

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

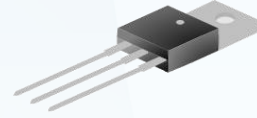
## Product Specification

▶ Domestic	Part Number	L79XX
▶ Overseas	Part Number	L79XX
▶ Equivalent	Part Number	L79XX

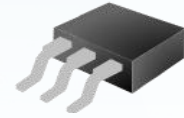
EV is the abbreviation of name EVVO

## FEATURES

- Output current in excess of 1.0A
- Internal short current circuit limiting
- Internal thermal overload protection
- Output voltage offered of 4% tolerance



TO220-3



TO263-3

## ABSOLUTE MAXIMUM RATINGS

Condition	VALUE	UNIT
Maximum input voltage at $T_J=25^{\circ}\text{C}$	-35	V
Maximum operating junction temperature	+125	$^{\circ}\text{C}$
Lead Temperature (TL) (Soldering, 10 seconds)	+245	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS L7905

( $V_{IN} = -10\text{V}$ ,  $I_O = 500\text{mA}$ ,  $C_{IN} = 2.2\mu\text{F}$ ,  $C_O = 1.0\mu\text{F}$ ,  $T_J = 25^{\circ}\text{C}$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_O$	$-7.0\text{V} \geq V_{IN} \geq -20\text{V}$ $5.0\text{mA} \leq I_O \leq 1.0\text{A}$	-4.82	-5.18	V
Line Regulation	$\Delta U_V$	$I_O = 100\text{mA}$ , $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_O = 100\text{mA}$ , $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$ $I_O = 500\text{mA}$ , $-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $I_O = 500\text{mA}$ , $-8.0\text{V} \geq V_{IN} \geq -12\text{V}$		47.5 23.5 95 47.5	mV
Load Regulation	$\Delta U_I$	$5.0\text{mA} \leq I_O \leq 1.5\text{A}$ $250\text{mA} \leq I_O \leq 750\text{mA}$		95 47.5	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-7.0\text{V} \geq V_{IN} \geq -25\text{V}$ $5.0\text{mA} \leq I_O \leq 1.5\text{A}$		1.25 0.48	mA

**ELECTRICAL CHARACTERISTICS L7906**

(VIN= -11V, Io = 500mA, CIN=2.2μF, Co=1.0μF, TJ=25°C, unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_o$	$-8.0V \geq V_{IN} \geq -21V$ $5.0mA \leq I_o \leq 1.0 A$	-5.77	-6.23	V
Line Regulation	$\Delta U_v$	$I_o = 100mA, -8.0V \geq V_{IN} \geq -25V$ $I_o = 100mA, -9.0V \geq V_{IN} \geq -13V$ $I_o = 500mA, -8.0V \geq V_{IN} \geq -25V$ $I_o = 500mA, -9.0V \geq V_{IN} \geq -13V$		57 28.5 114 57	mV
Load Regulation	$\Delta U_l$	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		114 57	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-8.0V \geq V_{IN} \geq -25V$ $5.0mA \leq I_o \leq 1.5 A$		1.25 0.48	mA

## ELECTRICAL CHARACTERISTICS L7908

( $V_{IN} = -14V$ ,  $I_O = 500mA$ ,  $C_{IN} = 2.2\mu F$ ,  $C_O = 1.0\mu F$ ,  $T_J = 25^\circ C$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_O$	$-10.5V \geq V_{IN} \geq -23V$ $5.0mA \leq I_O \leq 1.0 A$	-7.72	-8.28	V
Line Regulation	$\Delta U_V$	$I_O = 100mA$ , $-10.5V \geq V_{IN} \geq -25V$ $I_O = 100mA$ , $-11V \geq V_{IN} \geq -17V$ $I_O = 500mA$ , $-10.5V \geq V_{IN} \geq -25V$ $I_O = 500mA$ , $-11V \geq V_{IN} \geq -17V$		76 38 152 76	mV
Load Regulation	$\Delta U_I$	$5.0mA \leq I_O \leq 1.5 A$ $250mA \leq I_O \leq 750mA$		152 76	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-10.5V \geq V_{IN} \geq -25V$ $5.0mA \leq I_O \leq 1.5 A$		0.98 0.48	mA

