

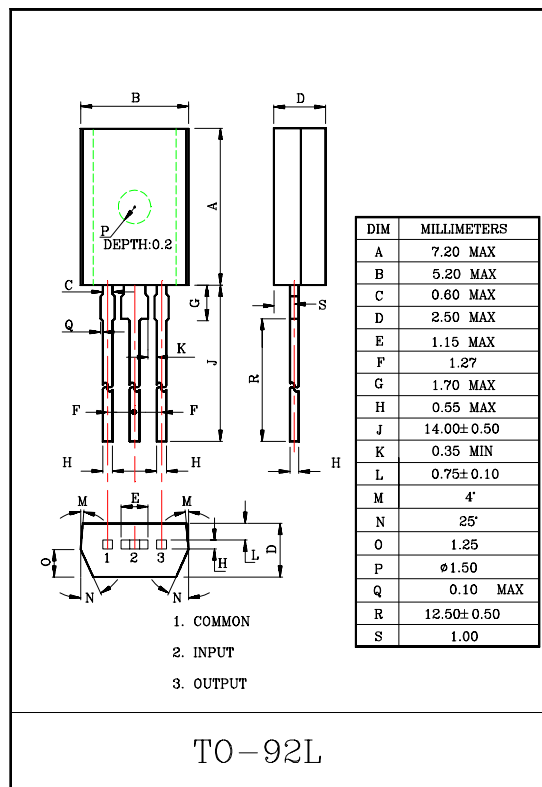
THREE TERMINAL NEGATIVE VOLTAGE REGULATORS
5V, 6V, 8V, 9V, 10V, 12V, 15V, 18V, 20V, 24V

FEATURES

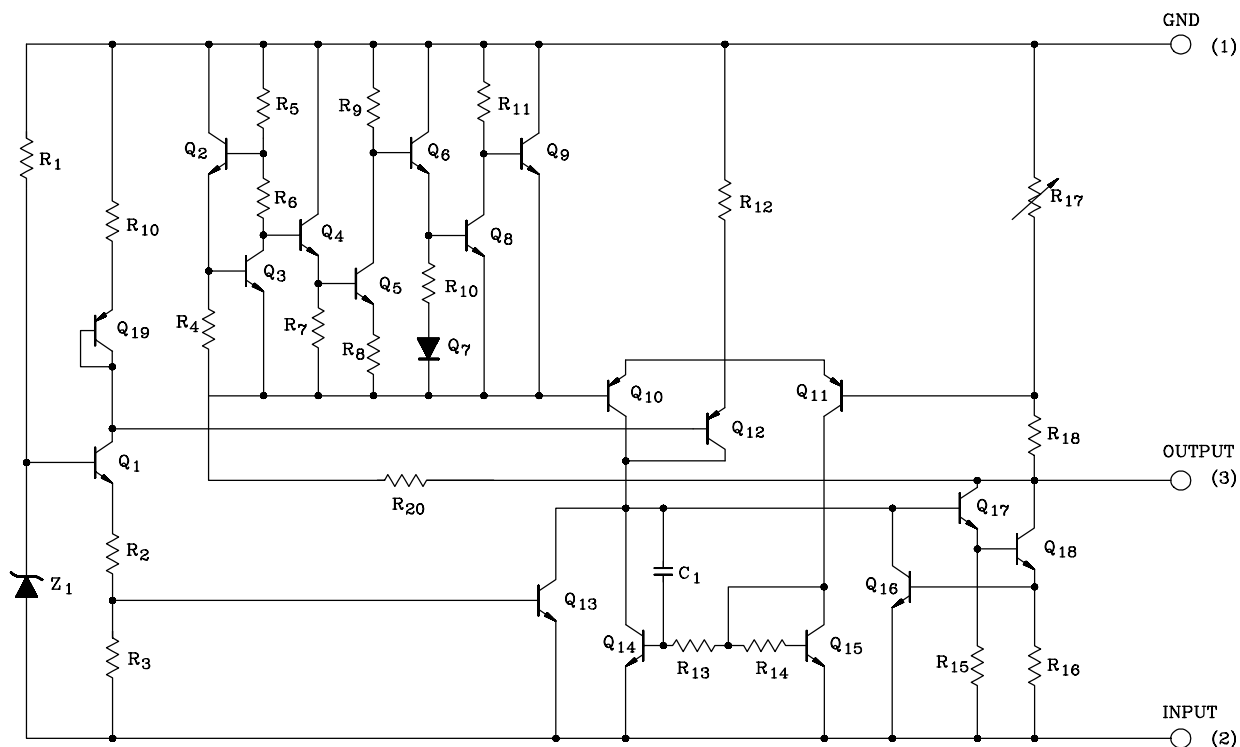
- Best Suited to a Power Supply for TTL and CMOS.
- Built-in Overcurrent Protective Circuit.
- Built-in Thermal Protective Circuit.
- Max. Output Current 150mA ($T_j=25^\circ\text{C}$).
- Packaged in TO-92L.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Input Voltage	V_{IN}	-35	V
		-40	
Power Dissipation ($T_c=25^\circ\text{C}$)	P_D	800	mW
Operating Junction Temperature	T_j	-30~150	$^\circ\text{C}$
Operating Temperature	T_{opr}	-30~75	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~150	$^\circ\text{C}$



