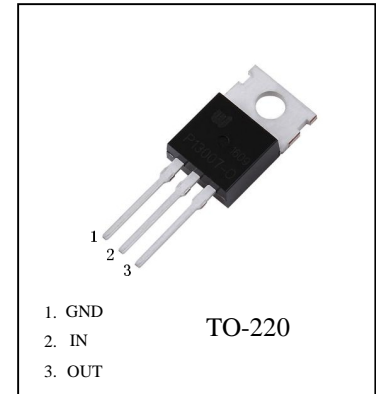


FEATURES

- Output Current up to 1.5 A
- Thermal Overload Protection
- Short Circuit Protection
- Output Transistor Safe Operating Area Protection

7909

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal resistance junction-air	R_{JA}	65	$^{\circ}\text{C}/\text{W}$
Thermal resistance junction-cases	R_{JC}	5	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	TOPR	0-125	$^{\circ}\text{C}$
Storage Temperature Range	TSTG	-65-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($V_i=10\text{V}, I_o=500\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_J = 25^{\circ}\text{C}$	-8.64	-9	-9.36	V
		$-11.5\text{V} \leq V_i \leq -24\text{V}, I_o=5\text{mA}-1\text{A}, P \leq 15\text{W}$	-8.55	-9	-9.45	V
Load Regulation	ΔV_o	$T_J = 25^{\circ}\text{C}, I_o=5\text{mA}-1.5\text{A}$			180	mV
		$T_J = 25^{\circ}\text{C}, I_o=250\text{mA}-750\text{mA}$			80	mV
Line regulation	ΔV_o	$-11.5\text{V} \leq V_i \leq -26\text{V}, T_J = 25^{\circ}\text{C}$			140	mV
		$-13\text{V} \leq V_i \leq -19\text{V}, T_J = 25^{\circ}\text{C}$			70	mV
Quiescent Current	I_q	$T_J = 25^{\circ}\text{C}$		1.6	2.6	mA
Quiescent Current Change	ΔI_q	$-11.5\text{V} \leq V_i \leq -26\text{V}$			1	mA
	ΔI_q	$5\text{mA} \leq I_o \leq 1\text{A}$			0.5	mA
Ripple Rejection	RR	$-12.5\text{V} \leq V_i \leq -22.5\text{V}, f=120\text{Hz}$	54	60		dB
Dropout Voltage	V_d	$T_J = 25^{\circ}\text{C}, I_o=1\text{A}$		1.1		V
Peak output Current	I_{pk}	$T_J = 25^{\circ}\text{C}$		2.1		A