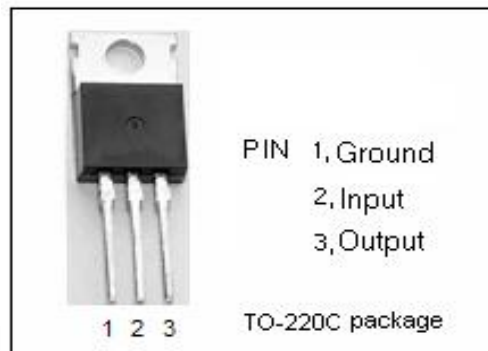


isc Three Terminal Negative Voltage Regulator

L7915CV

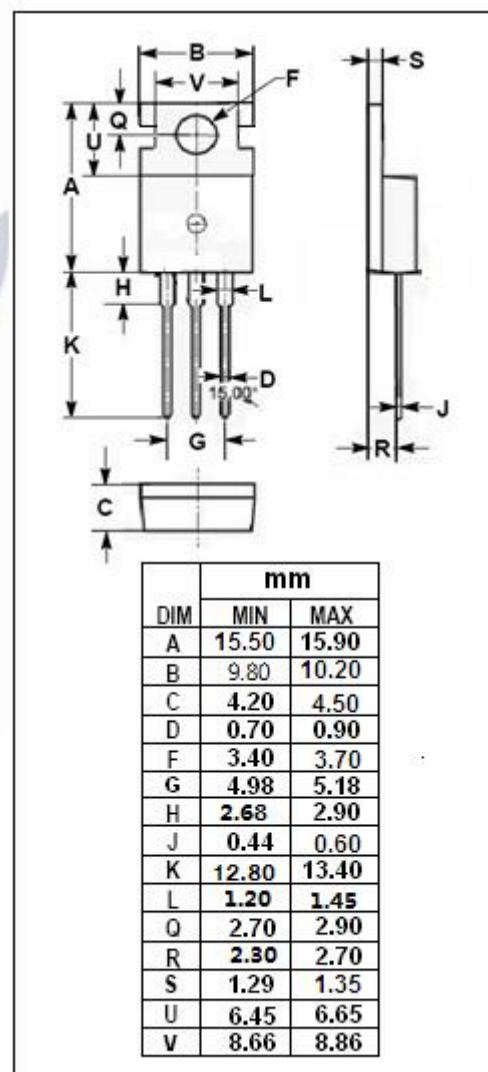
FEATURES

- Output current in excess of 1A
- 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_a=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _i	DC input voltage	-30	V
I _o	Output current	internally limited	
P _{tot}	Power dissipation	internally limited	
T _{OP}	Operating junction temperature	0~150	°C
T _{stg}	Storage temperature	-65~150	°C



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	50	°C/W

isc Three Terminal Negative Voltage Regulator**L7915CV****• ELECTRICAL CHARACTERISTICS** $T_J=25^{\circ}\text{C}$ ($V_i=-23\text{V}$, $I_o=0.5\text{A}$, $C_i=2.2\mu\text{F}$, $C_o=1\mu\text{F}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_o	Output Voltage	$V_{in}=-23\text{V}$; $I_o=1\text{A}$	-14.4	-15.6	V
V_o	Output Voltage	$V_{in}=-18.5$ to -30V ; $I_o=-5\text{mA}$ to -1A ;	-14.3	-15.7	V
ΔV_V	Line Regulation	$-17.5\text{V} \leq V_{in} \leq -30\text{V}$; $I_o=0.5\text{A}$		300	mV
ΔV_i	Load Regulation	$5.0\text{mA} \leq I_o \leq 1\text{A}$; $V_{in}=-23\text{V}$		300	mV
I_b	Quiescent Current	$V_{in}=-23\text{V}$; $I_o=1\text{A}$		6.0	mA
Δ_{b1}	Quiescent Current Change	$5.0\text{mA} \leq I_o \leq 1.0\text{A}$; $V_{in}=-23\text{V}$		0.5	mA
Δ_{b2}	Quiescent Current Change	$-18.5\text{V} \leq V_{in} \leq -30\text{V}$; $I_o=0.5\text{A}$		1.0	mA