## ELECTRICAL CHARACTERISTICS L7912

( $V_{IN} = -19V$ ,  $I_O = 500mA$ ,  $C_{IN} = 2.2\mu F$ ,  $C_O = 1.0\mu F$ ,  $T_J = 25^\circ C$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_O$	$-14.5V \geq V_{IN} \geq -21V$ $5.0mA \leq I_O \leq 1.0 A$	-11.52	-12.48	V
Line Regulation	$\Delta U_V$	$I_O = 100mA$ , $-14.5V \geq V_{IN} \geq -30V$ $I_O = 100mA$ , $-16V \geq V_{IN} \geq -22V$ $I_O = 500mA$ , $-14.5V \geq V_{IN} \geq -30V$ $I_O = 500mA$ , $-16V \geq V_{IN} \geq -22V$		114 58.5 228 114	mV
Load Regulation	$\Delta U_I$	$5.0mA \leq I_O \leq 1.5 A$ $250mA \leq I_O \leq 750mA$		228 114	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-14.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_O \leq 1.5 A$		1.25 0.48	mA

## ELECTRICAL CHARACTERISTICS L7915

( $V_{IN} = -23V$ ,  $I_o = 500mA$ ,  $C_{IN} = 2.2\mu F$ ,  $C_o = 1.0\mu F$ ,  $T_J = 25^\circ C$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_o$	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_o \leq 1.0 A$	-14.44	-15.56	V
Line Regulation	$\Delta U_v$	$I_o = 100mA$ , $-17.5V \geq V_{IN} \geq -30V$ $I_o = 100mA$ , $-20V \geq V_{IN} \geq -26V$ $I_o = 500mA$ , $-17.5V \geq V_{IN} \geq -30V$ $I_o = 500mA$ , $-20V \geq V_{IN} \geq -26V$		142 71 285 142	mV
Load Regulation	$\Delta U_l$	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		285 142	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-17.5V \geq V_{IN} \geq -30V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

## ELECTRICAL CHARACTERISTICS L7918

( $V_{IN} = -27V$ ,  $I_o = 500mA$ ,  $C_{IN} = 2.2\mu F$ ,  $C_o = 1.0\mu F$ ,  $T_J = 25^\circ C$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_o$	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.0 A$	-17.34	-18.66	V
Line Regulation	$\Delta U_v$	$I_o = 100mA$ , $-21V \geq V_{IN} \geq -33V$ $I_o = 100mA$ , $-24V \geq V_{IN} \geq -30V$ $I_o = 500mA$ , $-21V \geq V_{IN} \geq -33V$ $I_o = 500mA$ , $-24V \geq V_{IN} \geq -30V$		171 85.5 342 171	mV
Load Regulation	$\Delta U_l$	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		342 171	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-21V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

## ELECTRICAL CHARACTERISTICS L7924

( $V_{IN} = -33V$ ,  $I_o = 500mA$ ,  $C_{IN} = 2.2\mu F$ ,  $C_o = 1.0\mu F$ ,  $T_J = 25^\circ C$ , unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	NORMS		UNIT
			Min	Max	
Output Voltage	$V_o$	$-27V \geq V_{IN} \geq -38V$ $5.0mA \leq I_o \leq 1.0 A$	-23.05	-24.95	V
Line Regulation	$\Delta U_v$	$I_o = 100mA$ , $-27V \geq V_{IN} \geq -38V$ $I_o = 100mA$ , $-30V \geq V_{IN} \geq -36V$ $I_o = 500mA$ , $-27V \geq V_{IN} \geq -38V$ $I_o = 500mA$ , $-30V \geq V_{IN} \geq -36V$		228 114 446 228	mV
Load Regulation	$\Delta U_l$	$5.0mA \leq I_o \leq 1.5 A$ $250mA \leq I_o \leq 750mA$		446 228	mV
Quiescent Current	$I_B$			7.8	mA
Quiescent Current Change	$\Delta I_B$	$-27V \geq V_{IN} \geq -33V$ $5.0mA \leq I_o \leq 1.5 A$		0.98 0.48	mA

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