



SK7805

Three-terminal positive voltage regulator

FEATURES:

- Maximum Output current I_{CM} : 1A
- Output voltage V_o : 5V
- Total dissipation
 P_D : 1.25 W($T_a=25^{\circ}\text{C}$)

1.IN
2.GND
3.OUT



TO-252(D-PAK)

ABSOLUTE MAXIMUM RATINGS(Operating temperature unless otherwise specified)

Symbol	Parameter	Value	Units
V_I	Input Voltage	35	V
T_{OPR}	Operating junction Temperature Range	0~+125	$^{\circ}\text{C}$
T_{stG}	Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

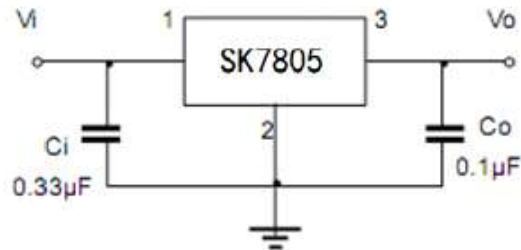
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	V_o		25 $^{\circ}\text{C}$	4.8	5.0	5.2	V
		7V $\leq V_i \leq 20\text{V}$, $I_o=5\text{mA} \sim 350\text{mA}$ $P_o \leq 1.5\text{W}$	0~125 $^{\circ}\text{C}$	4.75	5.0	5.25	V
Load Regulation	ΔV_o	$I_o=1\text{mA} \sim 0.5\text{A}$	25 $^{\circ}\text{C}$		15	100	mV
		$I_o=5\text{mA} \sim 200\text{mA}$	25 $^{\circ}\text{C}$		5	100	mV
Line regulation	ΔV_o	7V $\leq V_i \leq 25\text{V}$ $I_o=200\text{mA}$			3	100	mV
		8V $\leq V_i \leq 25\text{V}$ $I_o=200\text{mA}$	25 $^{\circ}\text{C}$		1	50	mV
Quiescent Current	I_q		25 $^{\circ}\text{C}$		4.2	6	mA
Quiescent Current Change	ΔI_q	8V $\leq V_i \leq 25\text{V}$ $I_o=200\text{mA}$	0~125 $^{\circ}\text{C}$			0.8	mA
	ΔI_q	5mA $\leq I_o \leq 350\text{mA}$	0~125 $^{\circ}\text{C}$			0.5	mA
Output Noise Voltage	V_N	10Hz $\leq f \leq 100\text{KHz}$	25 $^{\circ}\text{C}$		40	200	μV
Ripple Rejection	RR	8V $\leq V_i \leq 18\text{V}$, $f=120\text{Hz}$ $I_o=300\text{mA}$	0~125 $^{\circ}\text{C}$	62	80		dB
Dropout Voltage	V_d	$I_o=350\text{mA}$	25 $^{\circ}\text{C}$		2	2.5	V

