

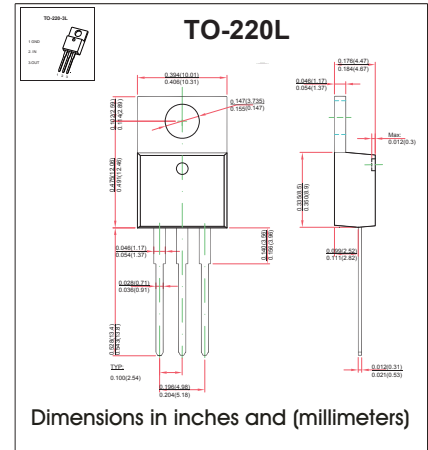
## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage  $V_O$ : -5V
- Continuous total dissipation  
 $P_D$ : 1.5 W (  $T_a = 25^\circ\text{C}$  )

### MECHANICAL DATA

- Case: TO-220 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



### ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	-35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	83.3	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_{OPR}$	0~+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65~+150	$^\circ\text{C}$

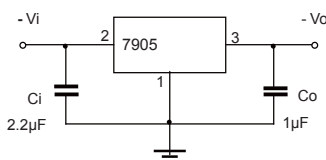
### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION

TEMPERATURE ( $V_i = -10\text{V}$ ,  $I_o = 500\text{mA}$ ,  $C_i = 2.2\mu\text{F}$ ,  $C_o = 1\mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	$V_o$	$25^\circ\text{C}$	-4.8	-5	-5.2	V
		$-7\text{V} \leq V_i \leq -20\text{V}$ , $I_o = 5\text{mA} - 1\text{A}$	0-125 $^\circ\text{C}$	-4.75	-5	-5.25
Load Regulation	$\Delta V_o$	$I_o = 5\text{mA} - 1.5\text{A}$	$25^\circ\text{C}$	15	100	mV
		$I_o = 250\text{mA} - 750\text{mA}$	$25^\circ\text{C}$	5	50	mV
Line Regulation	$\Delta V_o$	$-7\text{V} \leq V_i \leq -25\text{V}$	$25^\circ\text{C}$	12.5	50	mV
		$-8\text{V} \leq V_i \leq -12\text{V}$	$25^\circ\text{C}$	4	15	mV
Quiescent Current	$I_q$	$25^\circ\text{C}$		1.5	2	mA
Quiescent Current Change	$\Delta I_q$	$-7\text{V} \leq V_i \leq -25\text{V}$	0-125 $^\circ\text{C}$		0.5	mA
		$5\text{mA} \leq I_o \leq 1\text{A}$	0-125 $^\circ\text{C}$		0.5	mA
Output Noise Voltage	$V_N$	$10\text{Hz} \leq f \leq 100\text{KHz}$	$25^\circ\text{C}$	125		$\mu\text{V}/V_o$
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5\text{mA}$	0-125 $^\circ\text{C}$	-0.4		$\text{mV}/^\circ\text{C}$
Ripple Rejection	RR	$-8\text{V} \leq V_i \leq -18\text{V}$ , $f = 120\text{Hz}$	0-125 $^\circ\text{C}$	54	60	dB
Dropout Voltage	$V_d$	$I_o = 1\text{A}$	$25^\circ\text{C}$	1.1		V
Peak Current	$I_{pk}$	$25^\circ\text{C}$		2.1		A

\* Pulse test.

### TYPICAL APPLICATION



# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

