3-TERMINAL POSITIVE VOLTAGE REGULATOR

FEATURES

*Output current In Excess Of 1A
*Fixed output voltage of 5V available
*Thermal overload shutdown protection
*Short circuit current limiting
*Output transistor SOA protection

ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

Characteristic	Symbol	Rating	Unit
Input voltage	V_I	35	V
Output Current	I_O	1.5	A
Power Dissipation	P_D	internally Limited	mW
Operating Junction Temperature Range	T_{OPR}	-20~150	^0C
Storage Temperature Range	T_{STG}	-55~150	^0C

Package: TO-220
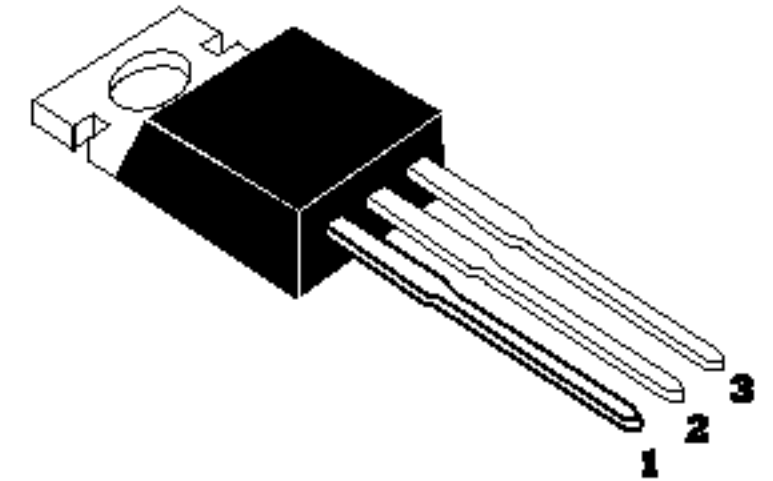
PIN; STYLE	1	2	3
NO.1	I	G	O

ELECTRICAL CHARACTERISTICS at Tamb=25^{0}C

(V_I=10V,I_O=0.5A,0°C<T_j<125°C,C_I=0.33uF,C_O=0.1uF,unless otherwise specified)(Note 1)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Output Voltage	V_O	4.8	5	5.2	V	T_j=25°C
Output Voltage	V_O	4.75		5.25	V	8V$\leq V_I \leq$20V,I_O=5mA-1.0A PD<15W
Load Regulation	$\triangle V_O$		1.3	100	mV	T_j=25°C,I_O=5mA-1.5A
Load Regulation	$\triangle V_O$		0.15	50	mV	T_j=25°C,I_O=0.25A-0.75A
Line Regulation	$\triangle V_O$		5	100	mV	7V$\leq V_I \leq$25V,T_j=25°C
Line Regulation	$\triangle V_O$		1.3	50	mV	8V$\leq V_I \leq$12V,T_j=25°C
Quiescent Current	Iq		3.2	8	mA	T_j=25°C
Quiescent Current Change	$\triangle$ Iq			1.3	mA	8V$\leq V_I \leq$25V
Quiescent Current Change	$\triangle$ Iq			0.5	mA	5mA$\leq I_O \leq$1.0A
Output Noise Voltage	V_N		10		uV	10Hz$\leq$f$\leq$100kHz
Temperature coefficient of V_O	$\triangle V_O/\triangle T$		-0.30		mV/$^{\circ}$C	
Ripple Rejection	RR		68		dB	8V$\leq V_I \leq$18V,f=120Hz,T_j=25°C
Peak Output Current	Ipk		2.2		A	Tj=25°C
Short-Circuit Current	Isc		200		mA	VI=35V,Tj=25°C
Dropout Voltage	V_D		2.0		V	T_j=25°C Io=1A

Note1: The maximum steady state usable output current is dependent on input voltage, heat sinking, lead length of the package and copper patten of PCB. The data above represent pulse test conditions with junction temperatures specified at the initiation of test.