

isc Three Terminal Positive Voltage Regulator

TA7805

FEATURES

- Output current in excess of 1.5A
- Output voltage of 5V
- Internal thermal overload protection
- Output transition Safe-Area compensation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

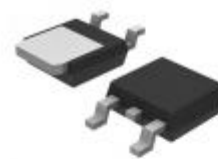
ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

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	0~150	°C
T _{stg}	Storage temperature	-55~150	°C

THERMAL CHARACTERISTICS

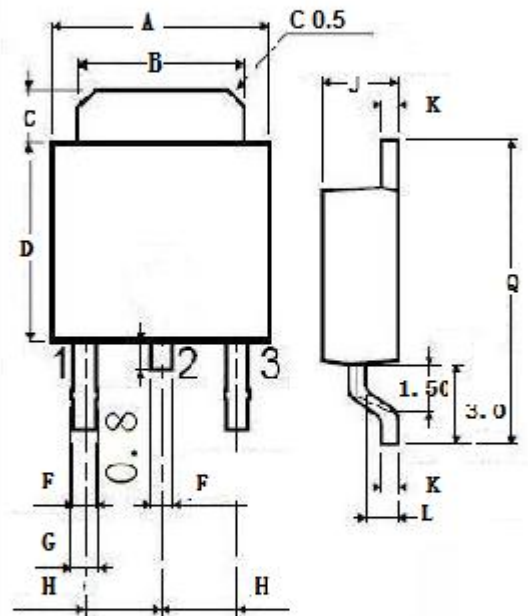
SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	12.5	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	125	°C/W

DPAK



PIN: 1. Input
2. Ground
3. Output

T0-252 package



DIM	mm	
	MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

isc Three Terminal Positive Voltage Regulator**TA7805****• ELECTRICAL CHARACTERISTICS** $T_j=25^{\circ}\text{C}$ ($V_i=10\text{V}$, $C_i=0.33\ \mu\text{F}$, $C_o=0.1\ \mu\text{F}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_o	Output Voltage	$V_{in}=10\text{V}$; $I_o=100\text{mA}$	4.8	5.2	V
ΔV_v	Line Regulation	$7\text{V} \leq V_{in} \leq 25\text{V}$ $8\text{V} \leq V_{in} \leq 12\text{V}$		100 50	mV
ΔV_i	Load Regulation	$5.0\text{mA} \leq I_o \leq 1.4\text{A}$ $250\text{mA} \leq I_o \leq 750\text{mA}$		100 50	mV
I_b	Quiescent Current	$I_o=5\text{mA}$		8.0	mA
Δ_b	Quiescent Current Change	$7\text{V} \leq V_{in} \leq 25\text{V}$; $I_o=5\text{mA}$		1.3	mA