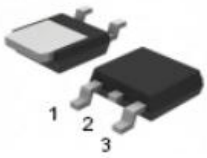
isc Three Terminal Positive Voltage Regulator 7912

FEATURES

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

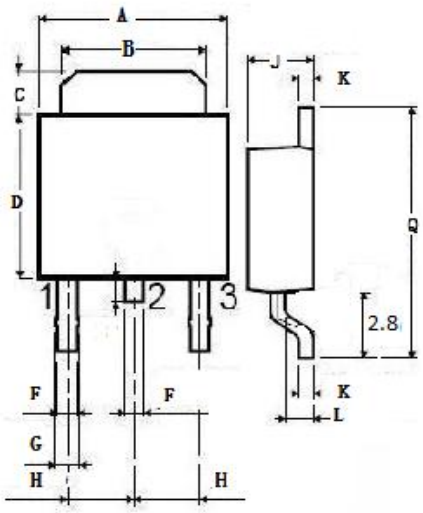


PIN 1, Ground
2, Input
3, Output

DPAK
TO-252 Package

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	-40~125	℃
T_{stg}	Storage temperature	-55~150	℃



	mm	
DIM	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

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

isc Three Terminal Negative Voltage Regulator 7912

Electrical characteristics

T_j=25℃ (V_i= -19V, I_O=0.5A, C_i= 2.2 μF, C_O= 1 μF unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V_O	Output Voltage	V_{in}=-19V; I_O=0.5A	-11.5	-12	-12.5	V
V_O	Output Voltage	V_{in}=-15.5to-27V; I_O=5mA to1A; Po≤15W	-11.4	-12	-12.6	V
$\triangle V_V$	Line Regulation	-14.5V≤V_{in}≤-30V; I_O=0.5A -16V≤V_{in}≤-22V ; I_O=0.5A			240 120	mV
$\triangle V_i$	Load Regulation	5.0mA≤I_O≤1.5A; 250mA≤I_O≤750mA;			240 120	mV
I_d	Quiescent Current	V_{in}=-19V; I_O=0.5A			3	mA
$\triangle_{d1}$	Quiescent Current Change	5.0mA≤I_O≤1.0A; V_{in}=-19V			0.5	mA
$\triangle_{d2}$	Quiescent Current Change	-15V≤V_{in}≤-30V; I_O=0.5A			1	mA