

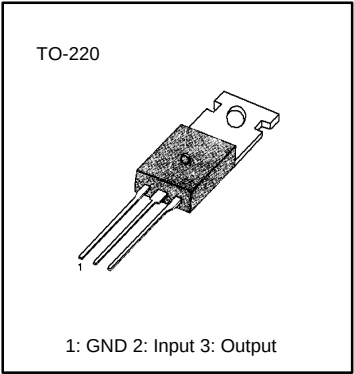
LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

3-TERMINAL 1A NEGATIVE VOLTAGE REGULATORS

The LM79XX series of three-terminal negative regulators are available in TO-220 package and with several fixed output voltages, making them useful in a wide range of applications. Each type employs internal current limiting, thermal shut-down and safe area protection, making it essentially indestructible.

FEATURES

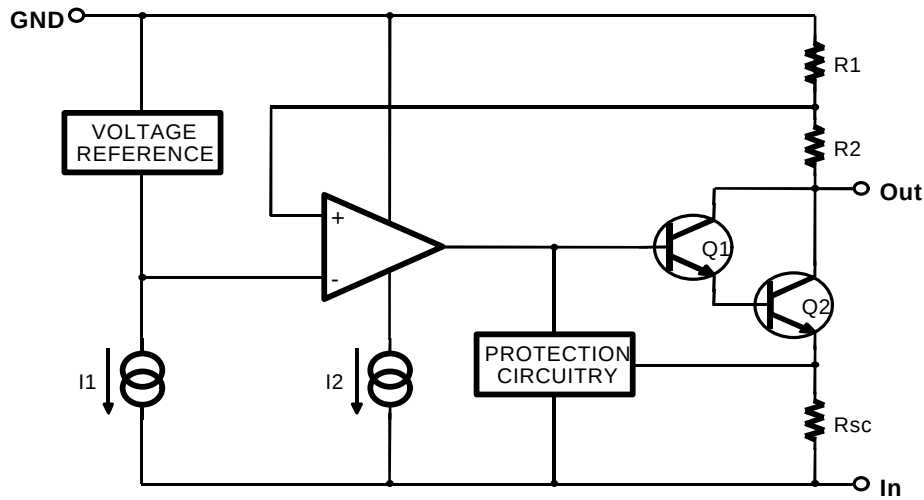
- Output Current in Excess of 1A
- Output Voltages of -5, -6, -8, -12, -15, -18, -24V
- Internal Thermal Overload Protection
- Short Circuit Protection
- Output Transistor Safe-Area Compensation



ORDERING INFORMATION

Device	Output Voltage Tolerance	Package	Operating Temperature
LM79XXCT	± 4%	TO-220	0 ~ +125 °C
LM79XXAT	± 2%		

BLOCK DIAGRAM



LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

ABSOLUTE MAXIMUM RATINGS (T_A=+25°C, unless otherwise specified)

Characteristic	Symbol	Value	Unit
Input Voltage	V _I	-35	V
Thermal Resistance Junction-Cases	R _{θJC}	5	°C / W
Junction-Air	R _{θJA}	65	°C / W
Operating Temperature Range	T _{OPR}	0 ~ +125	°C
Storage Temperature Range	T _{STG}	- 65 ~ +150	°C

LM7905 ELECTRICAL CHARACTERISTICS

(V_I = 10V, I_O = 500mA, 0°C ≤ T_J ≤ +125°C, C_I = 2.2μF, C_O = 1μF, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V _O	T _J = +25°C	- 4.8	- 5.0	- 5.2	V
		I _O = 5mA to 1A, P _O 15W V _I = -7 to -20V	- 4.75	- 5.0	- 5.25	
Line Regulation	ΔV _O	T _J = 25°C		5	50	mV
		V _I = -7 to -20V I _O = 1A		2	25	
		V _I = -8 to -12V I _O = 1A		7	50	
		V _I = -7.5 to -25V		7	50	
Load Regulation	ΔV _O	I _O = 5mA to 1.5A		10	100	mV
		T _J = +25°C I _O = 250 to 750mA		3	50	
Quiescent Current	I _Q	T _J = +25°C		3	6	mA
Quiescent Current Change	ΔI _Q	I _O = 5mA to 1A		0.05	0.5	mA
		V _I = -8 to -25V		0.1	0.8	
Temperature Coefficient of V _O	ΔV _O /ΔT	I _O = 5mA		- 0.4		mV/°C
Output Noise Voltage	V _N	f = 10Hz to 100KHz T _A = +25°C		40		μV
Ripple Rejection	RR	f = 120Hz, I _O = -35V ΔV _I = 10V	54	60		dB
Dropout Voltage	V _D	T _J = +25°C I _O = 1A		2		V
Short Circuit Current	I _{SC}	T _J = +25°C, V _I = -35V		300		mA
Peak Current	I _{PK}	T _J = +25°C		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7906 ELECTRICAL CHARACTERISTICS

