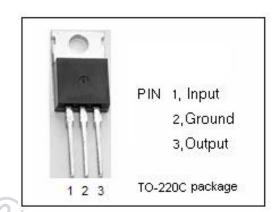


isc Three Terminal Positive Voltage Regulator

7805

FEATURES

- Output current in excess of 1.5A
- 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

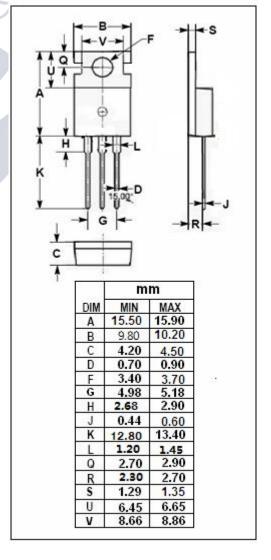


ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
Vi	DC input voltage	35	V
Io	Output current	internally limited	
P _{tot}	Power dissipation	internally limited	9
T _{OP}	Operating junction temperature	-40~125	$^{\circ}\mathbb{C}$
T _{stg}	Storage temperature	-55~150	$^{\circ}$

THERMAL CHARACTERISTICS

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





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• ELECTRICAL CHARACTERISTICS

T_j=25°C (V_i= 10V, I₀=0.5A, C_i= 0.33 μ F, C₀= 0.1 μ F unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
Vo	Output Voltage	V _{in} =20V; I _O =500mA	4.8	5.2	V
$\triangle V_V$	Line Regulation	7.5V≤V _{in} ≤20V; I _O =0.5A		50	mV
$\triangle V_i$	Load Regulation	5.0mA≤I ₀ ≤1.5A;V _{in} =10V		100	mV
Iq	Quiescent Current	V _{in} =10V; I _O =1.5A		6.0	mA
\triangle_{q1}	Quiescent Current Change	5.0mA≤I ₀ ≤1.0A;V _{in} =10V		0.5	mA
$\triangle_{ t q2}$	Quiescent Current Change	7V≤V _{in} ≤25V; I ₀ =500mA		1.3	mA

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