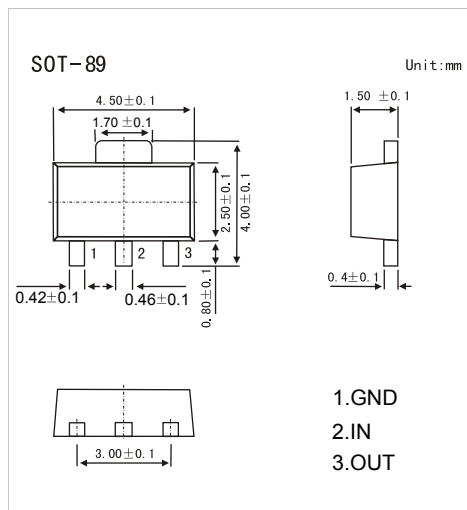


## Three-Terminal Negative Voltage Regulator

### 79L15

#### ■ Features

- Maximum Output current  $I_{om}$ : 0.1 A
- Output voltage  $V_o$ : -15V
- Continuous total dissipation  $P_d$ : 0.5 W



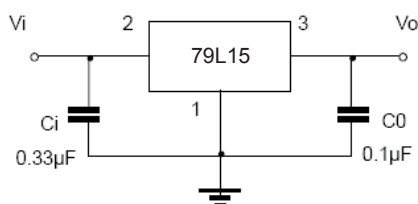
#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Input Voltage	$V_i$	-35	V
Operating Junction Temperature Range	$T_{opr}$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

#### ■ Electrical Characteristics ( $V_i = -23\text{V}, I_o = 40\text{mA}, 0^\circ\text{C} < T_j < 125^\circ\text{C}, C_1 = 0.33\ \mu\text{F}, C_o = 0.1\ \mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j = 25^\circ\text{C}$	-14.4	-15	-15.6	V
		$-17.5\text{V} \leq V_i \leq -30\text{V}, I_o = 1\text{mA} - 40\text{mA}$	-14.25	-15	-15.75	V
		$I_o = 1\text{mA} - 70\text{mA}$	-14.25	-15	-15.75	V
Load Regulation	$\Delta V_o$	$T_j = 25^\circ\text{C}, I_o = 1\text{mA} \text{ to } 100\text{mA}, V_i = -23\text{V}$		25	150	mV
		$T_j = 25^\circ\text{C}, I_o = 1\text{mA} \text{ to } 40\text{mA}, V_i = -23\text{V}$		15	75	mV
Line regulation	$\Delta V_o$	$-17.5\text{V} \leq V_i \leq -30\text{V}, T_j = 25^\circ\text{C}$		65	300	mV
		$-20\text{V} \leq V_i \leq -30\text{V}, T_j = 25^\circ\text{C}$		50	250	mV
Quiescent Current	$I_q$	$25^\circ\text{C}$			6.5	mA
Quiescent Current Change	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}, -20\text{V} \leq V_i \leq -30\text{V}$			1.5	mA
	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}, 1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output Noise Voltage	$V_N$	$10\text{Hz} \leq f \leq 100\text{kHz}, T_j = 25^\circ\text{C}$		90		$\mu\text{V}$
Ripple Rejection	RR	$-18.5\text{V} \leq V_i \leq -28.5\text{V}, f = 120\text{Hz}$	34	39		dB
Dropout Voltage	$V_d$	$T_j = 25^\circ\text{C}$		1.7		V

