Elektronische Bauelemente

SJ7805

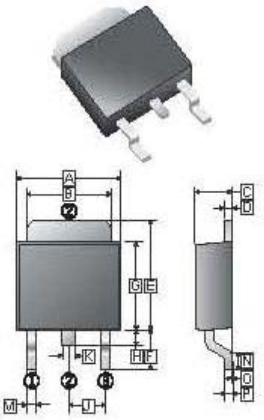
3-Terminal
Positive Voltage Regulator

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

DESCRIPTION

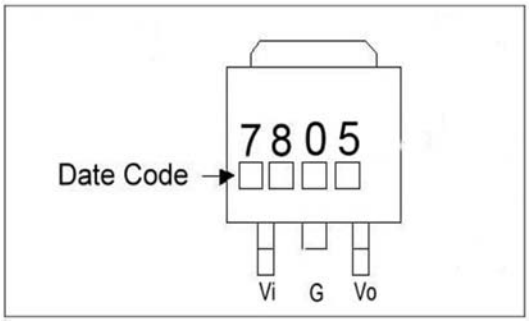
The SJ7805 of fixed-voltage monolithic intergratedcircuit voltage regulators designed for a wide range of applications. These applications include on-card regulation for elimination of noise and distribution problems associated with single-point regulation. This regulator can deliver up to 1A of output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

TO-252



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			

MARKING



PACKAGE INFORMATION

Package	MPQ	LeaderSize
TO-252	2.5K	13' inch

ABSOLUTE MAXIMUM RATINGS

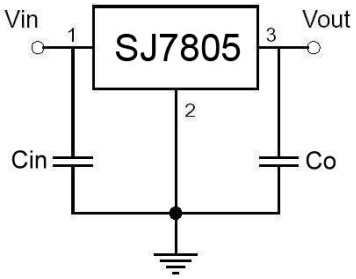
Parameter		Symbol	VALUE	UNITS
Input Voltage	SJ7805	V_{IN}	35	V
Output Current		I_O	1	A
Operating Junction and Storage Temperature Range		T_J,T_{STG}	-55~+150	°C
Thermal Resistance Junction-Air		$R_{\theta JA}$	125	W / °C
Thermal Resistance Juinction - Cases		$R_{\theta JC}$	12.5	W / °C

ELECTRICAL CHARACTERISTICS

SJ7805 (Refer to the test circuits, T_J=0~125 °C, I_O=500mA, V_{IN}=10V, C_{IN}=0.33μF, C_O=0.1μF unless otherwise specified)

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

TYPICAL APPLICATION



CHARACTERISTIC CURVE