

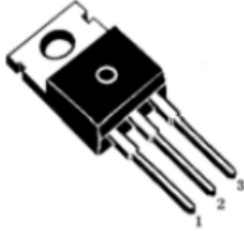
Model : 7815

Appearance: T0-220

Product name: three-end power supply voltage regulator

TO-252C contour picture

Polarity: Three pins from left to right 1: IN 2: GND 3: OUT



Uses: Used as Zener diode/resistor combination replacement. It offers two orders of magnitude effective product improvements in impedance and low static current. Mainly used in network products, DVD-ROM, CD-ROM, sound card and computer mother board, linear voltage regulator, controller.

Limit range (TA=25 ° C unless otherwise specified)

Project	Symbol	Rated value	Unit
Input valtage	VIN	35	V
Package reactance	RθJA	65	°C/W
Junction temperature	Tj	-20~125	°C
Storage temperature	Tstg	-65~150	°C

Electrical parameters (Io=500mA, Vi=23V, Ci=0.33F, Co=0.1F, Tj=25°C) unless otherwise specified

Parameter name	Symbol	Test condition	Canonical value			Unit	
			Min	Typical	Max		
Output voltage	Vo	Tj=25°C	14.4	15	15.6	V	
		5.0mA ≤ Io ≤ 1.0A, Vi=17.5V to 30V	14.25	15	15.75	V	
Voltage regulation	Regline	Tj=25°C	Vo=17.5V to 30V	-	11	300	mV
			Vi=20V to 26V	-	3	150	mV
Load adjustment rate	Regload	Tj=25°C	Io=5.0mA to 1.5A	-	12	300	mV
			Io=250mA to 750mA	-	5	150	mV
Static current	IQ	Tj=25°C	-	5.2	8.0	mA	
Static current change rate	ΔIQ	Tj=25°C	Io=5.0mA to 1.0A	-		0.5	mA
			Vi=18V to 30.5V	-		0.8	mA

Output voltage temperature coefficient ratio	$\Delta V/\Delta T$	$I_o=5mA$	-	-1	-	mV/°C
Output noise voltage	VNO	f=10Hz~100kHz, Tj=25°C		90		μV
Ripple rejection ratio	RR	$V_i=18.5\sim 28.5V$ f=120Hz	51	62		dB
Linear differential pressure	Vdrop	$I_o=1A$, Tj=25°C	-	2	-	V
Output resistance	Ro	f=1KHz	-	19	-	mΩ
Short-circuit current	Isc	$V_i=35V$, Tj=25°C	-	350	-	mA
Peak current	Ipk	Tj=25°C	-	2.2	-	A

Typical characteristic curve

