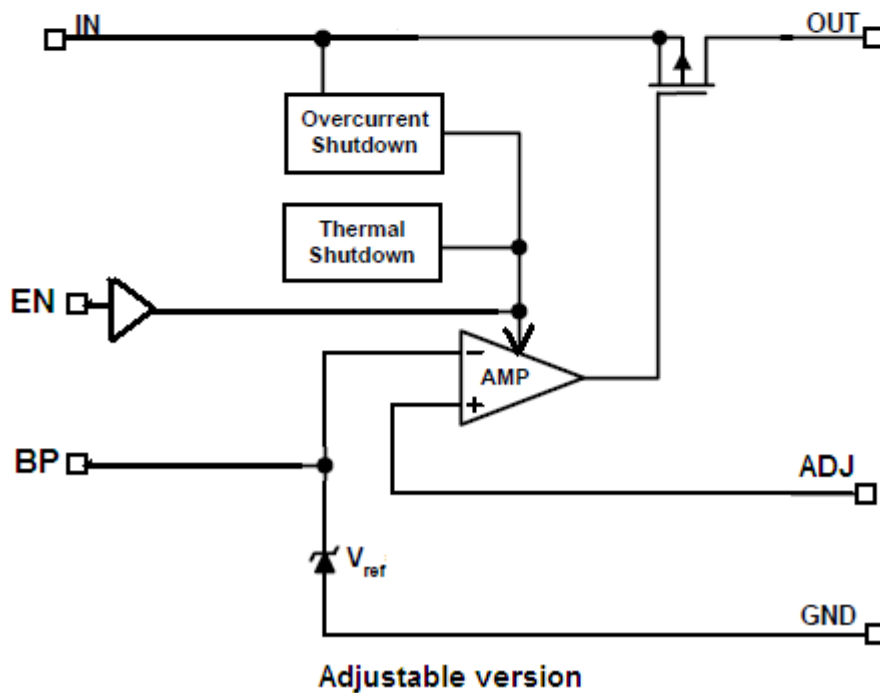
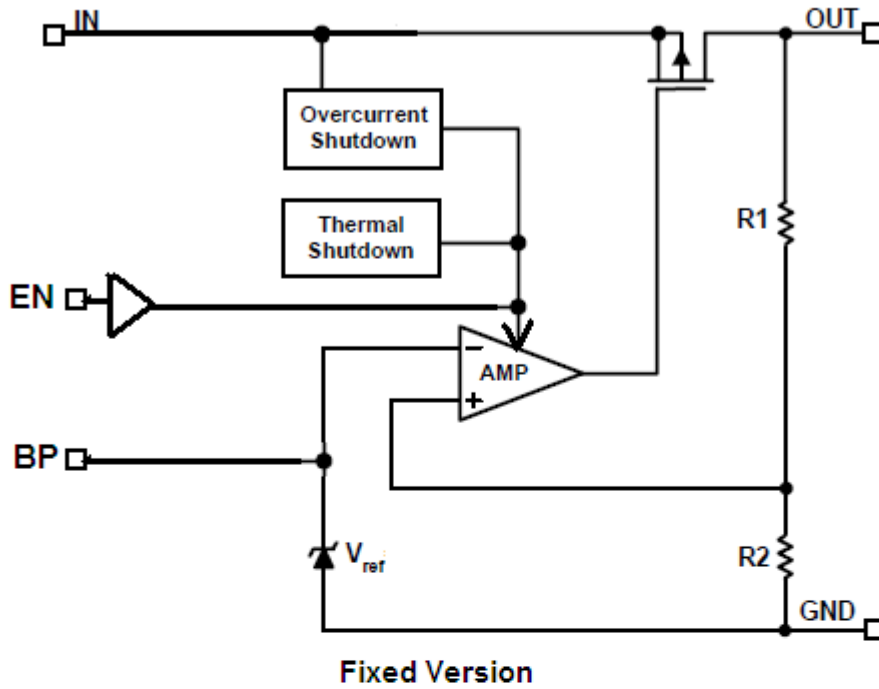