($V_I = 11V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	- 5.75	- 6	- 6.25	V
		$I_O = 5mA$ to 1A, $P_O = 15W$ $V_I = -9$ to - 21V	- 5.7	- 6	- 6.3	
Line Regulation	ΔV_O	$T_J = 25^\circ C$		10	120	mV
		$V_I = -8$ to - 25V $V_I = -9$ to -12V		5	60	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to 1.5A		10	120	mV
		$T_J = +25^\circ C$ $I_O = 250$ to 750mA		3	60	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to 1A			0.5	mA
		$V_I = -9$ to -25V			1.3	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.5		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to 100KHz $T_A = +25^\circ C$		130		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7908 ELECTRICAL CHARACTERISTICS

($V_I = 14V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	- 7.7	- 8	- 8.3	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$	- 7.6	- 8	- 8.4	
		$V_I = -1.5$ to $-23V$				
Line Regulation	ΔV_O	$T_J = 25^\circ C$		10	100	mV
		$V_I = -10.5$ to $-25V$		5	80	
		$V_I = -11$ to $-17V$				
Load Regulation	ΔV_O	$T_J = +25^\circ C$		12	160	mV
		$I_O = 5mA$ to $1.5A$				
		$T_J = +25^\circ C$		4	80	
Quiescent Current	I_Q	$I_O = 250$ to $750mA$				mA
		$T_J = +25^\circ C$		3	6	
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -11.5$ to $-25V$		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.6		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		175		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7909 ELECTRICAL CHARACTERISTICS

($V_I = 14V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	- 8.7	- 9.0	- 9.3	V
		$I_O = 5mA$ to 1A, $P_O = 15W$ $V_I = -1.5$ to -23V	- 8.6	- 9.0	- 9.4	
Line Regulation	ΔV_O	$T_J = 25^\circ C$		10	180	mV
		$V_I = -10.5$ to -25V $V_I = -11$ to -17V		5	90	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to 1.5A		12	180	mV
		$T_J = +25^\circ C$ $I_O = 250$ to 750mA		4	90	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to 1A		0.05	0.5	mA
		$V_I = -11.5$ to -25V		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.6		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to 100KHz $T_A = +25^\circ C$		175		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7912 ELECTRICAL CHARACTERISTICS

($V_I = 18V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	-11.5	-12	-12.5	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$ $V_I = -15.5$ to $-27V$	-11.4	-12	-12.6	
Line Regulation	ΔV_O	$T_J = 25^\circ C$		12	240	mV
		$V_I = -14.5$ to $-30V$ $V_I = -16$ to $-22V$		6	120	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to $1.5A$		12	240	mV
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		4	120	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -15$ to $-30V$		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.8		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100kHz$ $T_A = +25^\circ C$		200		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7915 ELECTRICAL CHARACTERISTICS

($V_I = 23V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	-14.4	-15	-15.6	V
		$I_O = 5mA$ to $1A$, $P_O \leq 15W$	-14.25	-15	-15.75	
		$V_I = -18$ to $-30V$				
Line Regulation	ΔV_O	$T_J = 25^\circ C$		12	300	mV
		$V_I = -17.5$ to $-30V$ $V_I = -20$ to $-26V$		6	150	
Load Regulation	ΔV_O	$T_J = +25^\circ C$		12	300	mV
		$I_O = 5mA$ to $1.5A$				
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		4	150	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -18.5$ to $-30V$		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O/\Delta T$	$I_O = 5mA$		-0.9		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		250		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7918 ELECTRICAL CHARACTERISTICS

