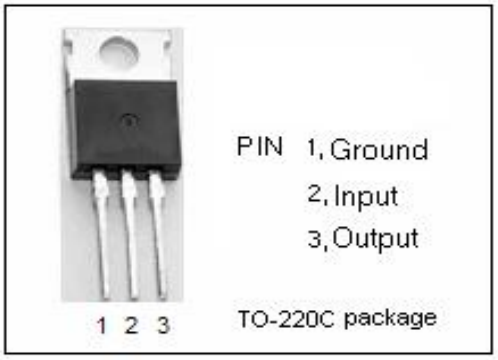
isc Three Terminal Negative Voltage Regulator 7915



FEATURES

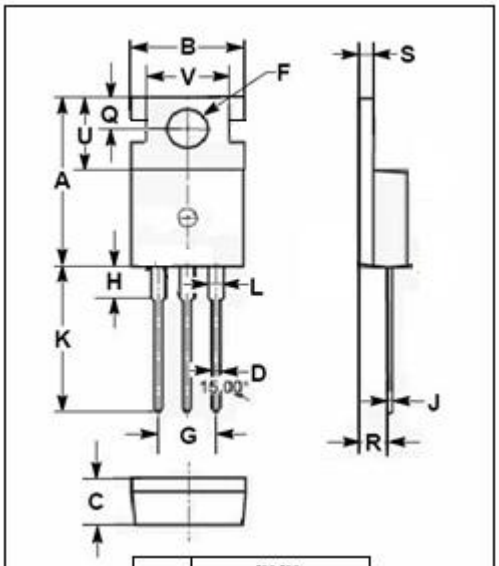
- Output current in excess of 1A
- Output voltage of -15V
- Internal thermal overload protection
- Output transition Safe-Area compensation

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	RATING	UNIT
V_i	DC input voltage	-30	V
T_{OP}	Operating junction temperature	0~150	℃
T_{stg}	Storage temperature	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	3	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	50	℃/W



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

isc Three Terminal Negative Voltage Regulator 7915

• ELECTRICAL CHARACTERISTICS

T_j=25℃ (V_i= -23V, I_O=0.5A, C_i= 2.2μF, C_O= 1μF unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_O	Output Voltage	V_{in}=-23V; I_O=1A	-14.4	-15	-15.6	V
V_O	Output Voltage	V_{in}=-17.5 to -30V; I_O= 5mA to 1A;	-14.4	-15	-15.6	V
$\triangle V_V$	Line Regulation	-17.5V≤V_{in}≤-30V; I_O=0.5A			300	mV
$\triangle V_i$	Load Regulation	5.0mA≤I_O≤1A; V_{in}=-23V			300	mV
I_b	Quiescent Current	V_{in}=-23V; I_O=1A			4	mA
$\triangle_{b1}$	Quiescent Current Change	5.0mA≤I_O≤1.0A;V_{in}=-23V			0.5	mA
$\triangle_{b2}$	Quiescent Current Change	-18.5V≤V_{in}≤-30V; I_O=0.5A			1	mA