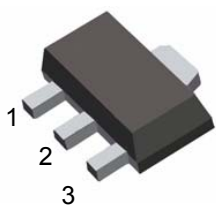


Three-terminal positive voltage regulator	SOT-89 Encapsulate Three-terminal Voltage Regulator
<p style="text-align: center;"><u>SOT-89</u></p> <p>1.OUT 2.GND 3.IN</p> 	<p>Features</p> <p>Maximum Output current I_{OM}: 0.1 A</p> <p>V_O: 15 V</p> <p>Continuous total dissipation P_D: 0.50 W</p>

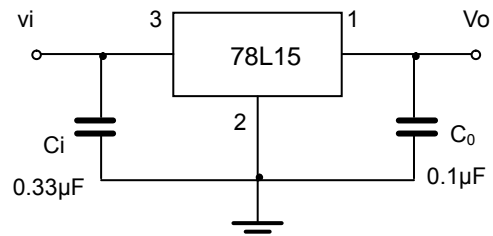
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Operating Junction Temperature Range	T _{OPR}	0-+125	°C
Storage Temperature Range	T _{STG}	-55-+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=23V, I_o=40mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT	
Output voltage	V _o	25°C	14.4	15	15.6	V	
		17.5V ≤ V _i ≤ 30V, I _o = 1mA-40mA	0-125°C	14.25	15	15.75	V
		V _i = 23V, I _o = 1mA-70mA		14.25	15	15.75	V
Load Regulation	ΔV _o	I _o = 1mA-100mA, V _i = 23V	25°C	25	150	mV	
		I _o = 1mA-40mA, V _i = 23V	25°C	15	75	mV	
Line regulation	ΔV _o	17.5V ≤ V _i ≤ 30V, I _o = 40mA	25°C	65	300	mV	
		19V ≤ V _i ≤ 30V, I _o = 40mA	25°C	58	250	mV	
Quiescent Current	I _q	25°C	4.6	6.5	mA		
Quiescent Current Change	ΔI _q	19V ≤ V _i ≤ 30V, I _o = 40mA	0-125°C		1.5	mA	
	ΔI _q	1mA ≤ I _o ≤ 40mA, V _i = 23V	0-125°C		0.1	mA	
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	82		μV	
Ripple Rejection	RR	18.5V ≤ V _i ≤ 28.5V, f = 120Hz	0-125°C	34	39	dB	
Dropout Voltage	V _d	25°C		1.7		V	

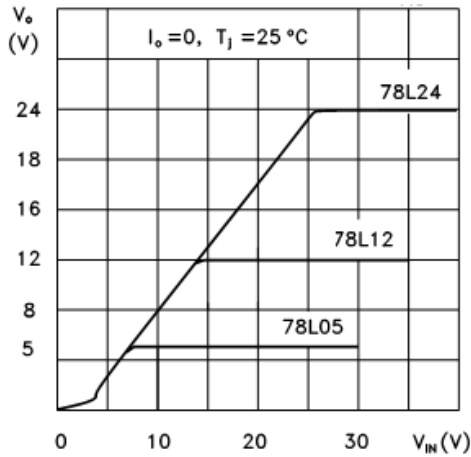
TYPICAL APPLICATION



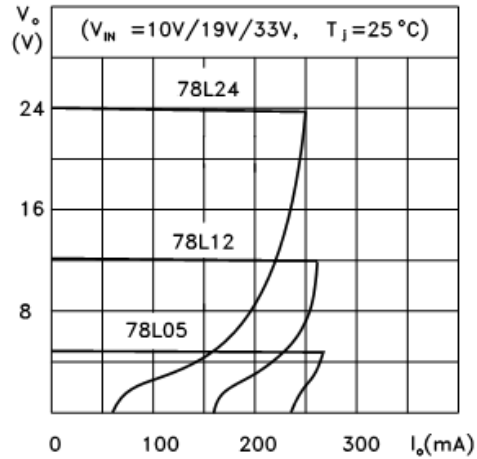
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

Typical Characteristics

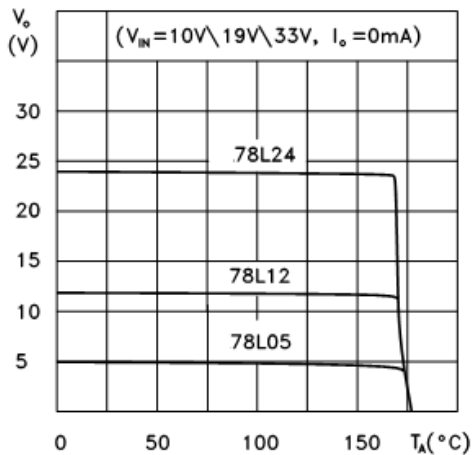
78L05/12/24 Output Characteristics



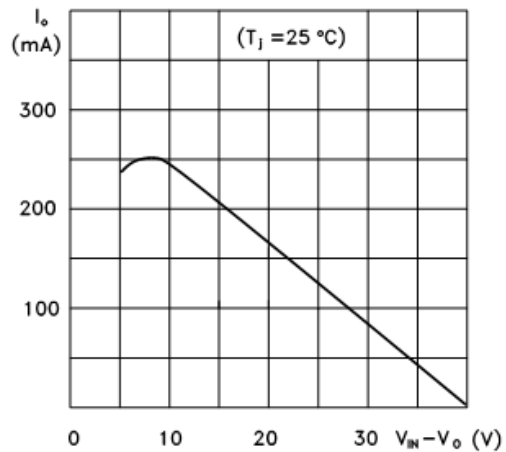
78L05/12/24 Load Characteristics



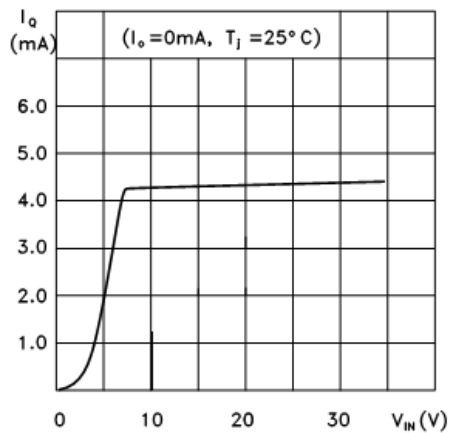
78L05/12/24 Thermal Shutdown



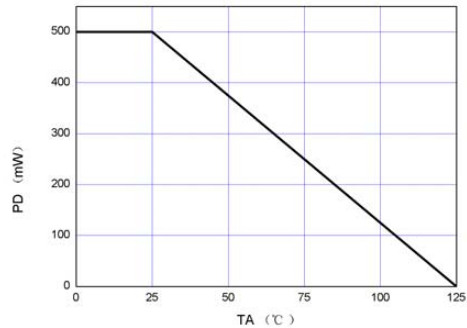
78L00 Series Short Circuit Output Current



78L05 Quiescent Current vs Input Voltage



PD-TA



单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)