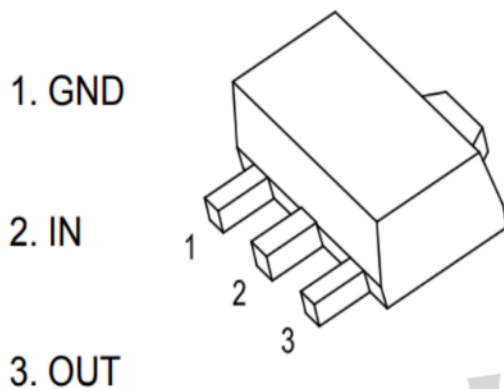


FEATURES

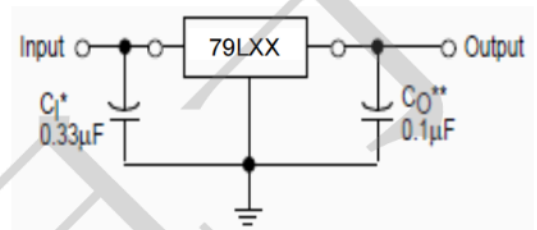
- Wide range of available, fixed output voltage.
 (VOUT : - 6.0V, - 9.0V, - 10V)
- superior ripple rejection ratio for audio frequency
- Maximum output current 100mA
- Over current and over temperature protection



SOT-89

APPLICATIONS

Three-terminal Negative Fixed Voltage Regulators



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Units
V_I	Input voltage	-30	V
P_D	Power dissipation	500	mW
T_{opr}	Operating ambient temperature	0 to +150	°C
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C

ELECTRICAL CHARACTERISTICS

($V_{IN} = -11\text{ V}$, $I_{OUT} = 40\text{ mA}$, $0^\circ\text{C} \leq T_j \leq 125^\circ\text{C}$, $C_{IN} = 0.33\mu\text{F}$, $C_L = 0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	79L06			UNIT
			MIN	TYP	MAX	
Output voltage	V_O	$T_j = 25^\circ\text{C}$ $V_{IN} = -10\text{ V}$, $1.0\text{ mA} \leq I_O \leq 70\text{ mA}$	-5.76 -5.70	-6.0	-6.24 -6.30	V
Load regulation	ΔV_{OLOAD}	$T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$ $T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$ $T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		17.5 12 5.5	70 35	mV
Line regulation	ΔV_{OLINE}	$T_j = 25^\circ\text{C}$, $-21\text{ V} \leq V_i \leq -8.1\text{ V}$ $T_j = 25^\circ\text{C}$, $-21\text{ V} \leq V_i \leq -9.0\text{ V}$		50 45	150 110	mV
Quiescent current	I_Q	$T_j = 25^\circ\text{C}$		-2.0	-4.0	mA
Quiescent current change	ΔI_Q	$T_j = 25^\circ\text{C}$, $-21\text{ V} \leq V_i \leq -9.0\text{ V}$ $1.0\text{ mA} \leq I_O \leq 40\text{ mA}$			1.5 1.0	mA
Voltage drop	V_{DROP}	$T_j = 25^\circ\text{C}$		1.3	—	V
Output short circuit current	I_{OS}	$T_j = 25^\circ\text{C}$		300		mA

ELECTRICAL CHARACTERISTICS

($V_{IN} = -14\text{ V}$, $I_{OUT} = 40\text{ mA}$, $0^\circ\text{C} \leq T_j \leq 125^\circ\text{C}$, $C_{IN} = 0.33\mu\text{F}$, $C_L = 0.1\mu\text{F}$, unless otherwise specified)

