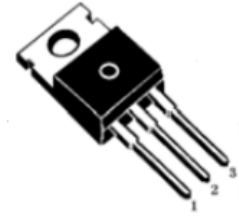


7905-1.5A
3 TERMINAL 1.5A NEGATIVE VOLTAGE REGULATOR
FEATURES

1. Output current up to 1.5A
2. Fixed output voltage of -5V
3. Thermal overload shutdown protection
4. Short circuit current limiting



1. Gnd 2. Input 3. Output

Absolute Maximum Ratings (Operating temperature range applies unless otherwise specified, $T_{amb}=25^{\circ}\text{C}$)

Characteristic	Symbol	Value	Unit
Input voltage	V_i	-35	V
Thermal resistance junction-air	$R_{\theta JA}$	65	$^{\circ}\text{C}/\text{W}$
Thermal resistance junction-cases	$R_{\theta JC}$	5	$^{\circ}\text{C}/\text{W}$
Operating Temperature	T_{opr}	0~+125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-65~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (Refer to test circuits, $0 < T_j < 125^{\circ}\text{C}$, $I_o=500\text{mA}$, $V_i=-10\text{V}$, $C_i=2.2\mu\text{F}$, $C_o=1\mu\text{F}$, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Units
Output voltage	V_o	$T_j=25^{\circ}\text{C}$	-4.8	-5.0	-5.2	V
		$5\text{mA} < I_o < 1\text{A}$, $P_o < 15\text{W}$ $V_i=-7\text{V}$ to -20V	-4.75	-5.0	-5.25	
Line regulation(Note)	ΔV_o	$T_j=25^{\circ}\text{C}$, $V_i=-7\text{V}$ to -25V	-	35	100	mV
		$T_j=25^{\circ}\text{C}$, $V_i=-8\text{V}$ to -12V	-	8	50	
Load regulation(Note)	ΔV_o	$T_j=25^{\circ}\text{C}$, $I_o=5\text{mA}$ to 1.5A	-	10	100	mV
		$T_j=25^{\circ}\text{C}$, $I_o=250\text{mA}$ to 750mA	-	3	50	
Quiescent current	I_Q	$T_j=25^{\circ}\text{C}$	-	3	6	mA
Quiescent current change	ΔI_Q	$I_o=5\text{mA}$ to 1A	-	0.05	0.5	mA
		$V_i=-8\text{V}$ to -25V	-	0.1	0.8	
Temperature coefficient of VD	$\Delta V_o/\Delta T$	$I_o=5\text{mA}$	-	0.5	-	mV/ $^{\circ}\text{C}$
Output noise voltage	V_N	$f=10\text{Hz}$ to 100kHz , $T_a=25^{\circ}\text{C}$	-	40	-	μV
Ripple rejection	RR	$f=120\text{Hz}$, $\Delta V_i=10\text{V}$	54	60	-	dB
Dropout voltage	VD	$I_o=1\text{A}$, $T_j=25^{\circ}\text{C}$	-	2	-	V
Short circuit current	I_{sc}	$V_i=-35\text{V}$, $T_j=25^{\circ}\text{C}$	-	10	-	mA