EQUIVALENT CIRCUIT



KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L05BP

(Unless otherwise specified, $V_{IN} = -10V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^\circ C \leq T_j \leq 125^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-5.2	-5.0	-4.8	V
Input Regulation	Reg line	1	T _j =25℃	-20V ≤ V _{IN} ≤ -7.0V	-	55	150	mV
				-20V ≤ V _{IN} ≤ -8.0V	-	45	100	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	11	60	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	5.0	30	
Output Voltage	V _{OUT}	1	-20V ≤ V _{IN} ≤ -7.0V 1.0mA ≤ I _{OUT} ≤ 40mA		-5.25	-	-4.75	V
			V _{IN} =-10V, 1.0mA ≤ I _{OUT} ≤ 70mA		-5.25	-	-4.75	
Quiescent Current	I _B	1	T _j =25℃		-	3.1	6.0	mA
			T _j =125℃		-	-	5.5	
Quiescent Current Change	ΔI _{BI}	1	-20V ≤ V _{IN} ≤ -8.0V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	40	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	12	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-18V ≤ V _{IN} ≤ -8.0V, T _j =25℃, f=120Hz		41	49	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-0.6	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L06BP

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

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-6.24	-6.0	-5.76	V
Input Regulation	Reg line	1	T _j =25℃	-21V≤V _{IN} ≤-8.1V	-	50	150	mV
				-21V≤V _{IN} ≤-9.0V	-	45	110	
Load Regulation	Reg load	1	T _j =25℃	1.0mA≤I _{OUT} ≤100mA	-	12	70	mV
				1.0mA≤I _{OUT} ≤40mA	-	5.5	35	
Output Voltage	V _{OUT}	1	-21V≤V _{IN} ≤-8.1V 1.0mA≤I _{OUT} ≤40mA		-6.3	-	-5.7	V
			V _{IN} =-11V, 1.0mA≤I _{OUT} ≤70mA		-6.3	-	-5.7	
Quiescent Current	I _B	1	T _j =25℃		-	3.1	6.0	mA
			T _j =125℃		-	-	5.5	
Quiescent Current Change	ΔI _{BI}	1	-20V≤V _{IN} ≤-9.0V		-	-	1.5	mA
	ΔI _{BO}		1.0mA≤I _{OUT} ≤40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz≤f≤100kHz		-	40	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	14	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-19V≤V _{IN} ≤-9.0V, T _j =25℃, f=120Hz		39	47	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-0.7	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L08BP