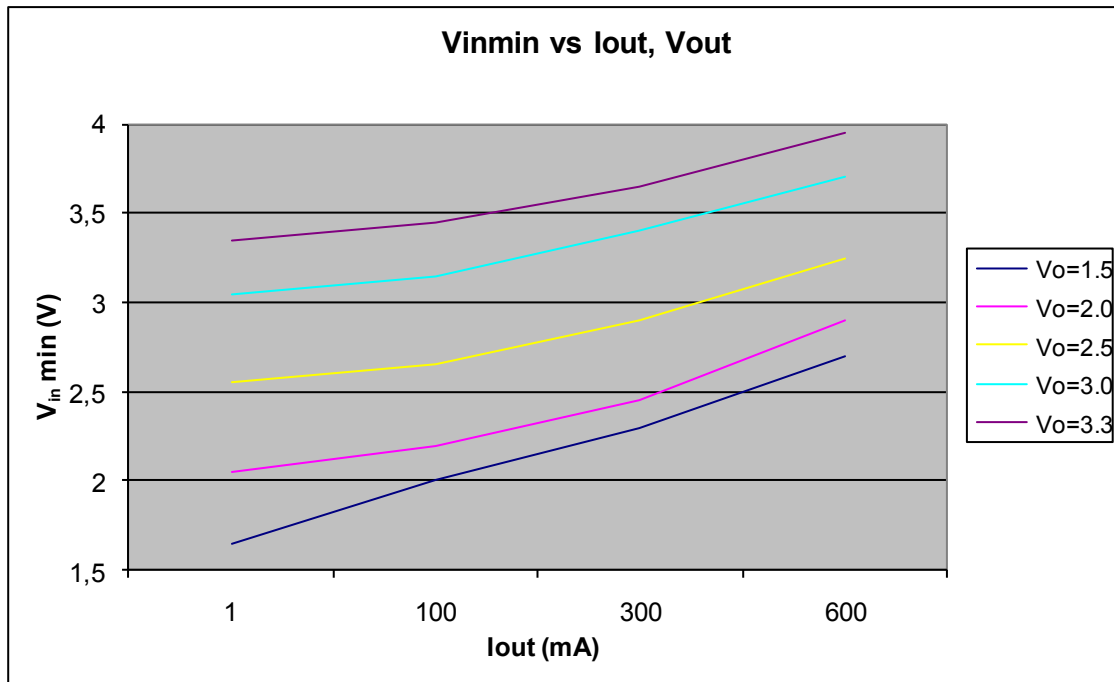
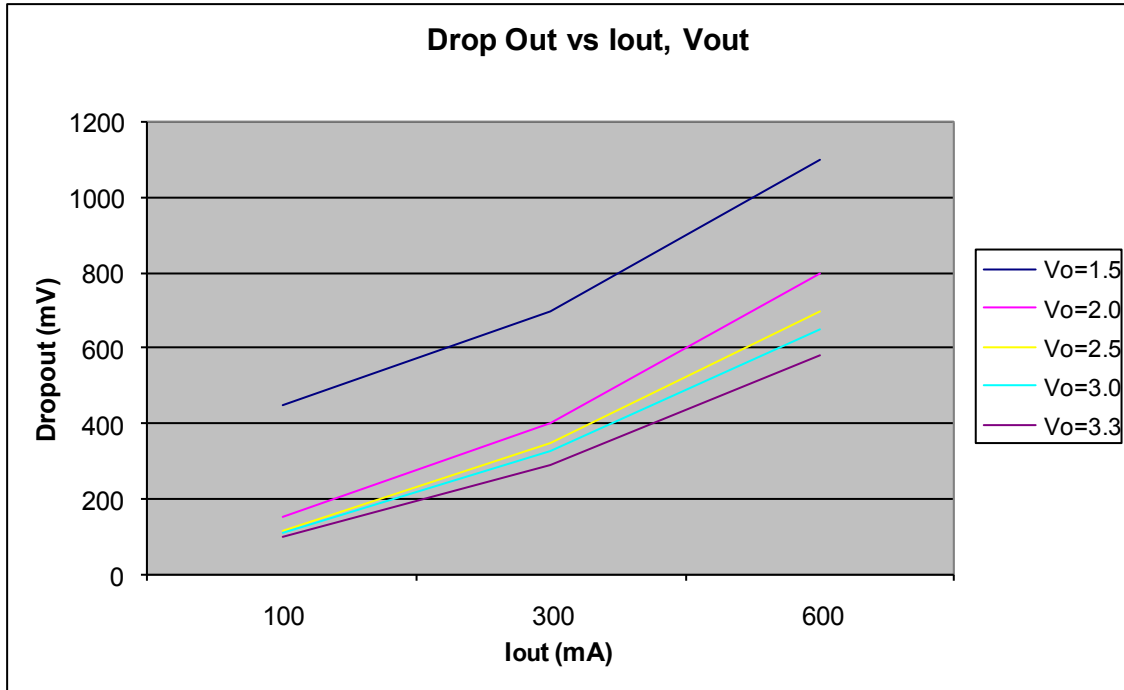
Fig.3. Ground current

