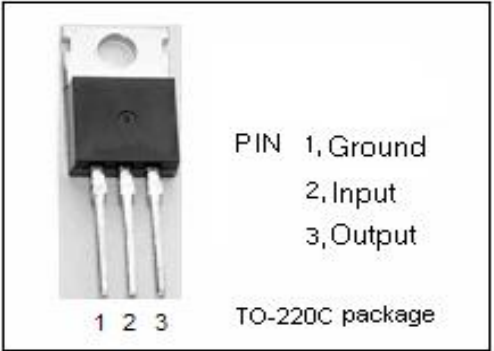


isc Three Terminal Negative Voltage Regulator

LM7905

FEATURES

- Output current in excess of 1.5A
- Output voltage of -5V
- Internal thermal overload protection
- Output transition Safe-Area compensation

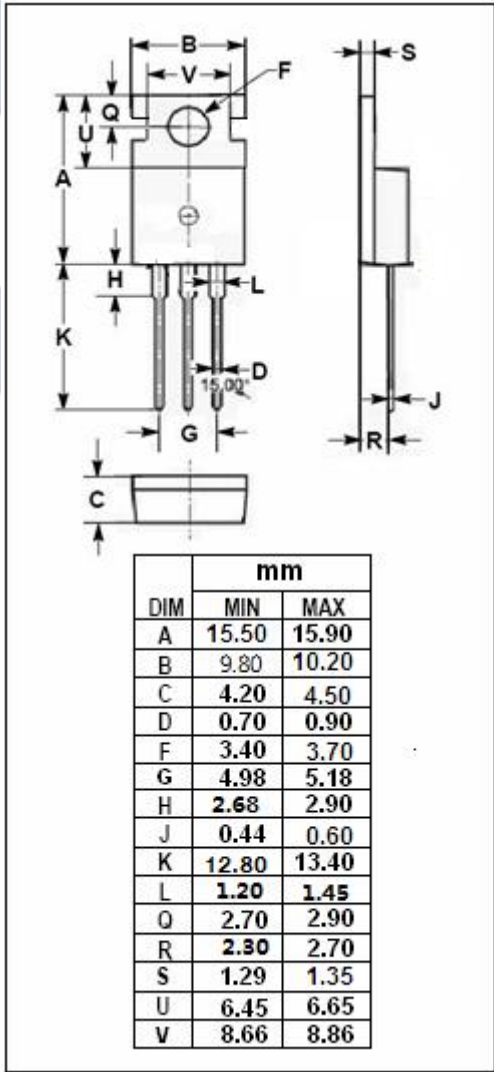


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _i	DC input voltage	-35	V
T _{OP}	Operating junction temperature	0~150	°C
T _{stg}	Storage temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	50	°C/W



isc Three Terminal Negative Voltage Regulator**LM7905****• ELECTRICAL CHARACTERISTICS**

$T_j=25^{\circ}\text{C}$ ($V_i=-10\text{V}$, $I_o=0.5\text{A}$, $C_i=2.2\mu\text{F}$, $C_o=1\mu\text{F}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_o	Output Voltage	$V_{in}=-10\text{V}$; $I_o=0.5\text{A}$	-4.8	-5	-5.2	V
V_o	Output Voltage	$V_{in}=-8$ to -20V ; $I_o=-5\text{mA}$ to -1A ; $P_o\leq 15\text{W}$	-4.75	-5	-5.25	V
ΔV_v	Line Regulation	$-7\text{V}\leq V_{in}\leq -25\text{V}$; $I_o=0.5\text{A}$ $-8\text{V}\leq V_{in}\leq -12\text{V}$; $I_o=0.5\text{A}$			100 50	mV
ΔV_i	Load Regulation	$5.0\text{mA}\leq I_o\leq 1.5\text{A}$; $V_{in}=-10\text{V}$ $250\text{mA}\leq I_o\leq 750\text{mA}$; $V_{in}=-10\text{V}$			100 50	mV
I_b	Quiescent Current	$V_{in}=-10\text{V}$; $I_o=0.5\text{A}$			3	mA
Δ_{b1}	Quiescent Current Change	$5.0\text{mA}\leq I_o\leq 1.0\text{A}$; $V_{in}=-10\text{V}$			0.5	mA
Δ_{b2}	Quiescent Current Change	$-8\text{V}\leq V_{in}\leq -25\text{V}$; $I_o=0.5\text{A}$			1.3	mA