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

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _J =25℃		-8.3	-8.0	-7.7	V
Input Regulation	Reg line	1	T _J =25℃	-23V ≤ V _{IN} ≤ -10.5V	-	20	175	mV
				-23V ≤ V _{IN} ≤ -11V	-	12	125	
Load Regulation	Reg load	1	T _J =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	15	80	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	7.0	40	
Output Voltage	V _{OUT}	1	-23V ≤ V _{IN} ≤ -10.5V 1.0mA ≤ I _{OUT} ≤ 40mA		-8.4	-	-7.6	V
			V _{IN} =-14V, 1.0mA ≤ I _{OUT} ≤ 70mA		-8.4	-	-7.6	
Quiescent Current	I _B	1	T _J =25℃		-	3.1	6.5	mA
			T _J =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-23V ≤ V _{IN} ≤ -11V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	60	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	20	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-23V ≤ V _{IN} ≤ -12V, T _J =25℃, f=120Hz		37	45	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _J =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-0.8	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L09BP

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

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-9.36	-9.0	-8.64	V
Input Regulation	Reg line	1	T _j =25℃	-24V ≤ V _{IN} ≤ -11.4V	-	80	200	mV
				-24V ≤ V _{IN} ≤ -12V	-	20	160	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	17	90	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	8.0	45	
Output Voltage	V _{OUT}	1	-24V ≤ V _{IN} ≤ -11.4V 1.0mA ≤ I _{OUT} ≤ 40mA		-9.45	-	-8.55	V
			V _{IN} =-15V, 1.0mA ≤ I _{OUT} ≤ 70mA		-9.45	-	-8.55	
Quiescent Current	I _B	1	T _j =25℃		-	3.2	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-24V ≤ V _{IN} ≤ -12V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	65	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	21	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-24V ≤ V _{IN} ≤ -12V, T _j =25℃, f=120Hz		36	44	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-0.85	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L10BP

(Unless otherwise specified, $V_{IN} = -16V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-10.4	-10.0	-9.6	V
Input Regulation	Reg line	1	T _j =25℃	-25V≤V _{IN} ≤-12.5V	-	80	230	mV
				-25V≤V _{IN} ≤-13V	-	30	170	
Load Regulation	Reg load	1	T _j =25℃	1.0mA≤I _{OUT} ≤100mA	-	18	90	mV
				1.0mA≤I _{OUT} ≤40mA	-	8.5	45	
Output Voltage	V _{OUT}	1	-25V≤V _{IN} ≤-12.5V 1.0mA≤I _{OUT} ≤40mA		-10.5	-	-9.5	V
			V _{IN} =-16V, 1.0mA≤I _{OUT} ≤70mA		-10.5	-	-9.5	
Quiescent Current	I _B	1	T _j =25℃		-	3.2	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-25V≤V _{IN} ≤-13V		-	-	1.5	mA
	ΔI _{BO}		1.0mA≤I _{OUT} ≤40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz≤f≤100kHz		-	70	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	22	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-24V≤V _{IN} ≤-13V, T _j =25℃, f=120Hz		36	43	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-0.9	-	mV/℃

KIA79L05BP~KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L12BP

(Unless otherwise specified, $V_{IN}=-19V$, $I_{OUT}=40mA$, $C_{IN}=0.33\mu F$, $C_{OUT}=0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-12.5	-12.0	-11.5	V
Input Regulation	Reg line	1	T _j =25℃	-27V ≤ V _{IN} ≤ -14.5V	-	120	250	mV
				-27V ≤ V _{IN} ≤ -16V	-	100	200	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	20	100	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	10	50	
Output Voltage	V _{OUT}	1	-27V ≤ V _{IN} ≤ -14.5V 1.0mA ≤ I _{OUT} ≤ 40mA		-12.6	-	-11.4	V
			V _{IN} =-19V, 1.0mA ≤ I _{OUT} ≤ 70mA		-12.6	-	-11.4	
Quiescent Current	I _B	1	T _j =25℃		-	3.2	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-27V ≤ V _{IN} ≤ -16V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	80	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	24	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-25V ≤ V _{IN} ≤ -15V, T _j =25℃, f=120Hz		37	42	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-1.0	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L15BP