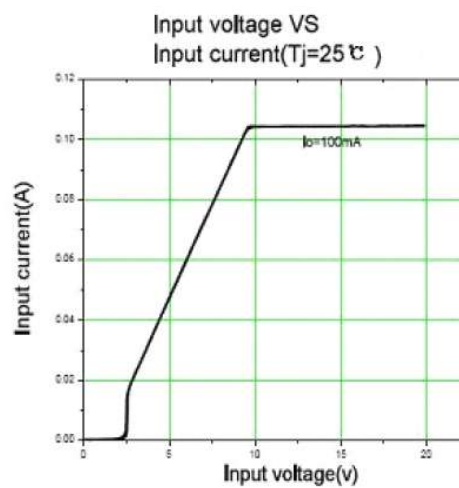
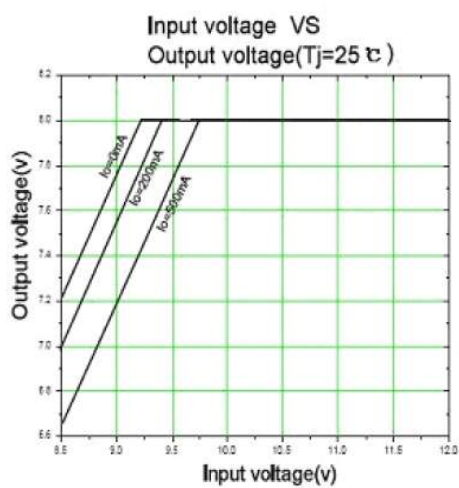
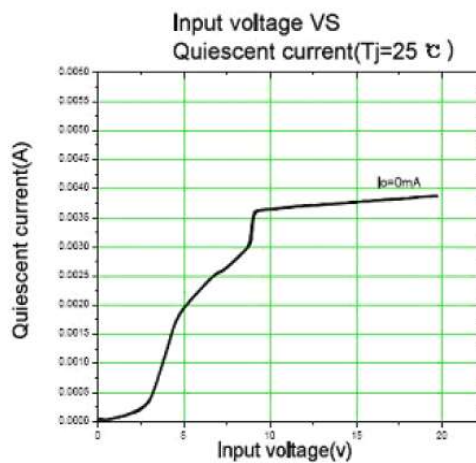
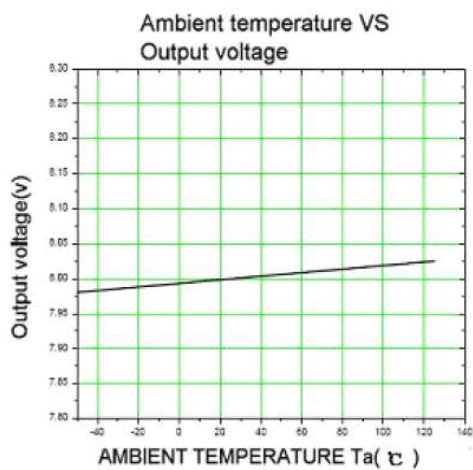


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TYPICAL APPLICATION

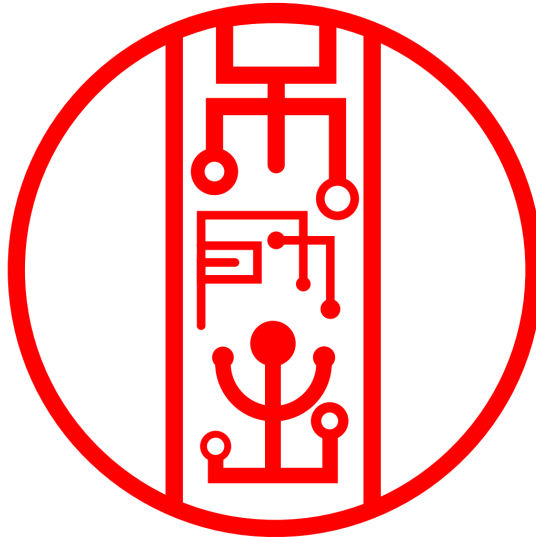


Typical Characteristics



PACKAGE OUTLINE

TO-252(D-PAK)



TO-252(D-PAK) mechanical data

UNIT		A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	M	N	J	K	T
mm	max	6.7	5.5	0.8	2.5	6.3	0.6	1.8	2.29	0.55	3.1	1.2	1.0	1.75	0.1	1.8	1.3	3.16	1.80	4.83
	min	6.3	5.1	0.3	2.1	5.9	0.4	1.3	TYPICAL	0.45	2.7	0.8	0.6	1.40	0.0	TYPICAL	TYPICAL	ref.	ref.	ref.
mil	max	264	217	31	98	248	24	71	90	22	122	47	39	69	4	71	51	124	71	190
	min	248	201	12	83	232	16	51	TYPICAL	18	106	31	24	55	0	TYPICAL	TYPICAL	ref.	ref.	ref.