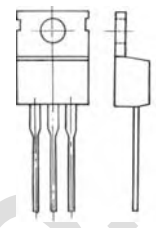
WEJ7810 Three-terminal positive voltage regulator

TO-220



1. IN
2. GND
3. OUT

1 2 3

FEATURES

Maximum Output current

I_{OM}: 1.5 A

Output voltage

V_o: 10 V

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

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	-20-+125	℃
Storage Temperature Range	T_{STG}	-55-+150	℃

ELECTRICAL CHARACTERISTICS (Vi=17V,Io=500mA,0℃<Tj<125℃,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	Vo	Tj=25℃	9.6	10	10.4	V
		12.5V≤V_i≤25V, Io=5mA-1A Po< 15W	9.5	10	10.5	V
Load Regulation	ΔVo	Tj=25℃, Io=5mA-1.5A		12	200	mV
		Tj=25℃, Io=250mA-750mA		4	100	mV
Line regulation	ΔVo	12.5V≤V_i≤28V, Tj=25℃		7	200	mV
		14V≤V_i≤20V, Tj=25℃		2	100	mV
Quiescent Current	Iq	Tj=25℃		4.3	8	mA
Quiescent Current Change	ΔIq	12.5V≤V_i≤28V			1	mA
	ΔIq	5mA≤I_O≤1A			0.5	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz		70		μV
Ripple Rejection	RR	13V≤V_i≤23V,f=120Hz,Tj=25℃	55	71		dB
Dropout Voltage	Vd	Tj=25℃, Io=1A		2		V
Short Circuit Current	Isc	Tj=25℃		400		mA
Peak Current	Ipk	Tj=25℃		2.2		A

TYPICAL APPLICATION