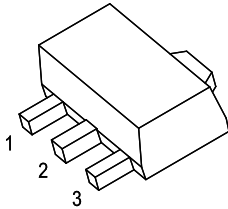


FEATURES

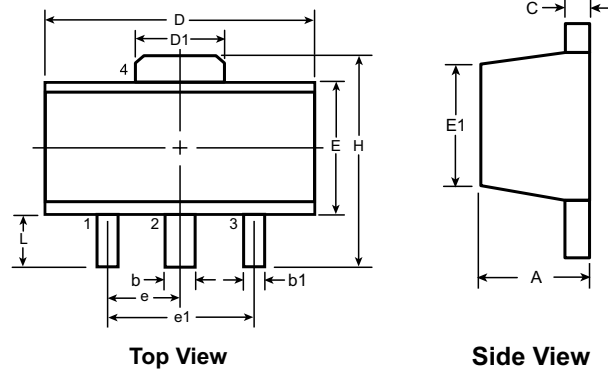
- Maximum output current
 I_{OM} : 0.1 A
- Output voltage
 V_o : 15 V
- Continuous total dissipation
 P_D : 0.5 W

SOT-89-3L

- 1. OUT
- 2. GND
- 3. IN



SOT-89 PACKAGE OUTLINE



Symbol	A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00'	1.50	3.94	0.89
	NOM	-	-	-	-	-	-	-	-	3.00	-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29	3.00	4.25	1.20

Dimensions in mm

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

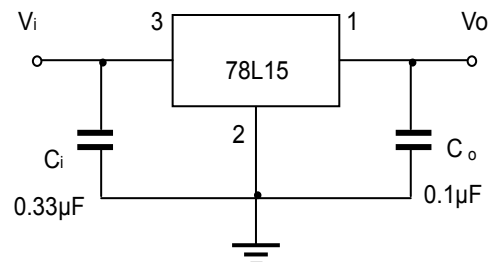
Parameter	Symbol	Value	Units
Input Voltage	V_I	35	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

78L15

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)

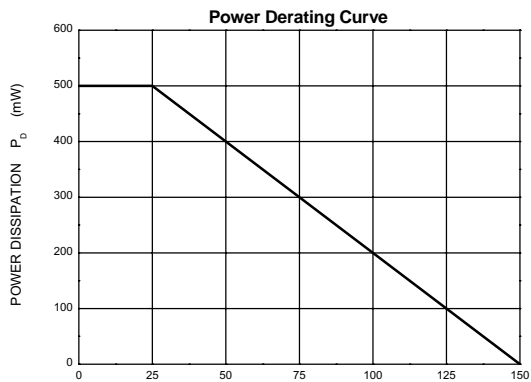
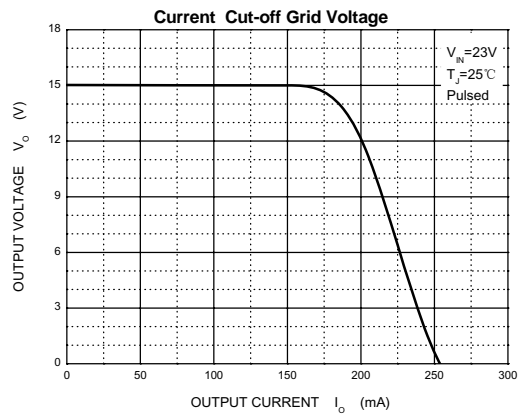
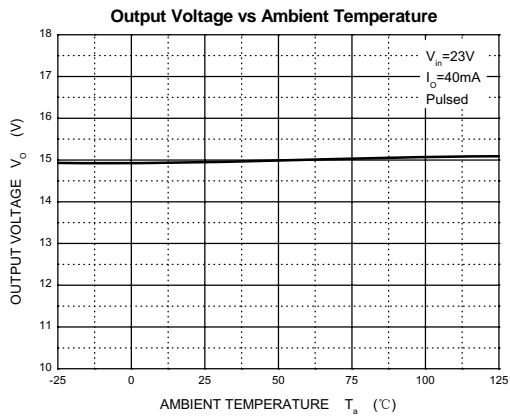
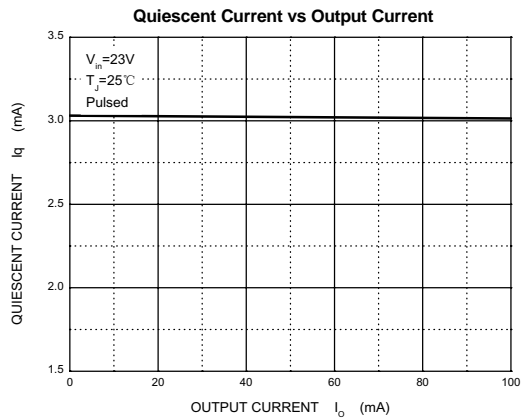
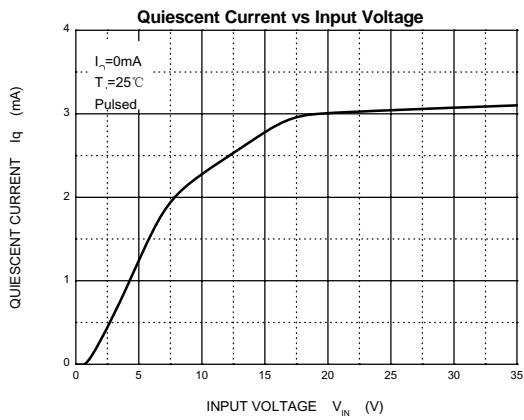
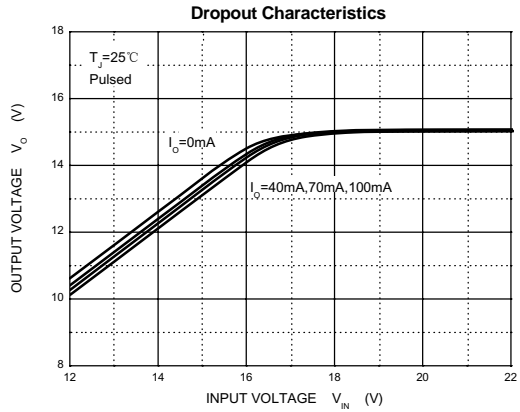
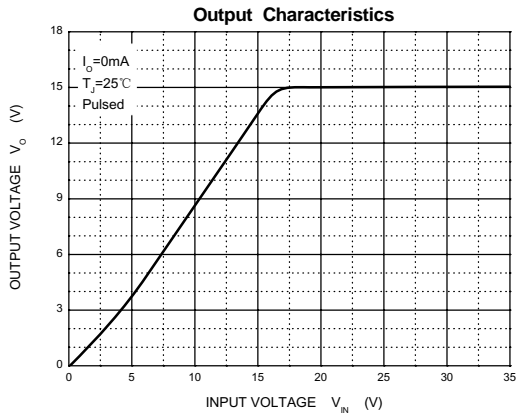
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_o	$25^\circ C$	14.4	15	15.6	V
		$17.5V \leq V_i \leq 30V, I_o=1mA-40mA$	14.25	15	15.75	V
		$V_i=23V, I_o=1mA-70mA$	14.25	15	15.75	V
Load Regulation	ΔV_o	$I_o=1mA-100mA, V_i=23V$	$25^\circ C$	25	150	mV
		$I_o=1mA-40mA, V_i=23V$	$25^\circ C$	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.

RATING AND CHARACTERISTIC CURVES (78L15)



C,Nov,2012