Features

- Internal Thermal Overload Protection
- Internal Short Circuit Current Limiting
- No External Components Required
- Output Voltage Offered in 2% Tolerance
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note1) ("P" Suffix Designates RoHS Compliant. See ordering information)

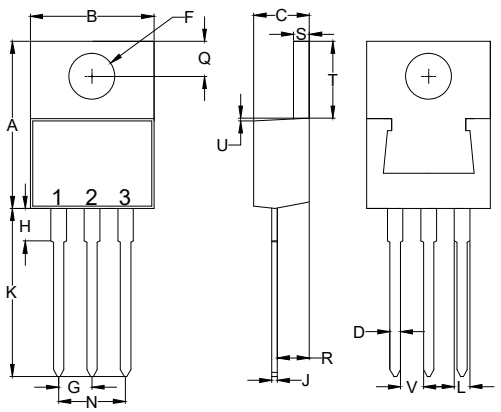
Three-Terminal Positive Voltage Regulators

Maximum Ratings

Parameter	Symbol	Value	Unit
Input Voltage	V_I	30	V
Output Current	I_o	1.0	A
Power Dissipation	P_D	15	W
Operating Junction Temperature Range	T_{OPR}	-20~75	℃
Storage Temperature Range	T_{STG}	-55~125	℃

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

TO-220



PIN 1. INPUT
PIN 2. GND
PIN 3. OUTPUT

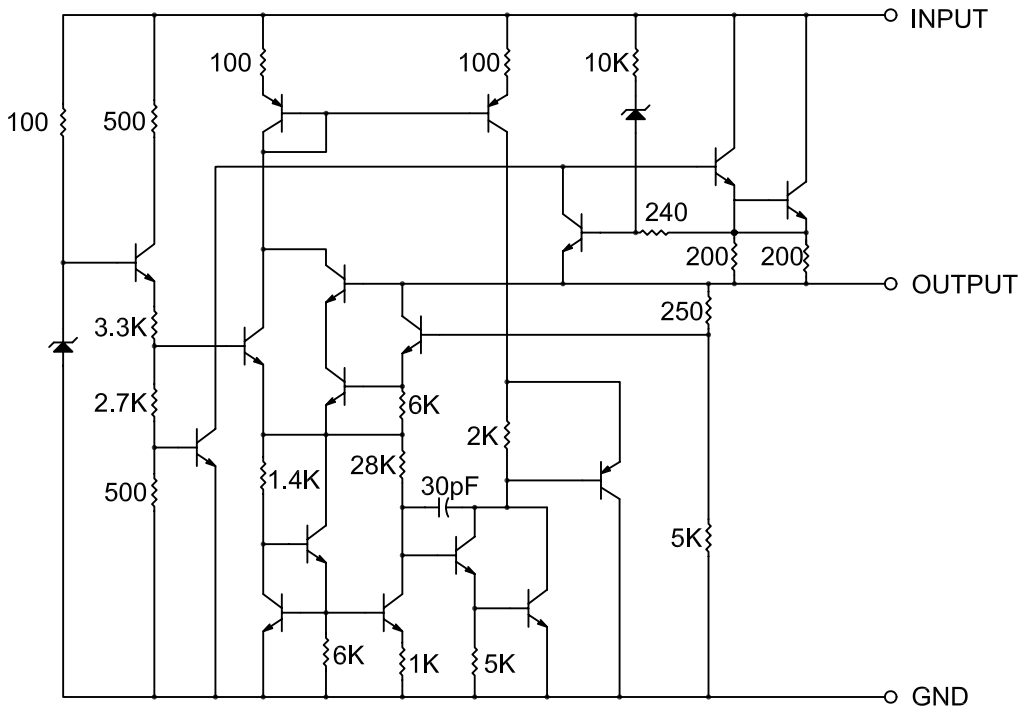
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.140	0.190	3.56	4.82	
D	0.020	0.045	0.51	1.14	
F	0.139	0.161	3.53	4.09	Φ
G	0.090	0.110	2.29	2.79	
H	-----	0.250	-----	6.35	
J	0.012	0.025	0.30	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.190	0.210	4.83	5.33	
Q	0.100	0.135	2.54	3.43	
R	0.080	0.115	2.04	2.92	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

Electrical Characteristics

(V_i=14V, I_o=500mA, 0°C＜T_j＜ 125 °C,C_i=0.33uF, C_o=0.1uF,Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	Vo	T_j=25°C	7.84	8.0	8.16	V
		10.5V≤V_i≤23V,5mA≤I_o≤1000mA , P_D=15W	7.74	-	8.26	V
Load Regulation	△Vo	5mA≤I_o≤1500mA,T_j=25°C	-	12.0	160	mV
		250mA≤I_o≤750mA,T_j=25°C	-	4.0	80	mV
Line Regulation	△Vo	10.5V≤V_1≤25V,T_j=25°C	-	6.0	160	mV
		11V≤V_1≤17V,T_j=25°C	-	2.0	80	mV
Quiescent Current	Iq	T_j=25°C,I_o=0	-	4.3	8.0	mA
Quiescent Current Change	$△I_q$	10.5V≤V_i≤25V,	-	-	1.0	mA
		5mA≤I_o≤1000mA	-	-	0.5	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz,,T_j=25°C	-	52	-	μV
Ripple Rejection	RR	f=120Hz	56	72	-	dB
Dropout Voltage	V_d	T_j=25°C,I_o=1.0A	-	2	-	V
Output Short Circuit Current	Ro	f=1.0KHz	-	16	-	mohm
Output Short Circuit Current	I_{OS}	T_j=25°C	-	450	-	mA
Peak Output Current	I_{opeak}	T_j=25°C	-	2.2	-	A
Temperature Coefficient of Output Voltage	$△Vo/△T_j$	0°C≤T_j≤125°C,I_o=5.0mA	-	1.8	-	mV/°C

Representation Schematic Diagram



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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