

THREE-TERMINAL POSITIVE VOLTAGE REGULATOR

FEATURES

Maximum output current

 $I_{OM} : 1.5A$

Output voltage

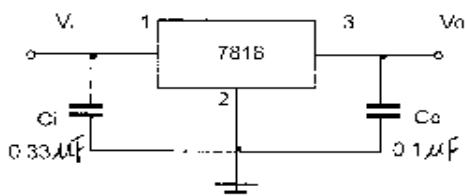
 $V_O : 18 \text{ V}$

Continuous total dissipation

$$P_D : 2W (T_J=25^{\circ}\text{C})$$

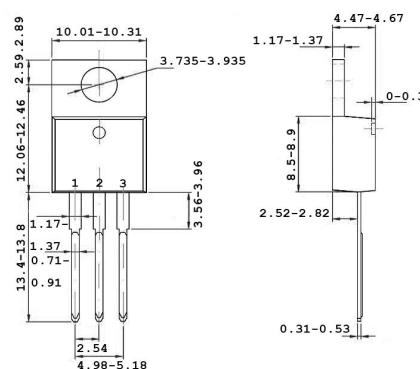
15W ($T_C=25^{\circ}\text{C}$)

TYPICAL APPLICATION



TO-220

1. IN
2. GND
3. OUT



UNIT:mm

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

Parameters	Symbols	Value	UNITS
Input Voltage	V_I	35	V
Thermal Resistance Junction - Air	$R_{\theta JA}$	65	$^{\circ}\text{C}/\text{W}$
Thermal Resistance Junction - Cases	$R_{\theta JC}$	5	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_{OPR}	0~+150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

($V_i=27V$, $I_o=500mA$, $0^{\circ}C < T_J < 125^{\circ}C$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, unless otherwise specified)

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output Voltage	V _O	T _J =25℃	17.3	18	18.7	V
		21V≤V _I ≤33V, I _O =5mA-1A P _O ≤15W	17.1	18	18.9	V
Load Regulation	ΔV _O	T _J =25℃, I _O =5mA-1.5A T _J =25℃, I _O =250mA-750mA		12 4	360 180	mV mV
Line Regulation	ΔV _O	21V≤V _I ≤33V, T _J =25℃ 24V≤V _I ≤30V, T _J =25℃		15 5	360 180	mV mV
Quiescent Current	I _q	T _J =25℃		4.5	8	mA
Quiescent Current Change	Δ I _q Δ I _q	21V≤V _I ≤33V 5mA≤I _O ≤1A			1 0.5	mA mA
Output Voltage Drift	ΔV _O /ΔT	I _O =5mA		-1		mV/℃
Output Noise Voltage	V _N	10Hz≤f≤100KHz		110		μV
Ripple Rejection	RR	22V≤V _I ≤32V, f=120Hz, T _J =25℃	53	69		dB
Dropout Voltage	V _d	T _J =25℃, I _O =1A		2		V
Output Resistance	R _O	f=1KHz		22		mΩ
Short Circuit Current	I _{sc}	V _I =35V, T _J =25℃		200		mA
Peak Current	I _{pk}	T _J =25℃		2.1		A