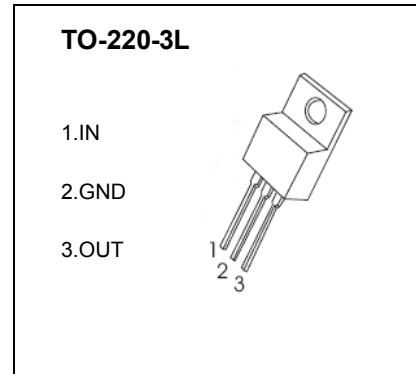


TO-220-3L Plastic-Encapsulate Voltage Regulators

CJ7805H Three-terminal positive voltage regulator

FEATURES

- Maximum pulse output current : I_{OM} : 1.5 A
- Output voltage V_o : 5V
- Continuous total dissipation is internally limited



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

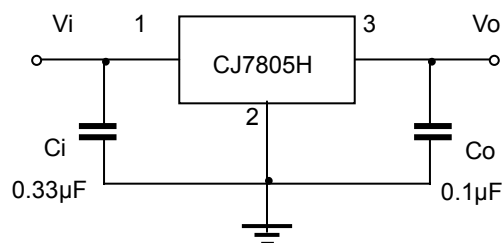
Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	83.3	$^{\circ}C/W$
Thermal Resistance from Junction to Case	$R_{\theta JC}$	8.3	$^{\circ}C/W$
Operating Junction Temperature Range	T_{OPR}	0~+150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=10V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