($V_I = 27V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	-17.3	-18	-18.7	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$ $V_I = -22.5$ to $-33V$	-17.1	-18	-18.9	
Line Regulation	ΔV_O	$T_J = 25^\circ C$		15	360	mV
		$V_I = -21$ to $-33V$ $V_I = -24$ to $-30V$		8	180	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to $1.5A$		15	360	mV
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		5	180	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$			0.5	mA
		$V_I = -22$ to $-33V$			1	
Temperature Coefficient of V_O	$\Delta V_O/\Delta T$	$I_O = 5mA$		-1		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		300		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7924 ELECTRICAL CHARACTERISTICS

($V_I = 33V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	- 23	- 24	- 25	V
		$I_O = 5mA$ to $1A$, $P_O \leq 15W$ $V_I = -27$ to $-38V$	- 22.8	- 24	- 25.2	
Line Regulation	ΔV_O	$T_J = 25^\circ C$		15	480	mV
		$V_I = -27$ to $-38V$ $V_I = -30$ to $-36V$		8	180	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to $1.5A$		15	480	mV
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		5	240	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$			0.5	mA
		$V_I = -27$ to $-38V$			1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-1		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		400		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

LM7905A ELECTRICAL CHARACTERISTICS

($V_I = 10V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	- 4.9	- 5.0	- 5.1	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$ $V_I = -7$ to $-20V$	- 4.8	-5.0	- 5.2	
Line Regulation	ΔV_O	$T_J = +25^\circ C$ $V_I = -7$ to $-20V$ $I_O = 1A$		5	50	mV
		$V_I = -8$ to $-12V$ $I_O = 1A$		2	25	
		$V_I = -7.5$ to $-25V$		7	50	
		$V_I = -8$ to $-12V$ $I_O = 1A$		7	50	
Load Regulation	ΔV_O	$I_O = 5mA$ to $1.5A$		10	100	mV
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		3	50	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -8$ to $-25V$		0.1	0.8	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		- 0.4		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		40		μV
Ripple Rejection	RR	$f = 120Hz$, $I_O = -35V$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

($V_I = 18V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	-11.75	-12	-12.25	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$ $V_I = -15.5$ to $-27V$	-11.5	-12	-12.5	
Line Regulation	ΔV_O	$T_J = +25^\circ C$		12	240	mV
		$V_I = -14.5$ to $-30V$ $V_I = -16$ to $-22V$		6	120	
Load Regulation	ΔV_O	$T_J = +25^\circ C$ $I_O = 5mA$ to $1.5A$		12	240	mV
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		4	120	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -15$ to $-30V$		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.8		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		200		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

($V_I = 23V$, $I_O = 500mA$, $0^\circ C \leq T_J \leq +125^\circ C$, $C_I = 2.2\mu F$, $C_O = 1\mu F$, unless otherwise specified.)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = +25^\circ C$	-14.7	-15	-15.3	V
		$I_O = 5mA$ to $1A$, $P_O = 15W$	-14.4	-15	-15.6	
		$V_I = -18$ to $-30V$				
Line Regulation	ΔV_O	$T_J = +25^\circ C$		12	300	mV
		$V_I = -17.5$ to $-30V$		6	150	
		$V_I = -20$ to $-26V$				
Load Regulation	ΔV_O	$T_J = +25^\circ C$		12	300	mV
		$I_O = 5mA$ to $1.5A$				
		$T_J = +25^\circ C$ $I_O = 250$ to $750mA$		4	150	
Quiescent Current	I_Q	$T_J = +25^\circ C$		3	6	mA
Quiescent Current Change	ΔI_Q	$I_O = 5mA$ to $1A$		0.05	0.5	mA
		$V_I = -18.5$ to $-30V$		0.1	1	
Temperature Coefficient of V_O	$\Delta V_O / \Delta T$	$I_O = 5mA$		-0.9		mV/ $^\circ C$
Output Noise Voltage	V_N	$f = 10Hz$ to $100KHz$ $T_A = +25^\circ C$		250		μV
Ripple Rejection	RR	$f = 120Hz$ $\Delta V_I = 10V$	54	60		dB
Dropout Voltage	V_D	$T_J = +25^\circ C$ $I_O = 1A$		2		V
Short Circuit Current	I_{SC}	$T_J = +25^\circ C$, $V_I = -35V$		300		mA
Peak Current	I_{PK}	$T_J = +25^\circ C$		2.2		A

* Load and line regulation are specified at constant junction temperature. Changes in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.

