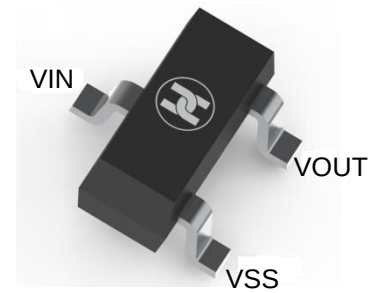
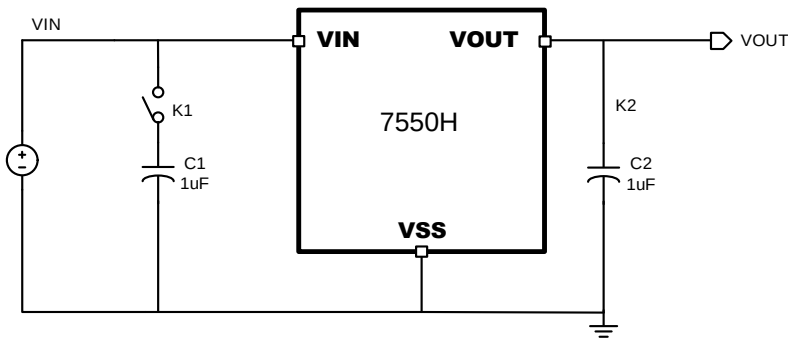


PLASTIC-ENCAPSULATE VOLTAGE REGULATORS

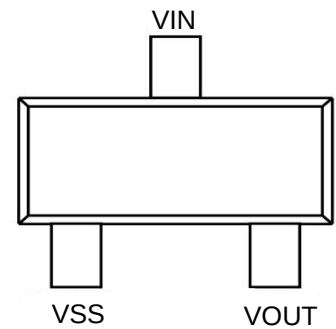
FEATURES

- Maximum Output Current I_o : 0.1 A
- Output Voltage V_o : 5 V
- Continuous Total Dissipation
 P_D : 0.25 W ($T_a = 25^\circ\text{C}$)
- Surface Mount device

SCHEMATIC DIAGRAM



SOT-23



MECHANICAL DATA

- Case: SOT-23
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.008 grams (approximate)
- Marking: 7550

MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	30	V
Power Dissipation	P_D	250	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	160	$^\circ\text{C}/\text{W}$
Operating Temperature	T_{opr}	-40~+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~+150	$^\circ\text{C}$

