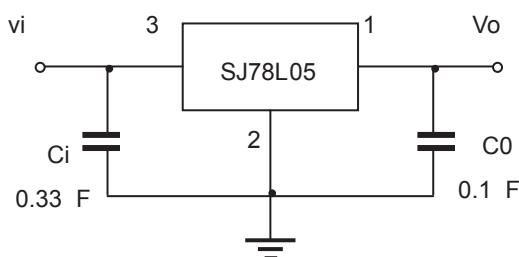


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead-free

FEATURES

- Maximum output current I_O : 0.1A
- Output voltage V_O : 5V
- Continuous total dissipation
 P_D : 0.625W ($T_A=25^\circ\text{C}$)

TYPICAL APPLICATION



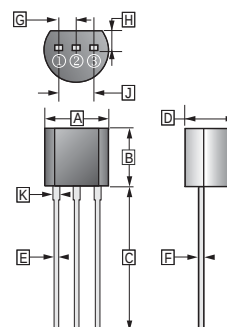
MARKING

CJ78L05

PINNING

1. Out
2. Ground
3. IN

TO-92



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

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

PARAMETER	SYMBOL	VALUE	UNITS
Input Voltage	V_I	30	V
Operating Junction and Storage Temperature Range	T_{OPR}, T_{STG}	0~125, -55~150	$^\circ\text{C}$

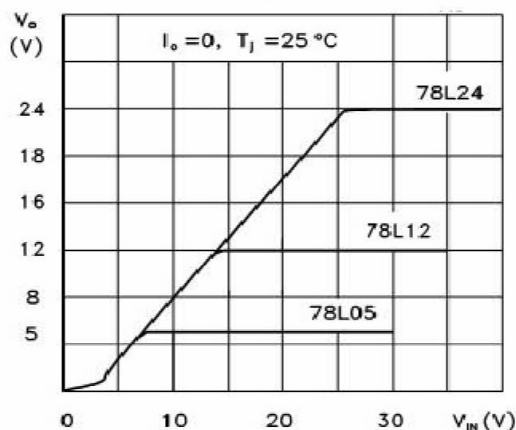
ELECTRICAL CHARACTERISTICS

(At specified virtual junction temperature, $V_I=10\text{V}$, $I_O=40\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$ unless otherwise specified)

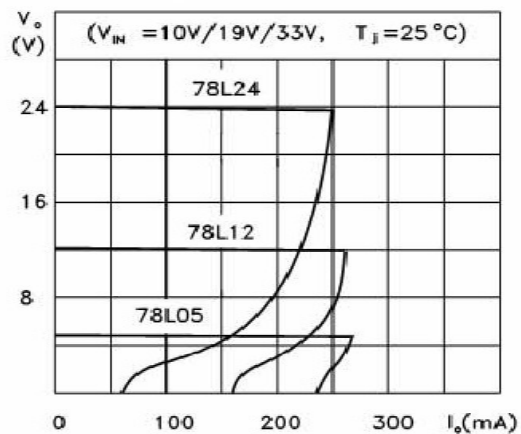
PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Output Voltage	V_O	4.8	5.0	5.2	V	$T_J=25^\circ\text{C}$,
		4.75	5.0	5.25	V	$7\text{V} \leq V_I \leq 20\text{V}$, $I_O=1\text{mA} \sim 40\text{mA}$, $T_J=0 \sim 125^\circ\text{C}$
		4.75	5.0	5.25	V	$I_O=1\text{mA} \sim 70\text{mA}$, $T_J=0 \sim 125^\circ\text{C}$
Load Regulation	ΔV_O	-	15	60	mV	$I_O=1\text{mA} \sim 100\text{mA}$, $T_J=25^\circ\text{C}$
		-	8	30	mV	$I_O=1\text{mA} \sim 40\text{mA}$, $T_J=25^\circ\text{C}$
Line Regulation	ΔV_O	-	32	150	mV	$7\text{V} \leq V_I \leq 20\text{V}$
		-	26	100	mV	$8\text{V} \leq V_I \leq 20\text{V}$, $T_J=25^\circ\text{C}$
Quiescent Current	I_Q	-	3.8	6	mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_Q	-	-	1.5	mA	$8\text{V} \leq V_I \leq 20\text{V}$, $T_J=0 \sim 125^\circ\text{C}$
	ΔI_Q	-	-	0.1	mA	$1\text{mA} \leq V_I \leq 40\text{mA}$, $T_J=0 \sim 125^\circ\text{C}$
Output Noise Voltage	V_N	-	42	-	μV	$10\text{Hz} \leq f \leq 100\text{KHz}$, $T_J=25^\circ\text{C}$
Ripple Rejection	RR	41	49	-	dB	$8\text{V} \leq V_I \leq 20\text{V}$, $f=120\text{Hz}$, $T_J=0 \sim 125^\circ\text{C}$
Drop Out Voltage	V_D	-	1.7	-	C	$T_J=25^\circ\text{C}$

TYPICAL APPLICATION

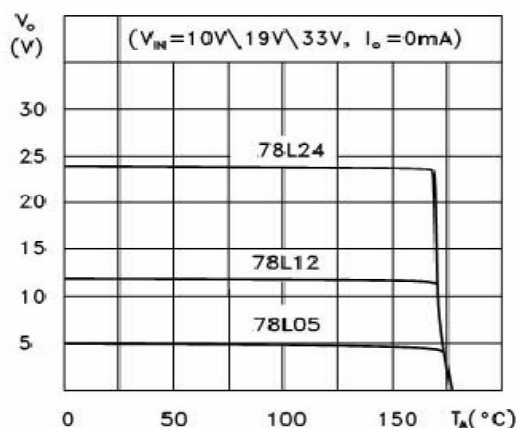
Output Characteristics



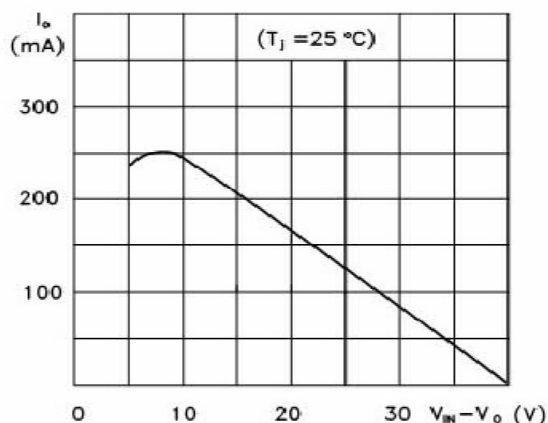
Load Characteristics



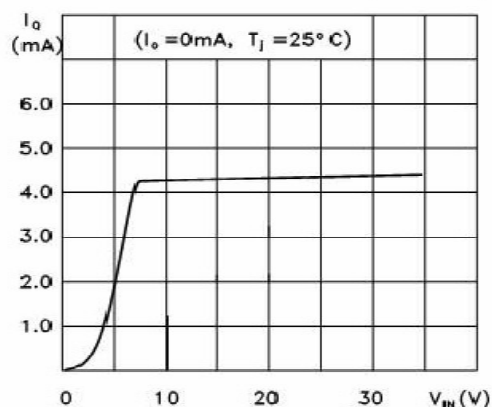
Thermal Shutdown



Short Circuit Output Current



Quiescent Current vs Input Voltage



PD-TA