LM79XX/A (KA79XX, MC79XX) FIXED VOLTAGE REGULATOR (NEGATIVE)

Fig.1 Output Voltage

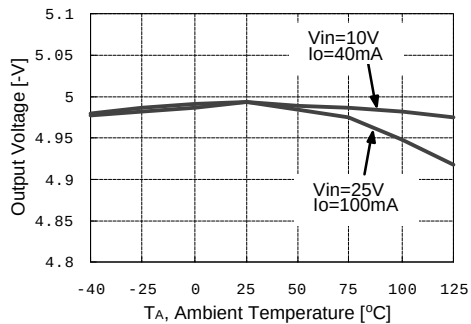


Fig. 2 Load Regulation

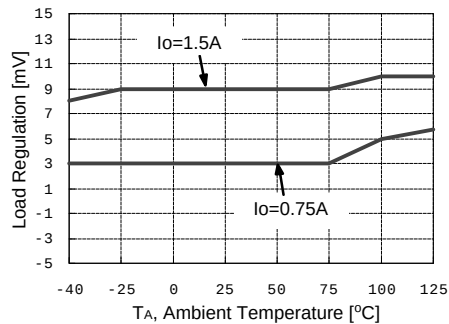


Fig.3 Quiescent Current

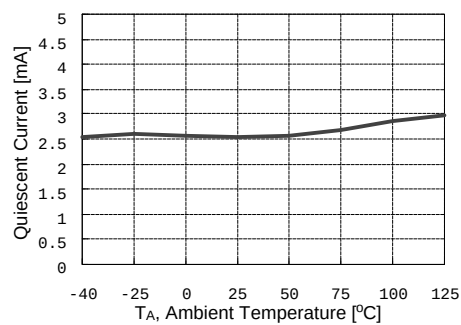


Fig. 4 Dropout Voltage

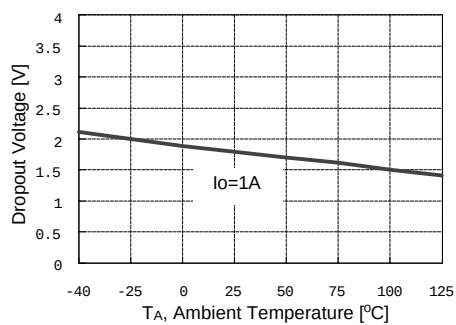
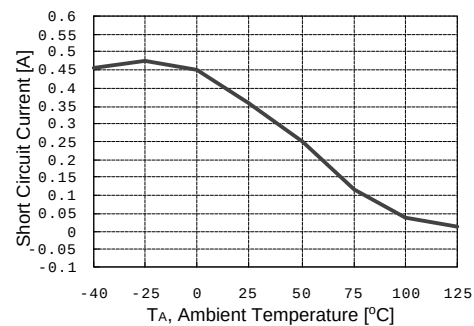


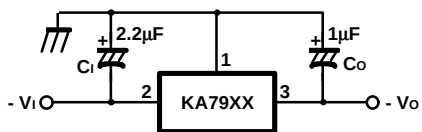
Fig.5 Short Circuit Current



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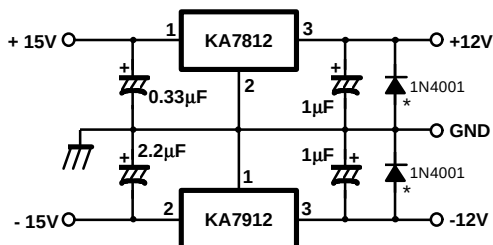
Fig. 6 Negative Fixed output regulator



Notes:

- (1) To specify an output voltage, substitute voltage value for "XX".
- (2) Required for stability. For value given, capacitor must be solid tantalum. If aluminum electrolytics are used, at least ten times value shown should be selected. C_i is required if regulator is located an appreciable distance from power supply filter.
- (3) To improve transient response. If large capacitors are used, a high current diode from input to output (1N4001 or similar) should be introduced to protect the device from momentary input short circuit.

Fig. 7 Split power supply ($\pm 12V/1A$)



*: Against potential latch-up problems.

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