

WEJ7812 Three-terminal positive voltage regulator

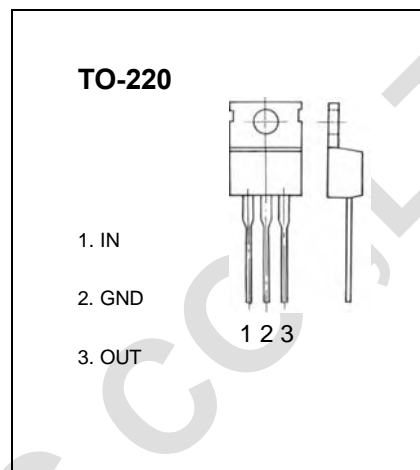
FEATURES

Maximum Output current

I_{OM} : 1 A

Output voltage

V_o : 12 V



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

Parameter	Symbol	Value	Unit
Input Voltage	V_i	40	V
Operating Junction Temperature Range	T_{OPR}	0-125	°C
Storage Temperature Range	T_{STG}	-55-150	°C

ELECTRICAL CHARACTERISTICS ($V_i=19V, I_o=500mA, 0^\circ C < T_j < 125^\circ C, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_j=25^\circ C$	11.5	12.0	12.5	V
		$5.0mA < I_o < 1.0A, P_o < 15W$ $V_i=14.5V$ to 27V	11.4	12	12.6	V
Load Regulation	ΔV_o	$T_j=25^\circ C, V_i=14.5V$ to 30V		10	240	mV
		$T_j=25^\circ C, V_i=16V$ to 22V		3	120	mV
Line regulation	ΔV_o	$T_j=25^\circ C, I_o=5.0mA$ to 1.5A		11	240	mV
		$T_j=25^\circ C, I_o=250mA$ to 750mA		5.0	120	mV
Quiescent Current	I_q	$T_j=25^\circ C$		5.1	8	mA
Quiescent Current Change	ΔI_q	$I_o=5.0mA$ to 1.0A			0.5	mA
		$V_i=14.5V$ to 30V			1.0	mA
Output Noise Voltage	V_N	$f=10Hz$ to 100KHz, $T_a=25^\circ C$		76		μV
Ripple Rejection	RR	$f=120Hz, V_i=15V$ to 25V	55	71		dB
Dropout Voltage	V_d	$I_o=1.0A, T_j=25^\circ C$		2		V
Output resistance	R_o	$f=1KHz$		18		m Ω
Short Circuit Current	I_{sc}	$V_i=35V, T_a=25^\circ C$		230		mA
Peak Current	I_{pk}	$T_j=25^\circ C$		2.2		A

TYPICAL APPLICATION