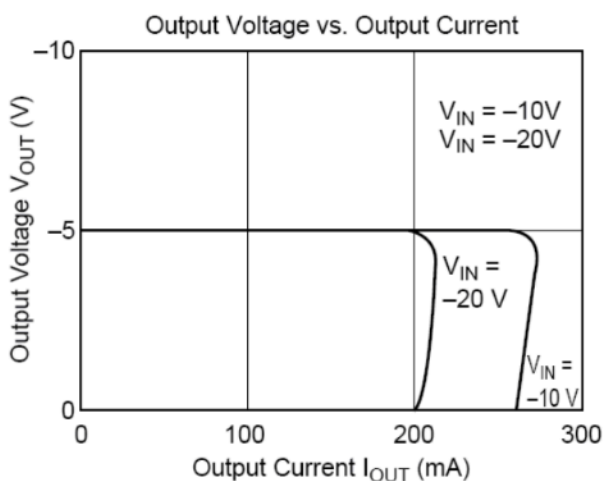
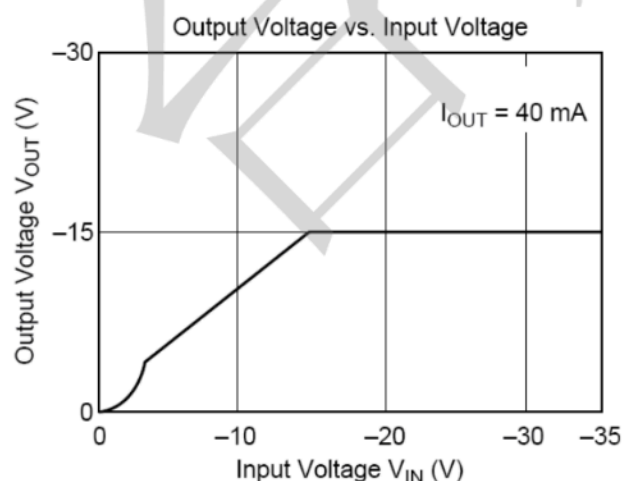
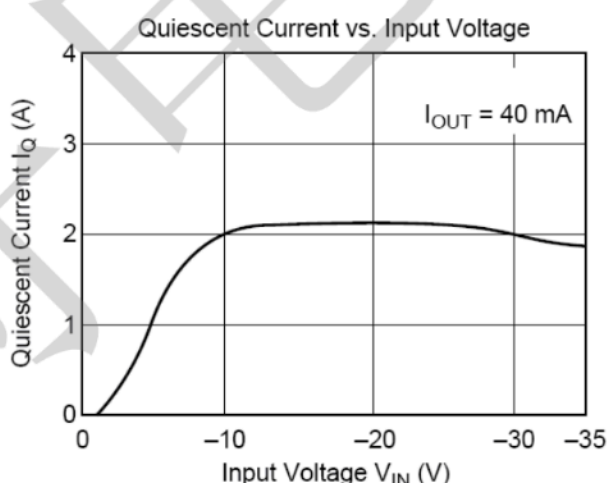
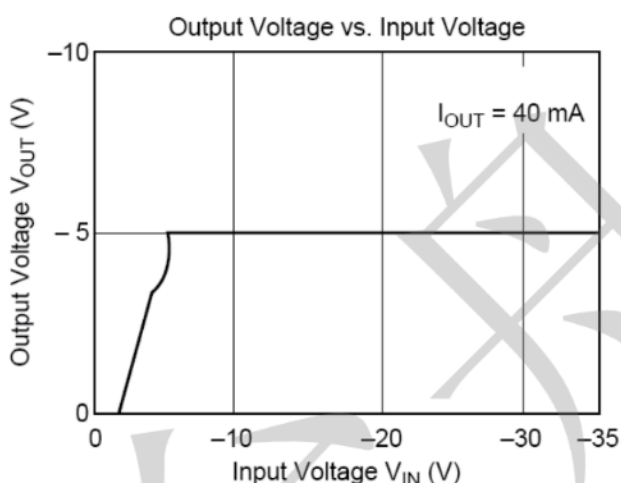
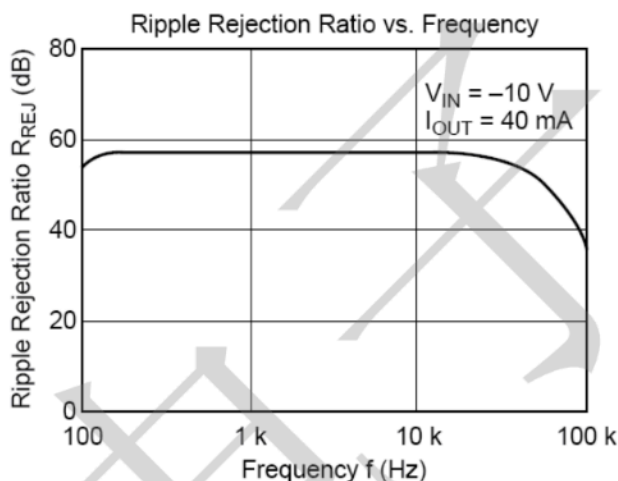
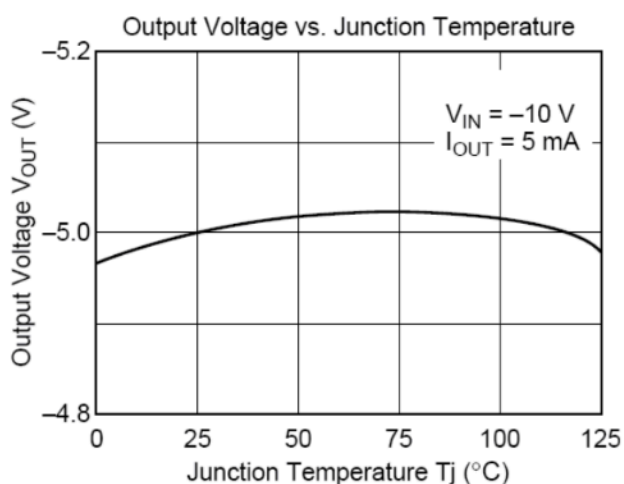
Parameter	Symbol	Test conditions	79L08			UNIT
			MIN	TYP	MAX	
Output voltage	V_O	$T_j = 25^\circ\text{C}$ $V_{IN} = -14\text{ V}$, $1.0\text{ mA} \leq I_O \leq 70\text{ mA}$	-7.68 -7.60	-8.0	-8.32 -8.40	V
Load regulation	ΔV_{OLOAD}	$T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		22		mV
		$T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		15	80	
		$T_j = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		7.0	40	
Line regulation	ΔV_{OLINE}	$T_j = 25^\circ\text{C}$, $-23\text{ V} \leq V_i \leq -10.5\text{ V}$		65	175	mV
		$T_j = 25^\circ\text{C}$, $-23\text{ V} \leq V_i \leq -11\text{ V}$		55	125	
Quiescent current	I_Q	$T_j = 25^\circ\text{C}$		-2.0	-4.0	mA
Quiescent current change	ΔI_Q	$T_j = 25^\circ\text{C}$, $-23\text{ V} \leq V_i \leq -11\text{ V}$			1.5	mA
		$1.0\text{ mA} \leq I_O \leq 40\text{ mA}$			1.0	
Voltage drop	V_{DROP}	$T_j = 25^\circ\text{C}$		1.3		V
Output short circuit current	I_{OS}	$T_j = 25^\circ\text{C}$		270		mA

