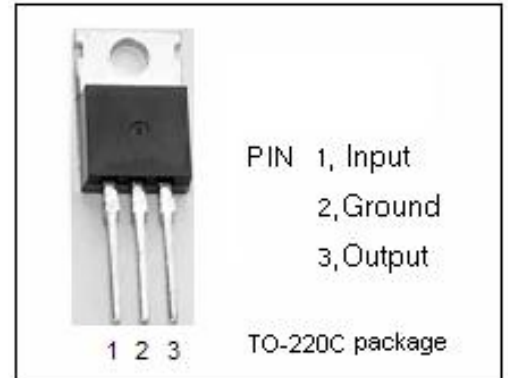


isc Three Terminal Positive Voltage Regulator

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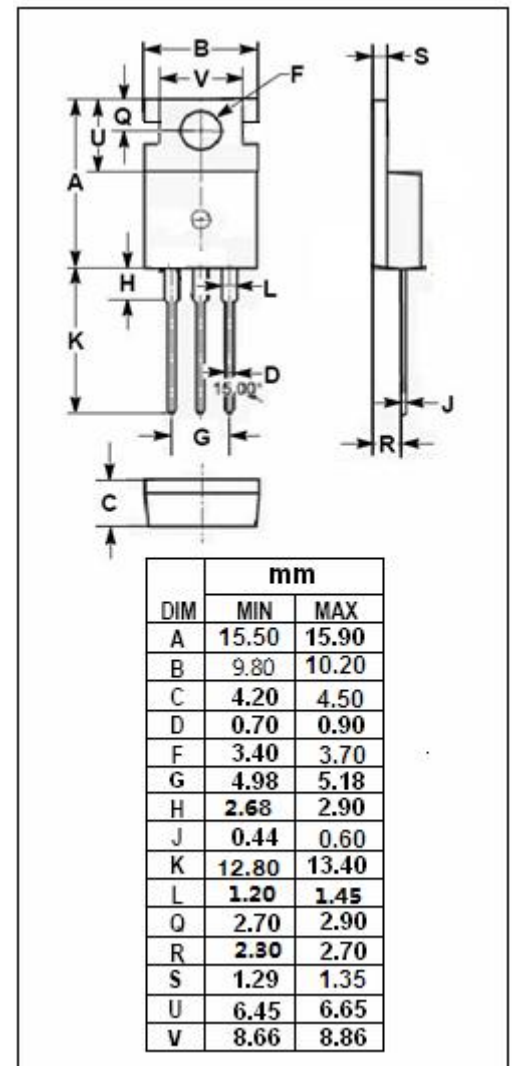
FEATURES

- Output current in excess of 1.0A
- Output voltage of 15V
- 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	-65~150	°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 Positive Voltage Regulator

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• ELECTRICAL CHARACTERISTICS

 $T_j=25^\circ\text{C}$ ($V_i=23\text{V}$, $I_o=0.5\text{A}$, $C_i=0.33\ \mu\text{F}$, $C_o=0.1\ \mu\text{F}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_o	Output Voltage	$V_{in}=23\text{V}$; $I_o=500\text{mA}$	14.4	15.6	V
V_o	Output Voltage	$I_o=5\text{mA}$ to 1.0A ; $P_o\leq 15\text{W}$ $V_{in}=18.5$ to 30V ;	14.25	15.75	V
ΔV_v	Line Regulation	$17.5\text{V}\leq V_{in}\leq 30\text{V}$; $20\text{V}\leq V_{in}\leq 26\text{V}$		300 150	mV
ΔV_i	Load Regulation	$5.0\text{mA}\leq I_o\leq 1.5\text{A}$; $250\text{mA}\leq I_o\leq 750\text{mA}$		300 150	mV
I_q	Quiescent Current	$V_{in}=23\text{V}$; $I_o=1\text{A}$		8.0	mA
Δ_{q1}	Quiescent Current Change	$5.0\text{mA}\leq I_o\leq 1.0\text{A}$; $V_{in}=23\text{V}$		0.5	mA
Δ_{q2}	Quiescent Current Change	$17.5\text{V}\leq V_{in}\leq 30\text{V}$; $I_o=500\text{mA}$		1.0	mA

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