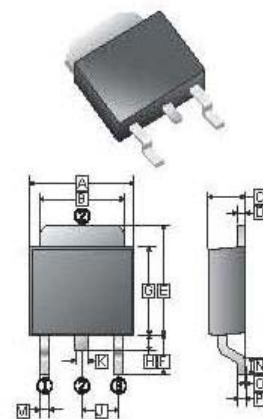


RoHS Compliant Product
A suffix of "--C" specifies halogen and lead-free

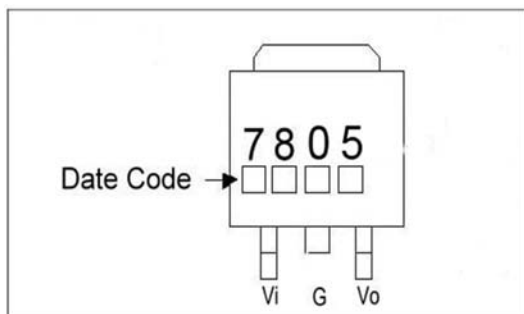
DESCRIPTION

The SJ7805-B of fixed-voltage monolithic integrated circuit voltage regulators designed for a wide range of applications. These applications include on-card regulation for elimination of noise and distribution problems associated with single-point regulation. This regulator can deliver up to 1A of output current. The internal current limiting and thermal shutdown features of these regulators make them essentially immune to overload.

TO-252



MARKING



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.8	J	2.30	REF.
B	5.20	5.50	K	0.70	0.90
C	2.20	2.40	L	0.50	0.70
D	0.43	0.58	M	0.60	0.90
E	6.40	7.35	N	1.40	1.78
F	2.40	3.00	O	0	0.15
G	5.40	5.80	P	0.43	0.58
H	0.60	1.20			

PACKAGE INFORMATION

Package	MPQ	LeaderSize
TO-252	2.5K	13' inch

ABSOLUTE MAXIMUM RATINGS

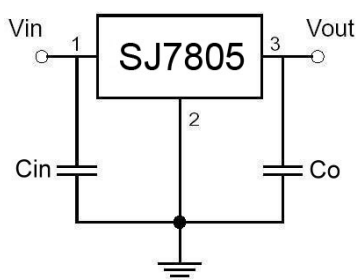
Parameter	Symbol	VALUE	UNITS
Input Voltage	V_{IN}	35	V
Output Current	I_O	1	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C
Thermal Resistance Junction-Air	$R_{\theta JA}$	125	W / °C
Thermal Resistance Junction - Cases	$R_{\theta JC}$	12.5	W / °C

SJ7805-B ELECTRICAL CHARACTERISTICS

(Refer to the test circuits, $T_J=0\sim 125\text{ }^\circ\text{C}$, $I_O=500\text{mA}$, $V_{IN}=10\text{V}$, $C_{IN}=0.33\mu\text{F}$, $C_O=0.1\mu\text{F}$ unless otherwise specified)

Symbol		Test Conditions	Min	Typ	Max	Units
V_O	B-Rank(5%)	$V_{IN}=10\text{V}$, $I_O=500\text{mA}$, $T_J=25\text{ }^\circ\text{C}$ $7.5\text{V} \leq V_{IN} \leq 20\text{V}$, $5\text{mA} \leq I_O \leq 1\text{A}$, $P_D \leq 15\text{W}$	4.75	5.0	5.25	V
ΔV_O (Line Regulation)		$7\text{V} \leq V_{IN} \leq 25\text{V}$, $I_O=500\text{mA}$, $T_J=25\text{ }^\circ\text{C}$	-	3	50	mV
		$8\text{V} \leq V_{IN} \leq 12\text{V}$, $I_O=500\text{mA}$, $T_J=25\text{ }^\circ\text{C}$	-	1	25	
ΔV_O (Load Regulation)		$V_{IN}=10\text{V}$, $5\text{mA} \leq I_O \leq 1\text{A}$, $T_J=25\text{ }^\circ\text{C}$	-	-	100	mV
		$V_{IN}=10\text{V}$, $250\text{mA} \leq I_O \leq 750\text{mA}$, $T_J=25\text{ }^\circ\text{C}$	-	-	50	
I_Q		$V_{IN}=10\text{V}$, $I_O=500\text{mA}$, $T_J=25\text{ }^\circ\text{C}$	-	-	8	mA
ΔI_Q		$V_{IN}=10\text{V}$, $5\text{mA} \leq I_O \leq 1\text{A}$	-	-	0.5	mA
		$7\text{V} \leq V_{IN} \leq 25\text{V}$, $I_O=500\text{mA}$	-	-	1.3	
V_N		$10\text{Hz} \leq f \leq 100\text{KHz}$	-	40	-	μA
RR		$8\text{V} \leq V_{IN} \leq 18\text{V}$, $f=120\text{Hz}$, $T_J=25\text{ }^\circ\text{C}$	-	80	-	dB
V_D		$I_O=1\text{A}$, $T_J=25\text{ }^\circ\text{C}$	-	2	-	V
I_{SC}		$V_{IN}=35\text{V}$, $T_J=25\text{ }^\circ\text{C}$	-	250	-	mA
I_{PK}		$T_J=25\text{ }^\circ\text{C}$	-	1.8	-	mA
$\Delta V_O / \Delta T_J$		$I_O=5\text{mA}$, $0\text{ }^\circ\text{C} \leq T_J \leq 25\text{ }^\circ\text{C}$	-	-0.6	-	$\text{mV}/\text{ }^\circ\text{C}$

TYPICAL APPLICATION



CHARACTERISTIC CURVE