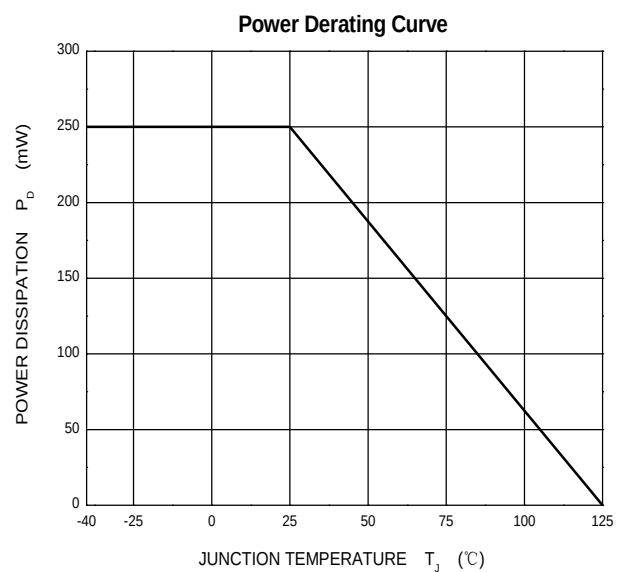
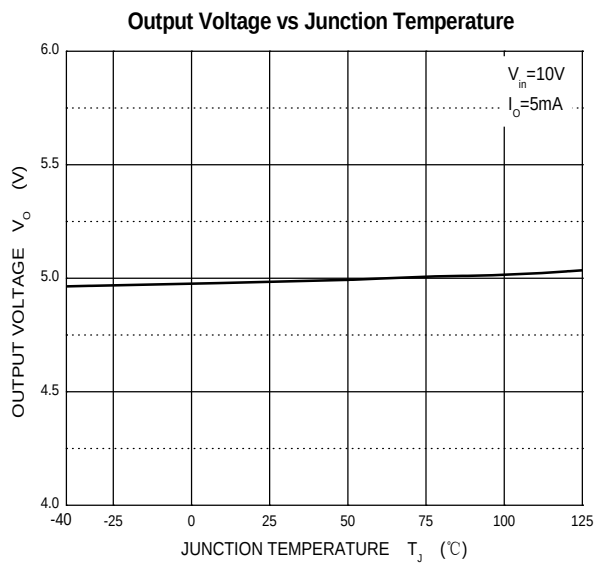
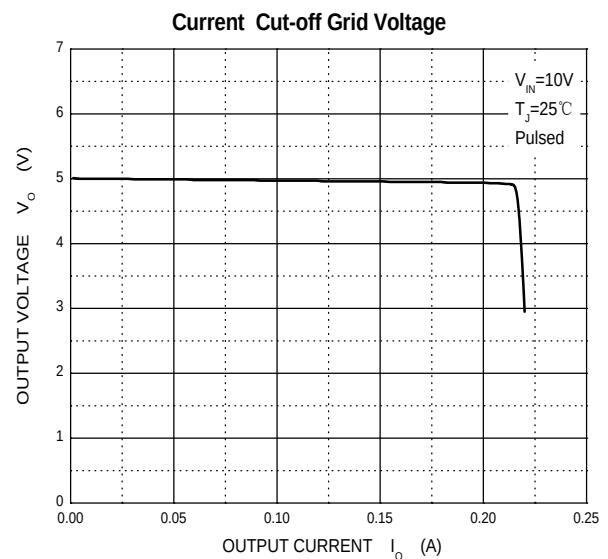
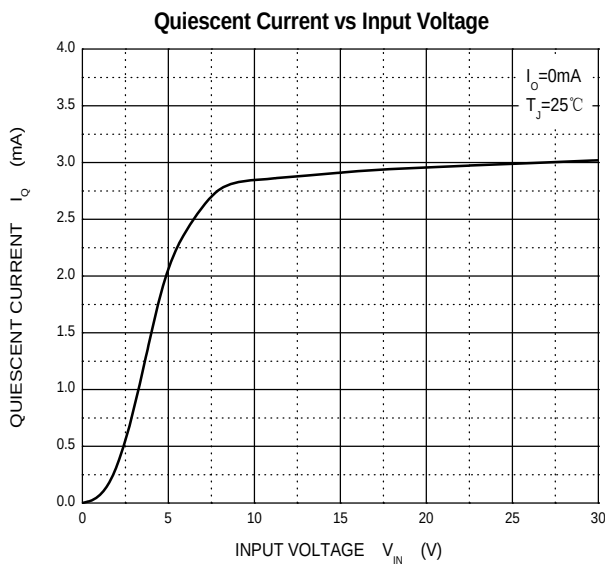
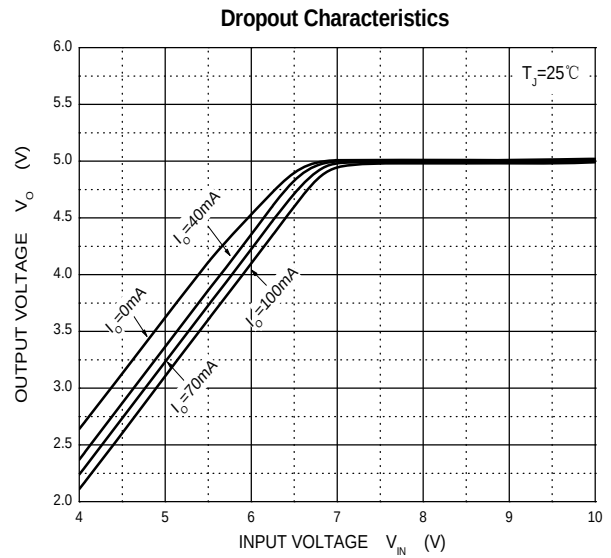
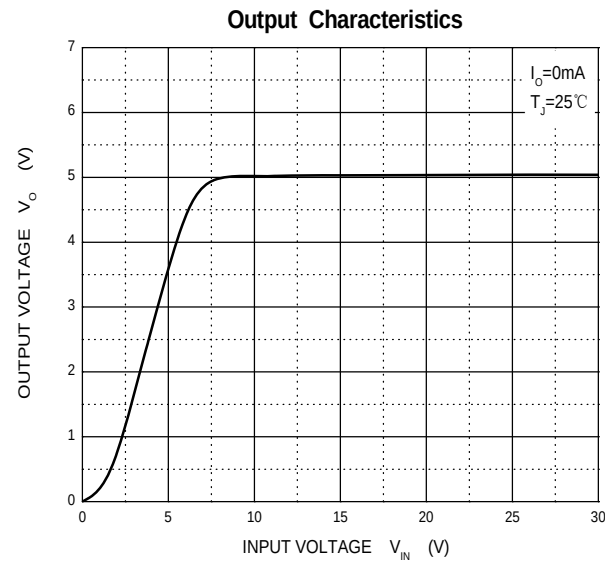
PLASTIC-ENCAPSULATE VOLTAGE REGULATORS

