

WEJ7905 Three-terminal positive voltage regulator

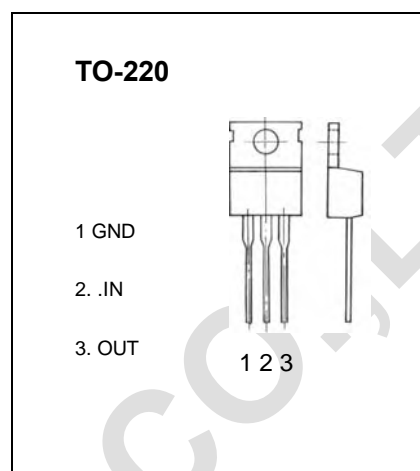
FEATURES

Maximum Output current

$$I_{OM}: 1.5 \text{ A}$$

Output voltage

$$V_o: -5 \text{ V}$$



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	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS ($V_i=-23V, I_o=500mA, 0^\circ C < T_j < 125^\circ C, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_j=25^\circ C$	-4.8	-5	-5.2	V
		$-7V \leq V_i \leq -20V, I_o=5mA \sim 1A, P_o < 15W$	-4.75	-5	-5.25	V
Load Regulation	ΔV_o	$T_j=25^\circ C, I_o=5mA \sim 1.5A$		15	100	mV
		$T_j=25^\circ C, I_o=250mA \sim 750mA$		5	50	mV
Line regulation	ΔV_o	$-7V \leq V_i \leq -25V, T_j=25^\circ C$		12.5	50	mV
		$-8V \leq V_i \leq -12V, T_j=25^\circ C$		4	15	mV
Quiescent Current	I_q	$T_j=25^\circ C$		1.5	2	mA
Quiescent Current Change	ΔI_q	$-7V \leq V_i \leq -25V$			0.5	mA
	ΔI_q	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		125		μV
Ripple Rejection	RR	$-8V \leq V_i \leq -18V, f=120Hz, T_j=25^\circ C$	54	60		dB
Dropout Voltage	V_d	$T_j=25^\circ C, I_o=1A$		1.1		V
Peak Current	I_{pk}	$T_j=25^\circ C$		2.1		A

TYPICAL APPLICATION

