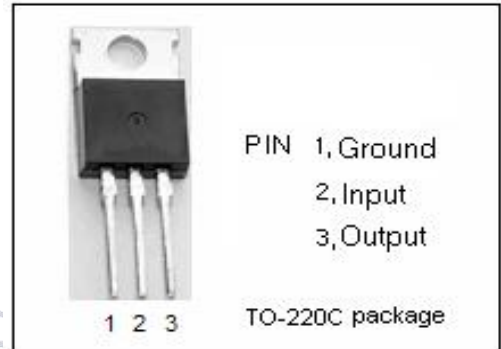


**isc Three Terminal Negative Voltage Regulator**

**7905**

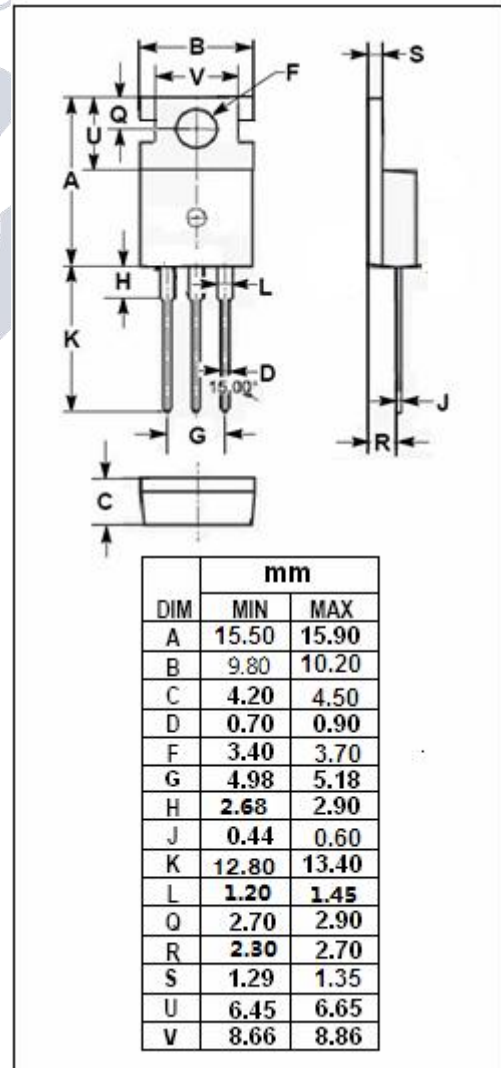
**FEATURES**

- Output current in excess of 1A
- Output voltage of -5V
- Internal thermal overload protection
- Output transition Safe-Area compensation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	RATING	UNIT
V <sub>i</sub>	DC input voltage	-35	V
I <sub>o</sub>	Output current	internally limited	
P <sub>tot</sub>	Power dissipation	internally limited	
T <sub>OP</sub>	Operating junction temperature	0~125	°C
T <sub>stg</sub>	Storage temperature	-55~150	°C



**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5	°C/W
R <sub>th j-a</sub>	Thermal Resistance, Junction to Ambient	65	°C/W

**isc Three Terminal Negative Voltage Regulator****7905****• 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	MAX	UNIT
$V_o$	Output Voltage	$V_{in}=-10\text{V}$ ; $I_o=500\text{mA}$	-4.8	-5.2	V
$V_o$	Output Voltage	$I_o=5\text{mA}$ to $1\text{A}$ ; $V_{in}=-7\text{V}$ to $-20\text{V}$	-4.75	-5.25	V
$\Delta V_v$	Line Regulation	$-7\text{V} \leq V_{in} \leq -25\text{V}$		100	mV
$\Delta V_i$	Load Regulation	$5\text{mA} \leq I_o \leq 1.5\text{A}$		100	mV
$I_q$	Quiescent Current	$V_{in}=10\text{V}$ ; $I_o=1.5\text{A}$		6	mA
$\Delta q_1$	Quiescent Current Change	$5\text{mA} \leq I_o \leq 1\text{A}$ ; $V_{in}=10\text{V}$		0.5	mA
$\Delta q_2$	Quiescent Current Change	$-8\text{V} \leq V_{in} \leq -25\text{V}$		0.8	mA

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