TYPICAL CHARACTERISTICS

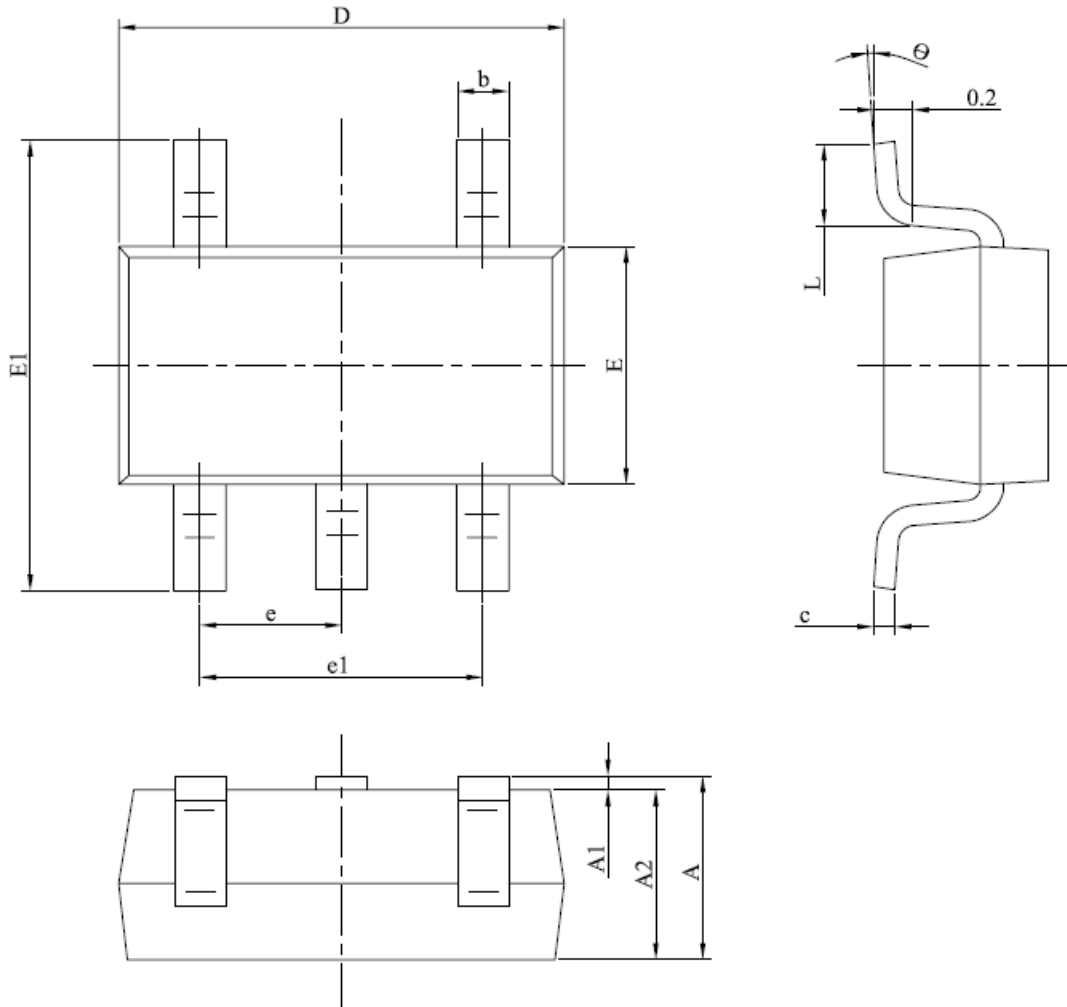


■ Functional Block Diagram





SOT-23-5L



SYMBOL UNIT		A	A1	A2	b	c	D	E	E1	e	e1	L	θ
		mm	Min.	1.050	0.000	1.050	0.300	0.100	2.820	1.500	2.650	0.950 (BSC)	1.800
Nom.	-		-	-	-	-	-	-	-	-	-		-
Max.	1.250		0.100	1.150	0.500	0.200	3.020	1.700	2.950	2.000	0.600		8°
inch	Min.	0.041	0.000	0.041	0.012	0.004	0.111	0.059	0.104	0.037 (BSC)	0.071	0.012	0°
	Nom.	-	-	-	-	-	-	-	-		-	-	-
	Max.	0.049	0.004	0.045	0.020	0.008	0.119	0.067	0.116		0.079	0.024	8°