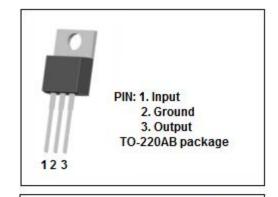


# **isc** Three Terminal Positive Voltage Regulator

ISC7805

#### **FEATURES**

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

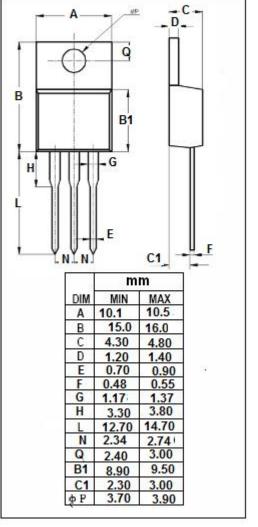


## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
Vi	DC input voltage	35	V
lo	Output current	internally limited	
P <sub>tot</sub>	Power dissipation	internally limited	
Тор	Operating junction temperature	0~150	$^{\circ}$
T <sub>stg</sub>	Storage temperature	-55~150	$^{\circ}$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3	°C/W
R <sub>th j-a</sub>	Thermal Resistance,Junction to Ambient	50	°C/W





# isc Three Terminal Positive Voltage Regulator

**ISC7805** 

#### • ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C (V<sub>i</sub>= 10V, I<sub>0</sub>=0.5A, C<sub>i</sub>= 0.33  $\mu$  F, C<sub>0</sub>= 0.1  $\mu$  F unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
Vo	Output Voltage	V <sub>in</sub> =10V; I <sub>O</sub> =500mA	4.85	5.15	V
$\triangle V_{V}$	Line Regulation	7.5V≤V <sub>in</sub> ≤20V; I <sub>O</sub> =500mA		50	mV
$\triangle V_i$	Load Regulation	5.0mA≤I <sub>O</sub> ≤1.0 A;V <sub>in</sub> =10V		100	mV
I <sub>b</sub>	Quiescent Current	V <sub>in</sub> =10V; I <sub>O</sub> =1.0A		6.0	mA
$\triangle_{b1}$	Quiescent Current Change	5.0mA≤I <sub>O</sub> ≤1.0A;V <sub>in</sub> =10V		0.5	mA
$\triangle$ b2	Quiescent Current Change	7V≤V <sub>in</sub> ≤25V; I <sub>0</sub> =500mA		0.8	mA



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