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
($V_i=10V$ $I_o=40mA$ $C_i=0.33\mu F$ $C_o=0.1\mu F$ unless otherwise specified)

No.	Test Item	Param	Test Conditions	Min.	Typ.	Max.	Unit
1	OS1	Continuity Test					
2	IQ1	Quiescent Current 1	K1 断开, $V_{IN}=V_{OUT}+2V$, 空载	1.000		5.000	μA
3	IQ2	Quiescent Current 2	K1 断开, $V_{IN}=30V$, 空载	1.000		5.000	μA
4	VOUT1	Output Voltage 1	K1 连通, $V_{IN}=V_{OUT}+2V$, VOUT 拉出 1mA 电流	4.90		5.10	V
5	VOUT2	Output Voltage 2	K1 连通, $V_{IN}=V_{OUT}+2V$, VOUT 拉出 50mA 电流	4.90		5.10	V
6	VOUT3	Output Voltage 3	K1 连通, $V_{IN}=V_{OUT}+2V$, VOUT 拉出 100mA 电流	4.90		5.10	V
7	VOUT4	Output Voltage 4	K1 连通, $V_{IN}=30V$, VOUT 拉出 1mA 电流	4.925		5.075	V
8	V_{DROP}	Dropout Voltage	$I_{OUT}=50mA$, V_{IN} 从 $V_{OUT}+2V$ 往下扫描, 当检测到 $V_{OUTA}=V_{OUT2} \times 0.98$, 记录此 时输入电压为 V_{INA} , V_{DROP} $=V_{INA}-V_{OUTA}$	200		600	mV
9	LNR	Output Voltage Line Regulation	$((V_{OUT4}-V_{OUT1})/V_{OUT1})/$ $(30-V_{OUT2}) \times 100\%$			0.200	%/V
10	LDR	Output Voltage Load Regulation	$ V_{OUT2}-V_{OUT1} $			50	mV
11	IQ3	Quiescent Current 3	K1 断开, $V_{IN}=V_{OUT}+2V$, 空载	1.000		5.000	μA
12	OS2	Continuity Test					