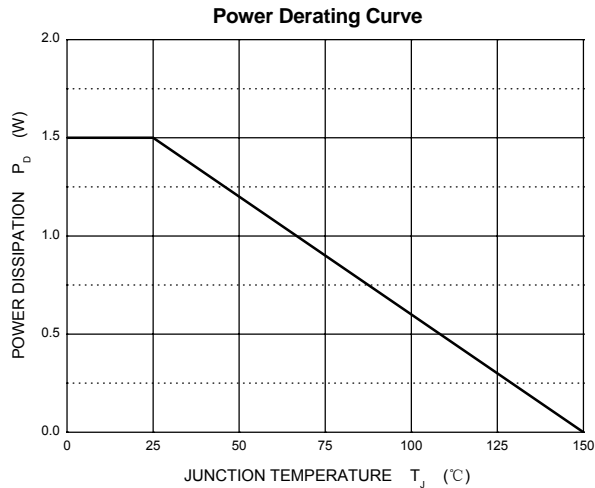
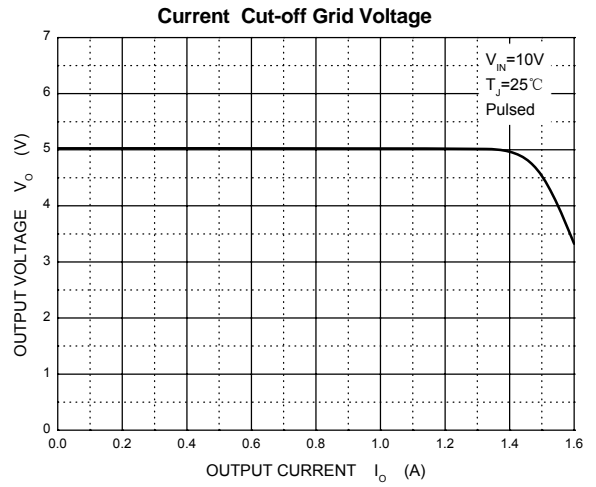
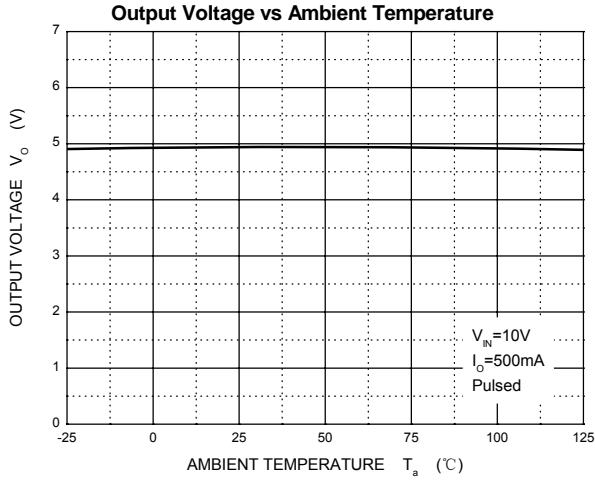
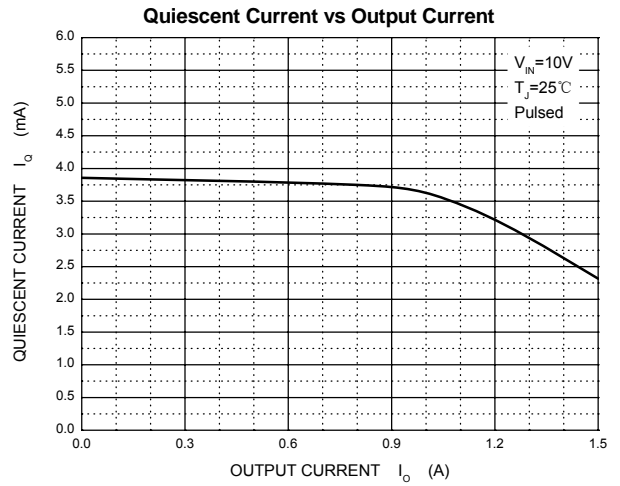
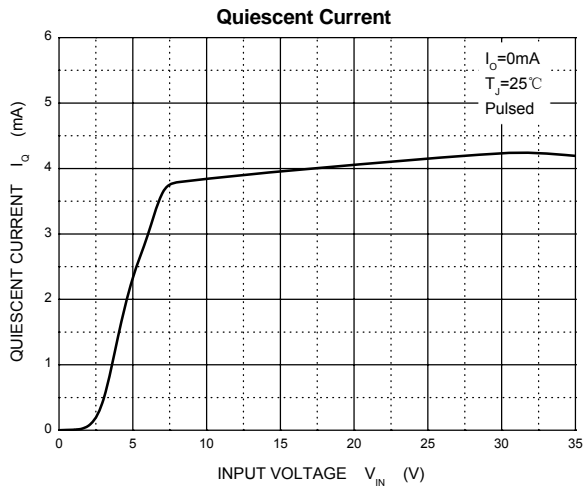
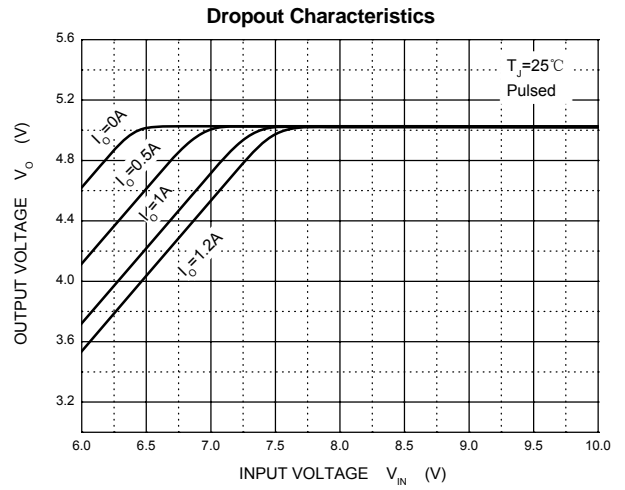
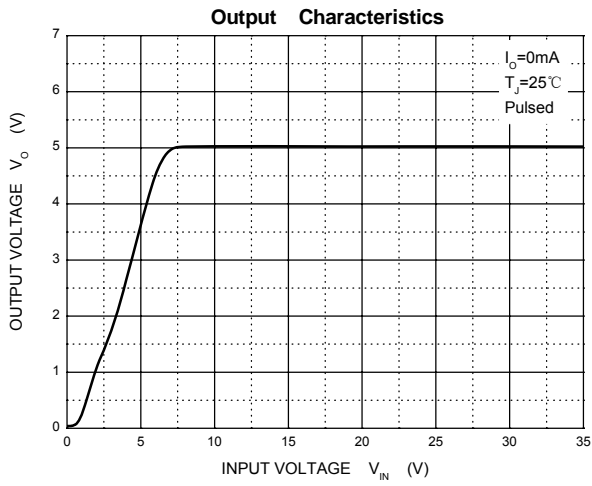
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_o	$25^{\circ}C$	4.8	5.0	5.2	V
	V_o (Note1)	$7V \leq V_i \leq 20V, I_o=5mA-1A, P \leq 15W$ $0-125^{\circ}C$	4.75	5.00	5.25	V
Load Regulation	ΔV_o	$I_o=5mA-1.5A$ $25^{\circ}C$		1.3	100	mV
		$I_o=250mA-750mA$ $25^{\circ}C$		0.9	50	mV
Line regulation	ΔV_o	$7V \leq V_i \leq 25V$ $25^{\circ}C$			100	mV
		$8V \leq V_i \leq 12V$ $25^{\circ}C$			50	mV
Quiescent Current	I_q	$25^{\circ}C$		3.5	8	mA
Quiescent Current Change	ΔI_q	$7V \leq V_i \leq 25V$ $0-125^{\circ}C$		0.3	1.3	mA
		$5mA \leq I_o \leq 1A$ $0-125^{\circ}C$		0.03	0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$ $25^{\circ}C$		42		μV
Output voltage drift	$\Delta V_o / \Delta T$	$I_o=5mA$ $0-125^{\circ}C$		-1.1		$mV/^{\circ}C$
Ripple Rejection	RR	$8V \leq V_i \leq 18V, f=120Hz$ $0-125^{\circ}C$	62	73		dB
Dropout Voltage	V_d	$I_o=1A$ $25^{\circ}C$		2		V
Output resistance	R_o	$f=1KHz$ $25^{\circ}C$		10		$m\Omega$
Short Circuit Current	I_{sc}	$25^{\circ}C$		230		mA
Peak Current	I_{pk}	$25^{\circ}C$		2.2		A

