

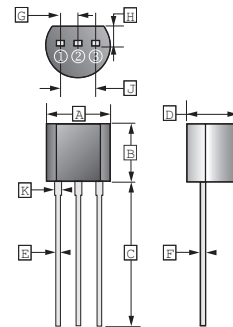
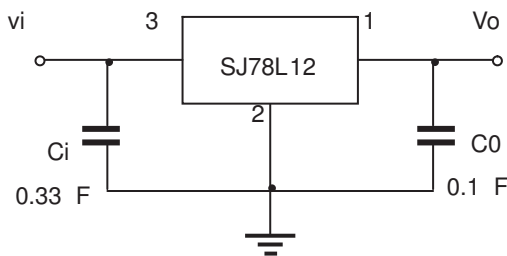
RoHS Compliant Product
A suffix of "-C" specifies halogen and lead-free

FEATURES

- Maximum output current I_o : 0.1A
- Output voltage V_o : 12V
- Continuous total dissipation P_D : 0.625W

TO-92

TYPICAL APPLICATION



MARKING

CJ78L12

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.70	F	0.36	0.51
B	4.30	4.70	G	1.27 TYP.	
C	12.70	-	H	1.10	-
D	3.30	3.81	J	2.42	2.66
E	0.36	0.56	K	0.36	0.76

PINNING

1. Out
2. Ground
3. IN

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNITS
Input Voltage	V_i	35	V
Operating Junction and Storage Temperature Range	T_{OPR}, T_{STG}	0~125, -55~150	°C

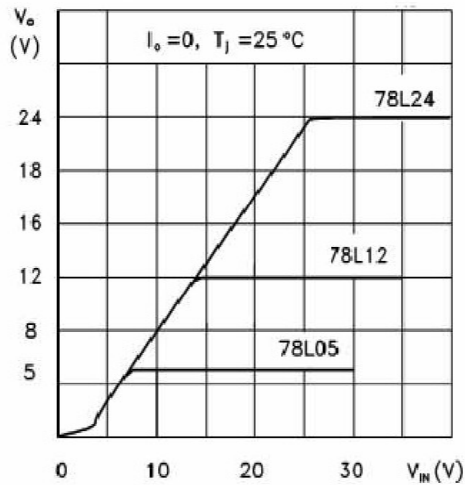
ELECTRICAL CHARACTERISTICS

(At specified virtual junction temperature, $V_i=19V$, $I_o=40mA$, $C_i=0.33\mu F$, $C_o=0.1\mu F$ unless otherwise specified)

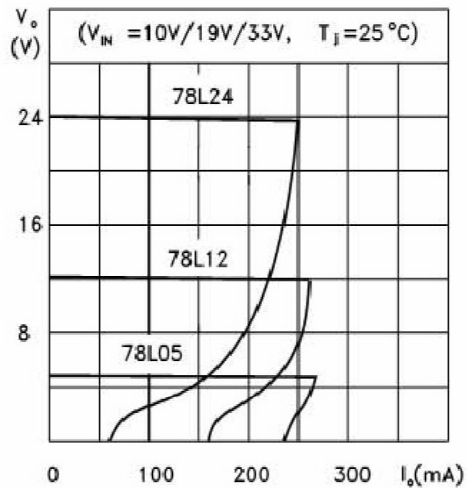
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Output Voltage	V_o	11.5	12	12.5	V	$T_J=25\text{ }^\circ\text{C}$,
		11.4	12	12.6	V	$14V \leq V_i \leq 27V$, $I_o=1mA \sim 40mA$, $T_J=0 \sim 125\text{ }^\circ\text{C}$
		11.4	12	12.6	V	$I_o=1mA \sim 70mA$, $T_J=0 \sim 125\text{ }^\circ\text{C}$
Load Regulation	ΔV_o	-	22	100	mV	$I_o=1mA \sim 100mA$, $T_J=25\text{ }^\circ\text{C}$
		-	13	50	mV	$I_o=1mA \sim 40mA$, $T_J=25\text{ }^\circ\text{C}$
Line Regulation	ΔV_o	-	55	250	mV	$14.5V \leq V_i \leq 27V$, $T_J=25\text{ }^\circ\text{C}$
		-	49	200	mV	$16V \leq V_i \leq 27V$, $T_J=25\text{ }^\circ\text{C}$
Quiescent Current	I_q	-	4.3	6.5	mA	$T_J=25\text{ }^\circ\text{C}$
Quiescent Current Change	ΔI_q	-	-	1.5	mA	$16V \leq V_i \leq 27V$, $T_J=0 \sim 125\text{ }^\circ\text{C}$
		-	-	0.1	mA	$1mA \leq V_i \leq 40mA$, $T_J=0 \sim 125\text{ }^\circ\text{C}$
Output Noise Voltage	V_N	-	70	-	μV	$10Hz \leq f \leq 100KHz$, $T_J=25\text{ }^\circ\text{C}$
Ripple Rejection	RR	37	42	-	dB	$15V \leq V_i \leq 25V$, $f=120Hz$, $T_J=0 \sim 125\text{ }^\circ\text{C}$
Drop Out Voltage	V_D	-	1.7	-	C	$T_J=25\text{ }^\circ\text{C}$

TYPICAL APPLICATION

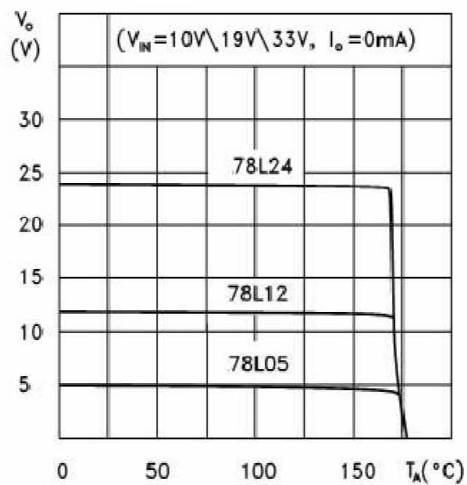
Output Characteristics



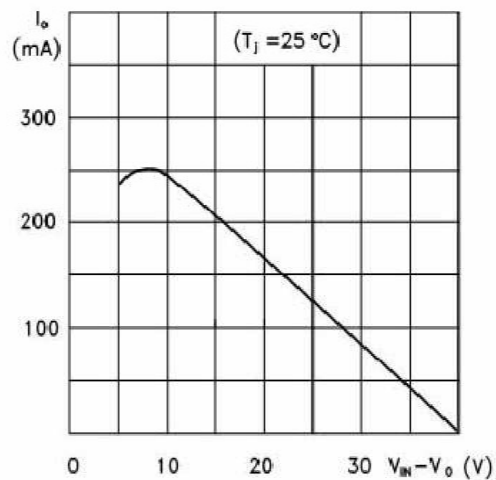
Load Characteristics



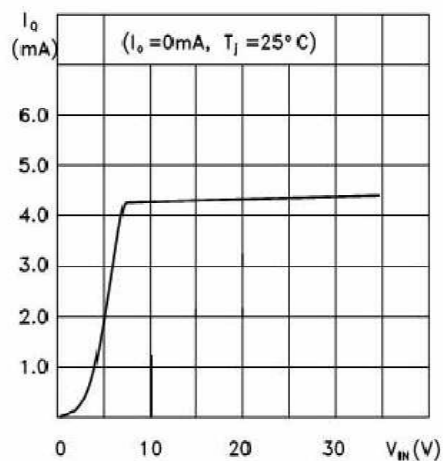
Thermal Shutdown



Short Circuit Output Current



Quiescent Current vs Input Voltage



PD-TA

