■ Absolute Maximum Ratings Ta=25℃

PARAMETER		SYMBOL	RATINGS	UNITS
Input Voltage		V_{IN}	7.0	V
Output Current		I_{OUT}	500 *	mA
Output Voltage		V_{OUT}	V_{SS} – 0.3 ~ V_{IN} + 0.3	V
Power Dissipation	SOT-23		250	mW
Operating Temperature Range		Topr	- 40 ~ + 85	°C
Storage Temperature Range		Tstg	- 55 ~ + 125	°C

* I_{OUT}=Pd / (V_{IN}-V_{OUT})

■ Electrical Characteristics Ta = 25℃

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS	CIRCUIT
Output Voltage (*7)	$V_{OUT(E)}$	I_{OUT}=30mA	x 0.98	$V_{OUT(T)}$ E-1	x 1.02	V	
Maximum Output Current	I_{OUTMAX}		-	-	E-2	mA	
Load Regulation	V_{OUT}	$V_{OUT(T)}$>1.8V, 1mA I_{OUT} 100mA $V_{OUT(T)}\leqq$1.8V, 1mA I_{OUT} 50mA	-	-	E-3	mV	
Dropout Voltage	Vdif1	I_{OUT}=30mA	-	E-4		mV	
	Vdif2	$V_{OUT(T)}$>1.8V: I_{OUT}=100mA $V_{OUT(T)}\leqq$1.8V: I_{OUT}=60mA	-	E-5		mV	
Supply Current	I_{DD}	VCE=VIN	-	1.0	3.0	μA	
Line Regulation	$\frac{V_{OUT}}{V_{IN}\ V_{OUT}}$	$V_{OUT(T)}$<4.5V:$V_{OUT(T)}$+1.0V V_{IN} 6.0V $V_{OUT(T)}\geqq$4.5V:5.5V V_{IN} 6.0V I_{OUT}=30mA	-	0.05	0.25	%/V	
Input Voltage	V_{IN}		1.8	-	6.0	V	-
Output Voltage Temperature Characteristics	$\frac{V_{OUT}}{Topr\ V_{OUT}}$	I_{OUT}=30mA -40 °C Topr 85 °C	-	±100	-	ppm/°C	
Short Circuit Current	Ishort	V_{IN}=V_{OUT}+1.5V, V_{OUT}=V_{SS}	-	E-6	-	mA	

NOTE:
* 1 : $V_{OUT(T)}$ = Specified output voltage
* 2 : $V_{OUT(E)}$ = Effective output voltage (Ie. The output voltage when "$V_{OUT(T)}$+1.0V" is provided at the V_{IN} pin while maintaining a certain I_{OUT} value.)
* 3 : Vdif = {V_{IN} 1$^{(*5)}$ + V_{OUT} 1$^{(*4)}$ }
* 4 : V_{OUT}1 = A voltage equal to 98% of the output voltage whenever an amply stabilized I_{OUT} {$V_{OUT(T)}$ + 1.0V} is input.
* 5 : V_{IN} 1 = The input voltage when V_{OUT}1 appears as input voltage is gradually decreased.
* 6 : Unless otherwise stated, V_{IN} = $V_{OUT(T)}$ + 1.0V
* 7 : When $V_{OUT(T)}\geqq$1.5V, accuracy is ±2%.
When $V_{OUT(T)}$<1.5V, accuracy is MIN.:$V_{OUT(T)}$ -30mV / MAX.:$V_{OUT(T)}$ +30mV
+1% accuracy (MIN.: $V_{OUT(T)}$ x 0.99 / MAX.:$V_{OUT(T)}$ x 1.01) is set at $V_{OUT(T)}\geqq$2.0V

	E-1				E-2	E-3	E-4		E-5		E-6
PARAMETER / SETTING VOLTAGE	OUTPUT VOLTAGE				MAX. OUTPUT CURRENT	LOAD REGULATION	DROPOUT VOLTAGE 1		DROPOUT VOLTAGE 2		SHORT CURRENT
	2% ACCURACY		1% ACCURACY								
$V_{OUT(T)}$	$V_{OUT(E)}$ (V)		$V_{OUT(E)}$ (V)		I_{OUTMAX} (mA)	r V_{OUT}	Vdif1		Vdif2		Ishort
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.
1.2	1.170	1.230					460	760	700	960	
1.3	1.270	1.330				40	400	650			180
1.4	1.370	1.430					350	590			

Ordering information

Package	Packing Description	Base Quantity	Packing Quantity
SOT-23			

Package Dimensions

SOT-23

	Dim.	Millimeter (mm)	mil