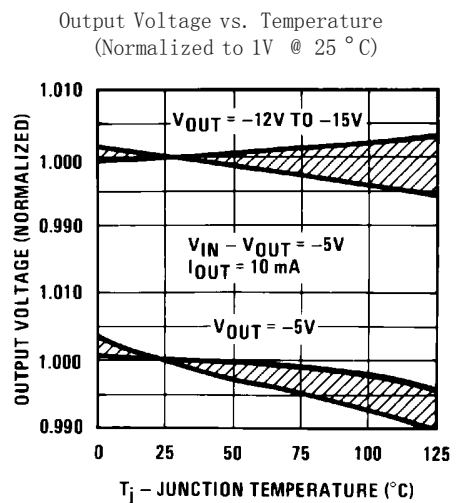
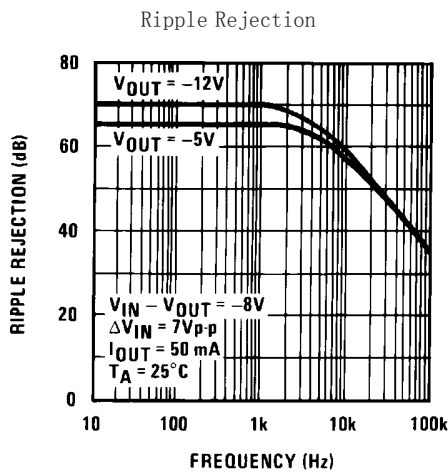
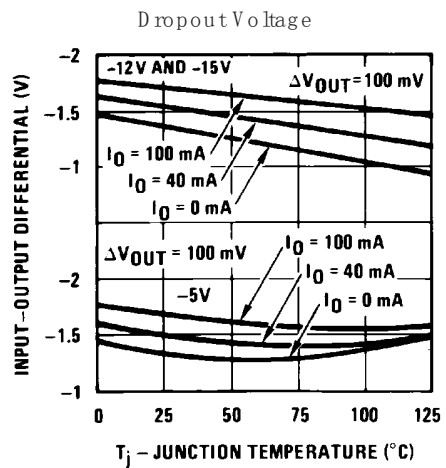
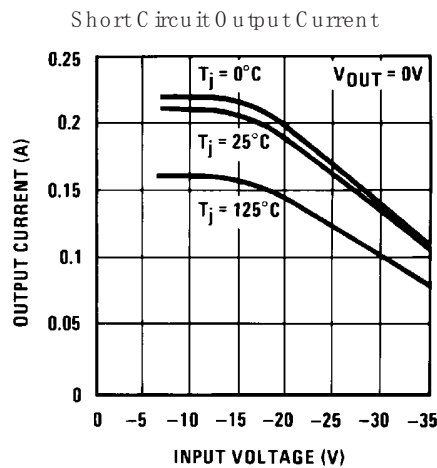
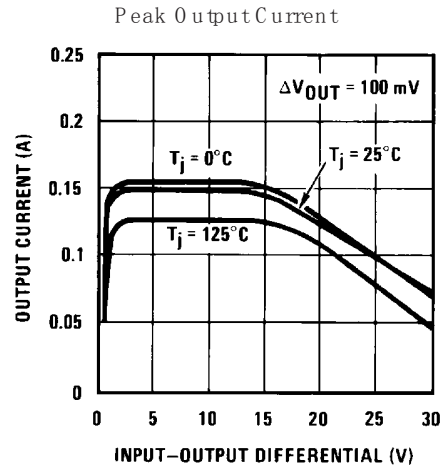
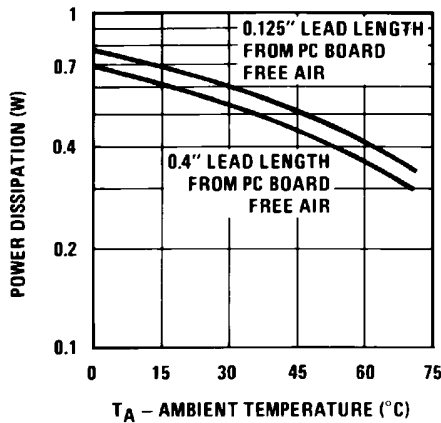
#### ■ Typical Application



# Three-Terminal Negative Voltage Regulator

## 79L15

### ■ Typical Characteristics



Three-Terminal Negative Voltage Regulator

79L15

■ Typical Characteristics

