

TIGER ELECTRONIC CO.,LTD

Product specification

3-Terminal 1A Positive Voltage Regulator

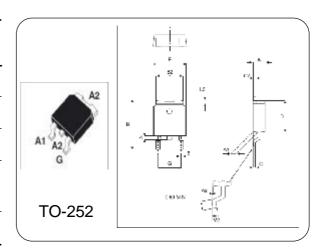
LM7815J

GENERAL DESCRIPTION

The LM7815 series of three terminal positive regulators are available in the TO-220 package and with several fixed output voltages, making them useful in a wide range of applications. Each type employs internal current limiting, thermal shut down and safe operating area protection, making it essentially indestructible. If adequate heat sinking is provided, they can deliver over 1A output current. Although designed primarily as fixed voltage regulators, these devices can be used with external components to obtain adjustable voltages and currents.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Тур	Unit	
Input Voltage	Vı	35	V	
Output Voltage	Vo	15.0	V	
Peak Current	I _{PK}	2.2	Α	
Operating Temperature Range	T _{OPR}	0~125	°C	
Storage Temperature Rang	T _{STG}	-65~150	°C	



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

(Refer to test circuit, Io = 500mA, Vi = 23V, Ci= 0.33uF, Co=0.1uF unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Output Voltage	Vo	V _I = 17.5V to 30V	14.55	15.0	15.45	V
Line Regulation (Note1)	Regline	V _I = 17.5V to 30V		11	300	mV
		V ₁ = 20V to 26V	_	3.0	150	
Load Regulation (Note1)	Regload	I _o = 5.0mA to1.5A		12	300	- mV
		I _o =250mA to 750mA	_	4	150	
Quiescent Current	IQ	T _J =+25 °C	_	5.2	8	mA
Ripple Rejection	RR	$f = 120Hz, V_0 = 15V \text{ to } 30V$	54	70		dB
Dropout Voltage	V_{Drop}	I _O = 1A, T _J =+25 °C		2		V
Output Resistance	r _o	f = 1KHz	_	0.019		Ω
Short Circuit Current	I _{sc}	V _I = 35V, T _A =+25 °C		250		mA
Peak Current	I _{PK}	T _J =+25 °C	_	2.2		Α