Note1: pulse test

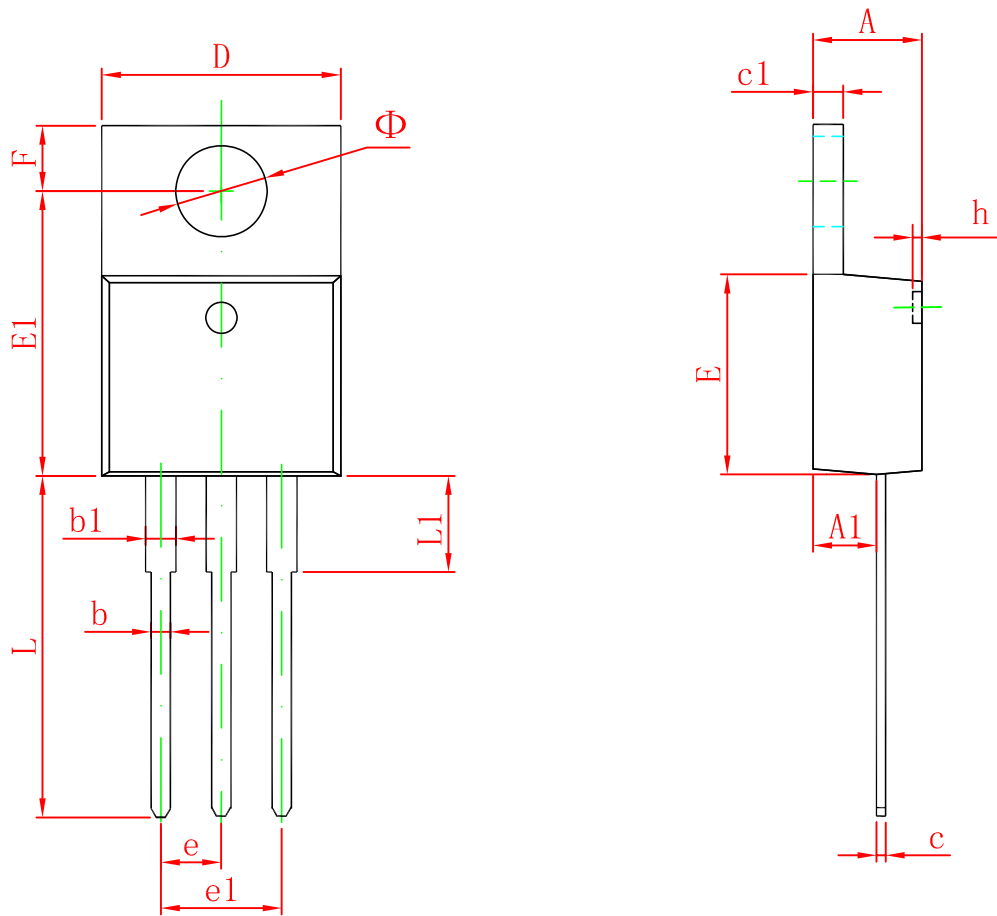
TYPICAL APPLICATION



Typical Characteristics



TO-220-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155