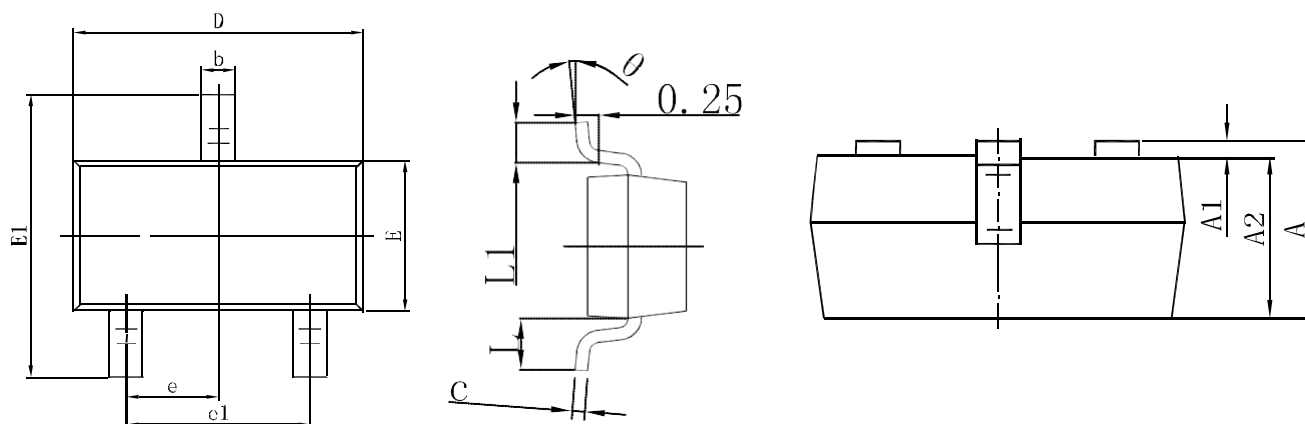
PLASTIC-ENCAPSULATE VOLTAGE REGULATORS

Typical Characteristics



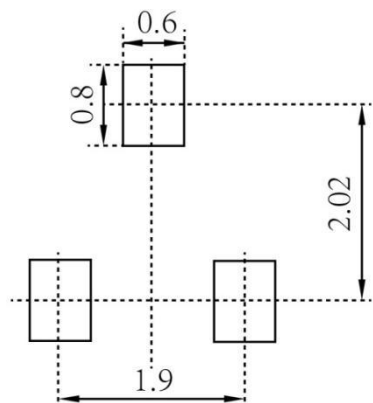
PLASTIC-ENCAPSULATE VOLTAGE REGULATORS

SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



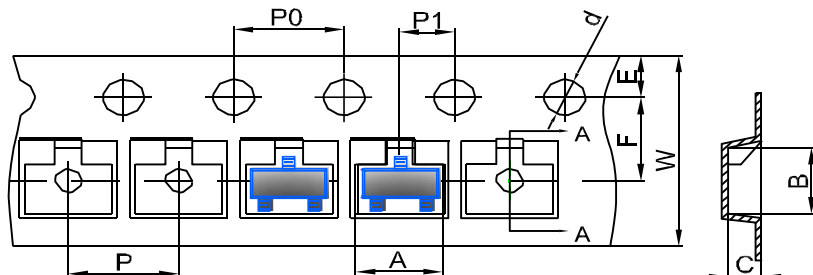
Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

PLASTIC-ENCAPSULATE VOLTAGE REGULATORS

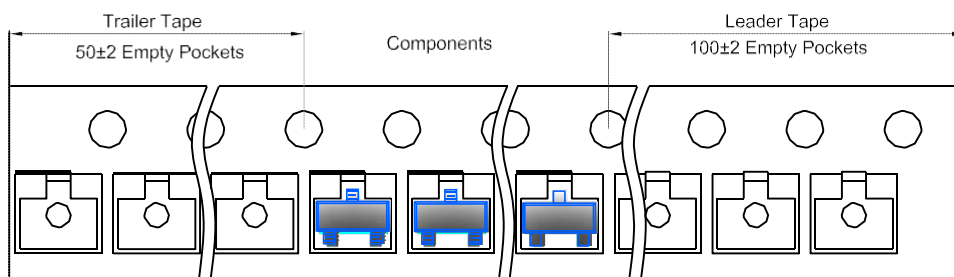
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

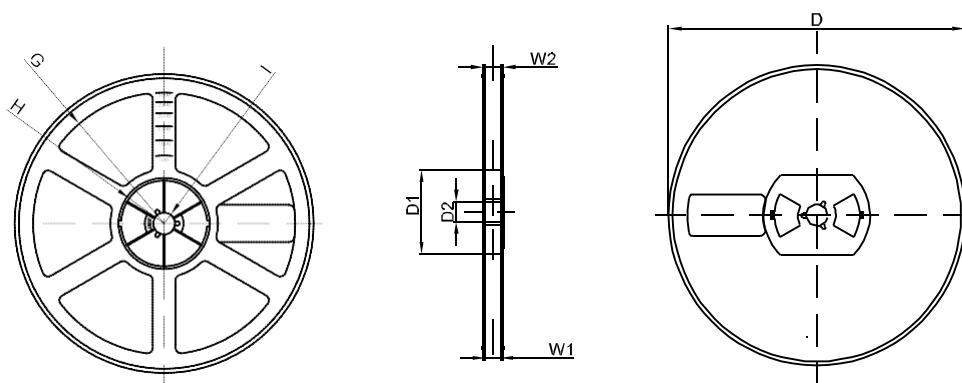


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOT-23 Tape Leader and Trailer



SOT-23 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1