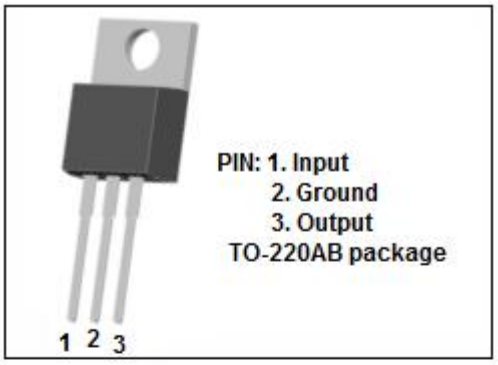
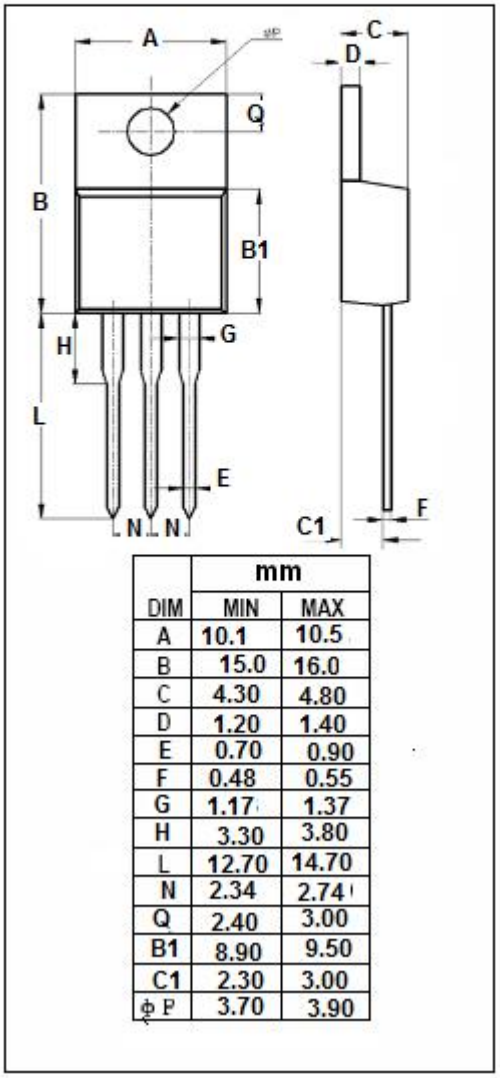
isc Three Terminal Positive Voltage Regulator LM7812LS

FEATURES

- Output current in excess of 1.5A
- Output voltage of 12V
- Internal thermal overload protection
- Output transition Safe-Area compensation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation





DIM	mm MIN	MAX
A	10.1	10.5
B	15.0	16.0
C	4.30	4.80
D	1.20	1.40
E	0.70	0.90
F	0.48	0.55
G	1.17	1.37
H	3.30	3.80
L	12.70	14.70
N	2.34	2.74
Q	2.40	3.00
B1	8.90	9.50
C1	2.30	3.00
ϕP	3.70	3.90

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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	0~150	℃
T_{stg}	Storage temperature	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	5	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	50	℃/W

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• ELECTRICAL CHARACTERISTICS

T_j=25℃ (V_i= 19V, I_O=0.5A, C_i= 0.33 μF, C_O= 0.1 μF unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_O	Output Voltage	V_{in}=19V; I_O=500mA	11.5	12.5	V
$\triangle V_V$	Line Regulation	14.5V≤V_{in}≤30V; I_O=500mA		120	mV
$\triangle V_i$	Load Regulation	5.0mA≤I_O≤1.5A;V_{in}=19V		100	mV
I_b	Quiescent Current	V_{in}=19V; I_O=1.0A		6.0	mA
$\triangle_{b1}$	Quiescent Current Change	5.0mA≤I_O≤1.0A;V_{in}=19V		0.5	mA
$\triangle_{b2}$	Quiescent Current Change	15V≤V_{in}≤30V; I_O=500mA		0.8	mA

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