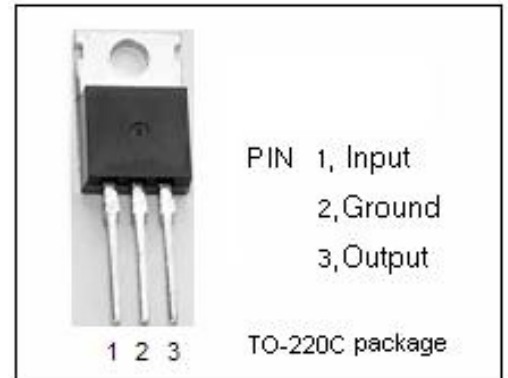
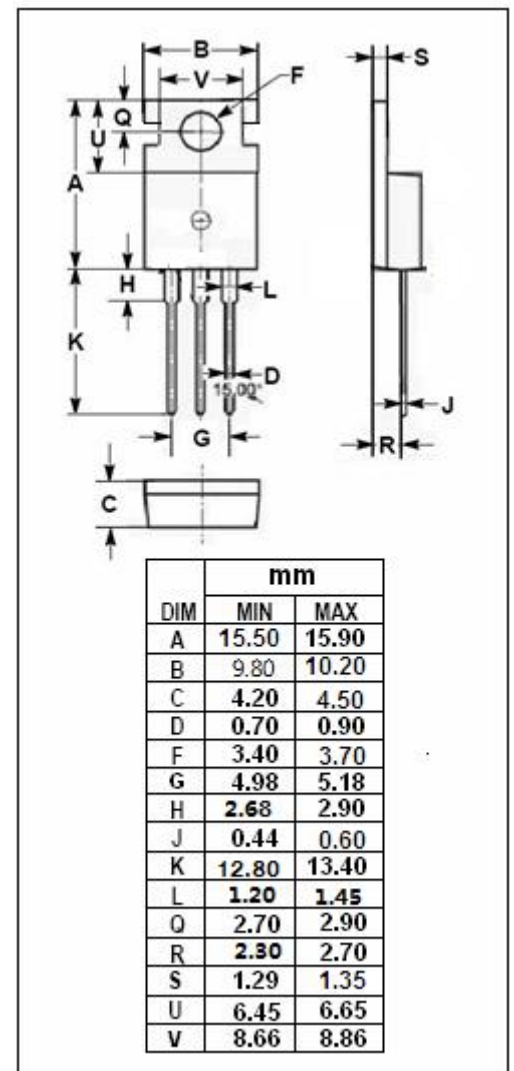


**isc Three Terminal Positive Voltage Regulator**
**LM7815**
**FEATURES**

- Output current in excess of 1.5A
- Output voltage of 15V
- 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	0~150	°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	3	°C/W
R <sub>th j-a</sub>	Thermal Resistance, Junction to Ambient	50	°C/W

## isc Three Terminal Positive Voltage Regulator

## LM7815

## • ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C (V<sub>i</sub>= 23V, I<sub>o</sub>=0.5A, C<sub>i</sub>= 0.33 μ F, C<sub>o</sub>= 0.1 μ F unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>o</sub>	Output Voltage	V <sub>in</sub> =23V; I <sub>o</sub> =1.5A	14.4	15.6	V
ΔV <sub>v</sub>	Line Regulation	17.5V ≤ V <sub>in</sub> ≤ 30V; I <sub>o</sub> =0.5A		150	mV
ΔV <sub>i</sub>	Load Regulation	5.0mA ≤ I <sub>o</sub> ≤ 1.5A; V <sub>in</sub> =23V		150	mV
I <sub>q</sub>	Quiescent Current	V <sub>in</sub> =23V; I <sub>o</sub> =1A		8.0	mA
Δ <sub>q1</sub>	Quiescent Current Change	5.0mA ≤ I <sub>o</sub> ≤ 1.0A; V <sub>in</sub> =23V		0.5	mA
Δ <sub>q2</sub>	Quiescent Current Change	17.5V ≤ V <sub>in</sub> ≤ 30V; I <sub>o</sub> =500mA		1.0	mA

## Notice:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.