

FEATURES

Maximum output current

I_{OM} : 0.1A

Output voltage

V_O : 15 V

Continuous total dissipation

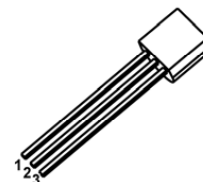
P_D : 0.625 W

TO-92

1.OUT

2.GND

3.IN



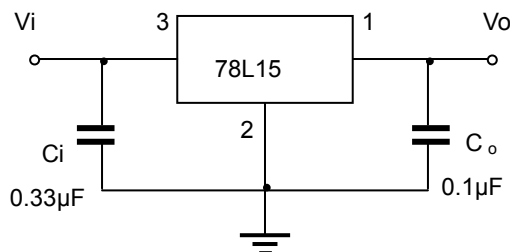
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

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

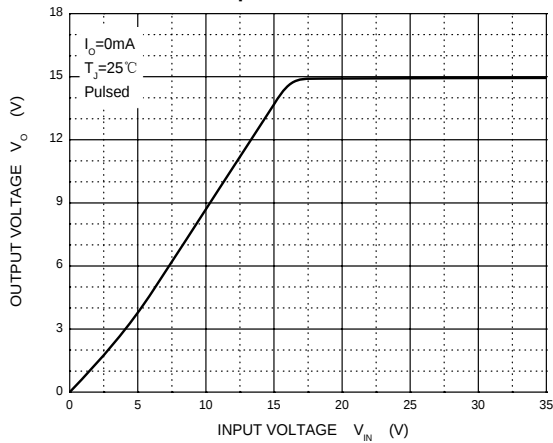
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_O	$25^\circ C$	14.4	15	15.6	V
		$17.5V \leq V_i \leq 30V, I_o = 1mA - 40mA$	14.25	15	15.75	V
		$V_i = 23V, I_o = 1mA - 70mA$	14.25	15	15.75	V
Load Regulation	ΔV_O	$I_o = 1mA - 100mA, V_i = 23V$	$25^\circ C$	25	150	mV
		$I_o = 1mA - 40mA, V_i = 23V$	$25^\circ C$	15	75	mV
Line regulation	ΔV_O	$17.5V \leq V_i \leq 30V, I_o = 40mA$	$25^\circ C$	65	300	mV
		$19V \leq V_i \leq 30V, I_o = 40mA$	$25^\circ C$	58	250	mV
Quiescent Current	I_q	$25^\circ C$		4.6	6.5	mA
Quiescent Current Change	ΔI_q	$19V \leq V_i \leq 30V, I_o = 40mA$	$0 - 125^\circ C$		1.5	mA
	ΔI_q	$1mA \leq I_o \leq 40mA, V_i = 23V$	$0 - 125^\circ C$		0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$	$25^\circ C$	82		μV
Ripple Rejection	RR	$18.5V \leq V_i \leq 28.5V, f = 120Hz$	$0 - 125^\circ C$	34	39	dB
Dropout Voltage	V_d	$25^\circ C$		1.7		V

TYPICAL APPLICATION

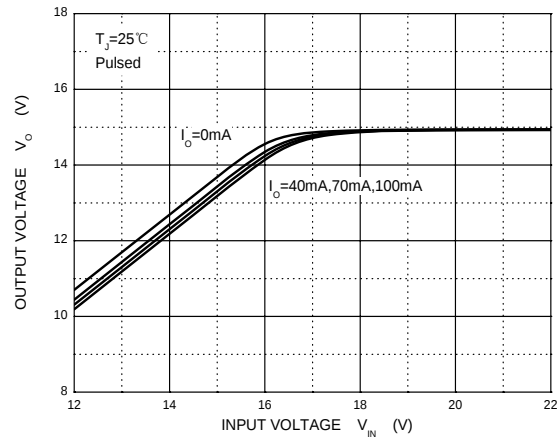


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

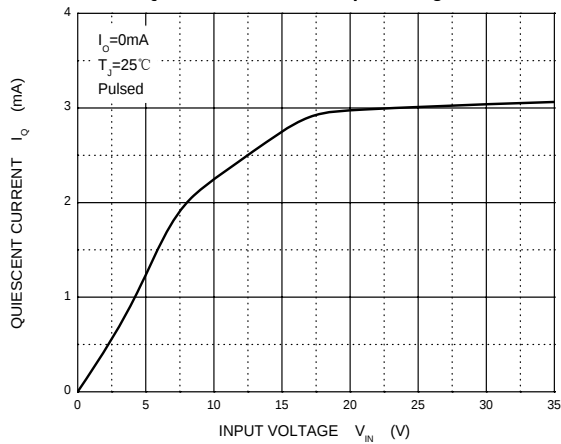
Output Characteristics



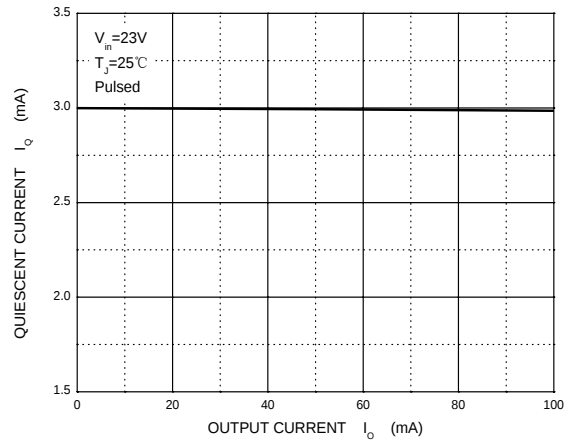
Dropout Characteristics



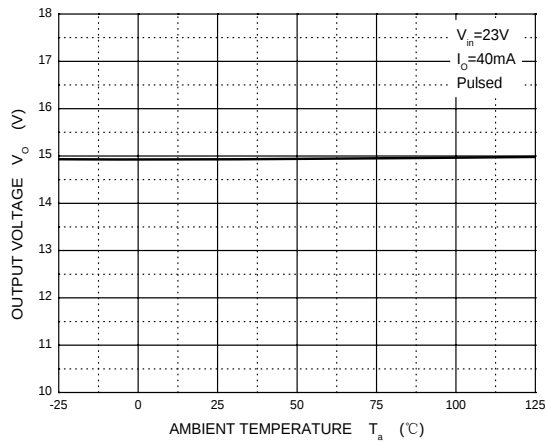
Quiescent Current vs Input Voltage



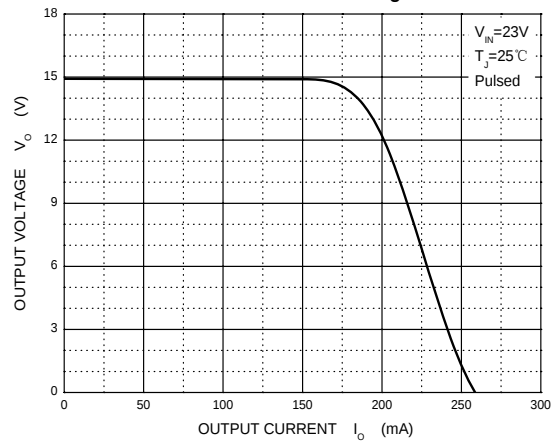
Quiescent Current vs Output Current



Output Voltage vs Ambient Temperature



Current Cut-off Grid Voltage



Power Derating Curve