ELECTRICAL CHARACTERISTICS

($V_{IN} = -15\text{ V}$, $I_{OUT} = 40\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$, $C_{IN} = 0.33\mu\text{F}$, $C_L = 0.1\mu\text{F}$, unless otherwise specified)

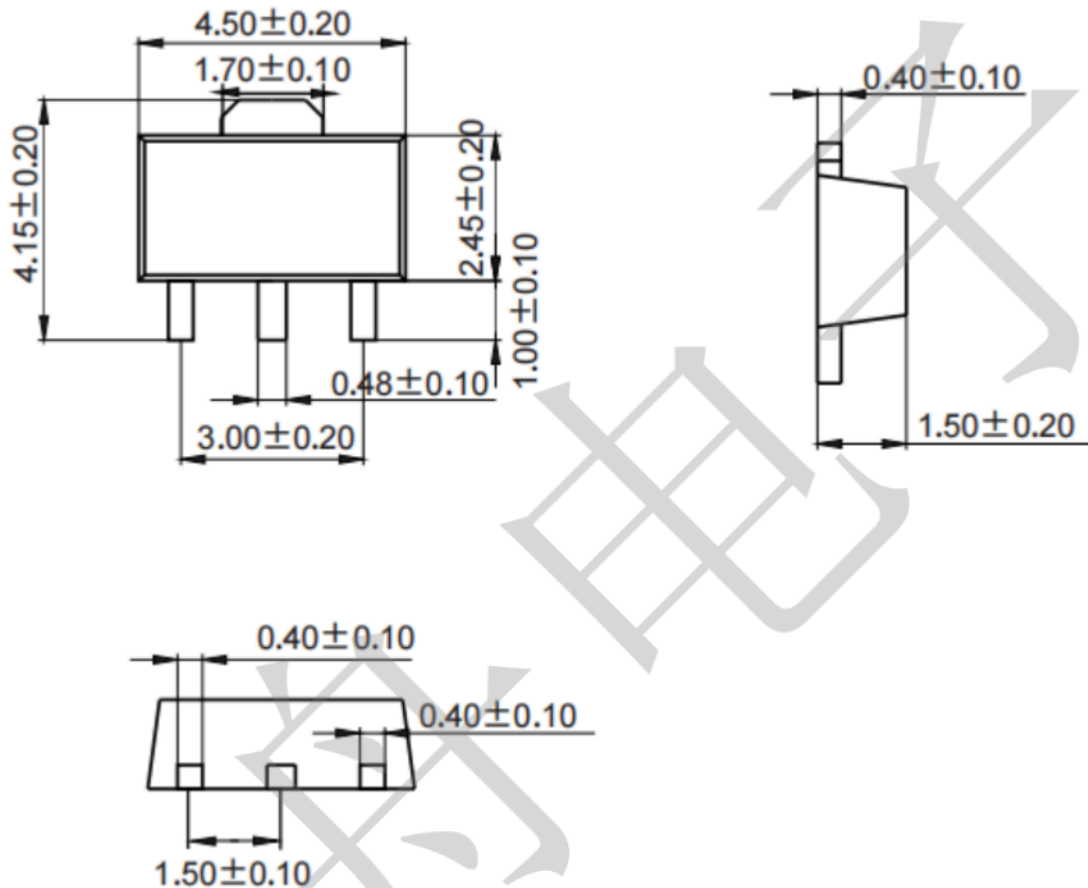
Parameter	Symbol	Test conditions	79L09			UNIT
			MIN	TYP	MAX	
Output voltage	V_O	$T_J = 25^\circ\text{C}$ $V_{IN} = -15\text{ V}$, $1.0\text{ mA} \leq I_O \leq 70\text{ mA}$	-8.64 -8.55	-9.0	-9.36 -9.45	V
Load regulation	ΔV_{OLOAD}	$T_J = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		24.5		mV
		$T_J = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		17	90	
		$T_J = 25^\circ\text{C}$, $1.0\text{ mA} \leq I_{OUT} \leq 150\text{ mA}$		8.0	45	
Line regulation	ΔV_{OLINE}	$T_J = 25^\circ\text{C}$, $-24\text{ V} \leq V_I \leq -11.4\text{ V}$		80	200	mV
		$T_J = 25^\circ\text{C}$, $-24\text{ V} \leq V_I \leq -12\text{ V}$		70	160	
Quiescent current	I_Q	$T_J = 25^\circ\text{C}$		-2.6	4.6	mA
Quiescent current change	ΔI_Q	$T_J = 25^\circ\text{C}$, $-24\text{ V} \leq V_I \leq -12\text{ V}$			1.5	mA
		$1.0\text{ mA} \leq I_O \leq 40\text{ mA}$			1.0	
Voltage drop	V_{DROP}	$T_J = 25^\circ\text{C}$		1.3		V
Output short circuit current	I_{OS}	$T_J = 25^\circ\text{C}$		270		mA

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



Package Outline Dimensions (unit:mm)

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Mounting Pad Layout (unit: mm)

