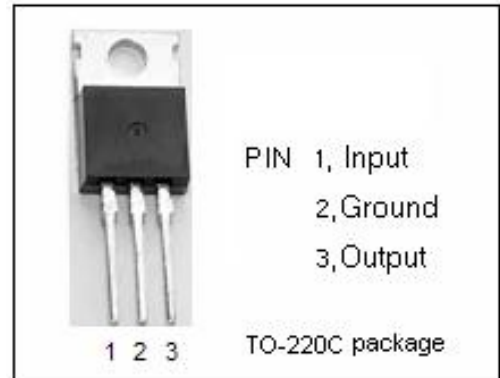


isc Three Terminal Negative Voltage Regulator

LM7905

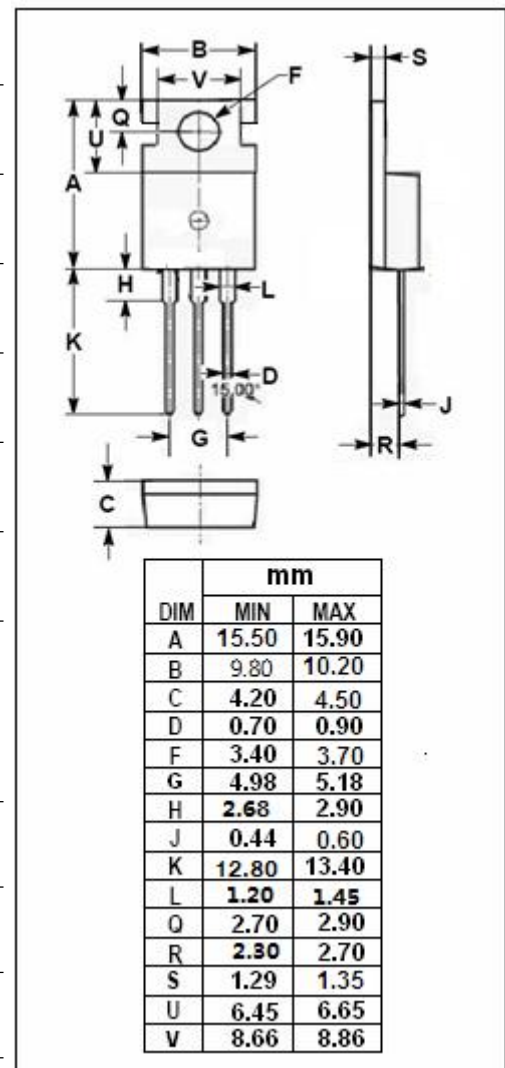
FEATURES

- Output current in excess of 1.5 A
- Output voltage of 5V
- Internal thermal overload protection
- Output transition Safe-Area compensation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _i	DC input voltage	-35	V
I _o	Output current	internally limited	
P _{tot}	Power dissipation	internally limited	
T _{OP}	Operating junction temperature	0~125	°C
T _{stg}	Storage temperature	-55~150	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	5	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	65	°C/W

isc Three Terminal Negative Voltage Regulator**LM7905****• ELECTRICAL CHARACTERISTICS**T_j=25°C (V_i= -10V, I_o=0.5A, C_i= 2.2 μ F, C_o= 1.0 μ F unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _o	Output Voltage	V _{in} =10V; I _o =500mA	-4.8	-5.2	V
V _o	Output Voltage	I _o =5mA to 1A; V _{in} =-7V to -20V	-4.75	-5.25	V
ΔV _v	Line Regulation	7V ≤ V _{in} ≤ 25V; I _o =0.5A		50	mV
ΔV _i	Load Regulation	5.0mA ≤ I _o ≤ 1.5A; V _{in} =10V		100	mV
I _q	Quiescent Current	V _{in} =10V; I _o =1.5A		6.0	mA
Δ _{q1}	Quiescent Current Change	5.0mA ≤ I _o ≤ 1.0A; V _{in} =10V		0.5	mA
Δ _{q2}	Quiescent Current Change	7V ≤ V _{in} ≤ 25V; I _o =500mA		0.8	mA

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