(Unless otherwise specified, $V_{IN} = -23V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-15.6	-15.0	-14.4	V
Input Regulation	Reg line	1	T _j =25℃	-30V ≤ V _{IN} ≤ -17.5V	-	130	300	mV
				-30V ≤ V _{IN} ≤ -20V	-	110	250	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	25	150	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	12	75	
Output Voltage	V _{OUT}	1	-30V ≤ V _{IN} ≤ -17.5V 1.0mA ≤ I _{OUT} ≤ 40mA		-15.75	-	-14.25	V
			V _{IN} =-23V, 1.0mA ≤ I _{OUT} ≤ 70mA		-15.75	-	-14.25	
Quiescent Current	I _B	1	T _j =25℃		-	3.3	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-30V ≤ V _{IN} ≤ -20V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	90	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	30	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-28.5V ≤ V _{IN} ≤ -18.5V, T _j =25℃, f=120Hz		34	39	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-1.3	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L18BP

(Unless otherwise specified, $V_{IN} = -27V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-18.7	-18.0	-17.3	V
Input Regulation	Reg line	1	T _j =25℃	-33V ≤ V _{IN} ≤ -20.7V	-	32	325	mV
				-33V ≤ V _{IN} ≤ -21V	-	27	275	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	30	170	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	15	75	
Output Voltage	V _{OUT}	1	-33V ≤ V _{IN} ≤ -20.9V 1.0mA ≤ I _{OUT} ≤ 40mA		-18.9	-	-17.1	V
			V _{IN} =-27V, 1.0mA ≤ I _{OUT} ≤ 70mA		-18.9	-	-17.1	
Quiescent Current	I _B	1	T _j =25℃		-	3.3	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-33V ≤ V _{IN} ≤ -21V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	150	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	45	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-33V ≤ V _{IN} ≤ -23V, T _j =25℃, f=120Hz		33	48	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-1.5	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

KIA79L20BP

(Unless otherwise specified, $V_{IN} = -29V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-20.8	-20.0	-19.2	V
Input Regulation	Reg line	1	T _j =25℃	-35V ≤ V _{IN} ≤ -23.5V	-	33	330	mV
				-35V ≤ V _{IN} ≤ -24V	-	28	285	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	33	180	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	17	90	
Output Voltage	V _{OUT}	1	-35V ≤ V _{IN} ≤ -23.5V 1.0mA ≤ I _{OUT} ≤ 40mA		-21.0	-	-19.0	V
			V _{IN} =-29V, 1.0mA ≤ I _{OUT} ≤ 70mA		-21.0	-	-19.0	
Quiescent Current	I _B	1	T _j =25℃		-	3.3	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-35V ≤ V _{IN} ≤ -24V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	170	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	49	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-35V ≤ V _{IN} ≤ -27V, T _j =25℃, f=120Hz		31	37	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-1.7	-	mV/℃

KIA79L05BP ~ KIA79L24BP

ELECTRICAL CHARACTERISTICS

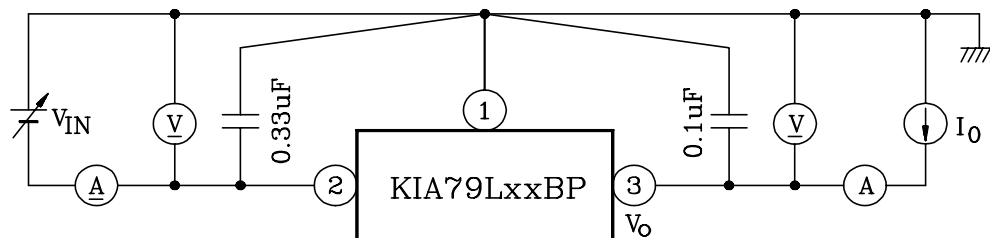
KIA79L24BP

(Unless otherwise specified, $V_{IN} = -33V$, $I_{OUT} = 40mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$)

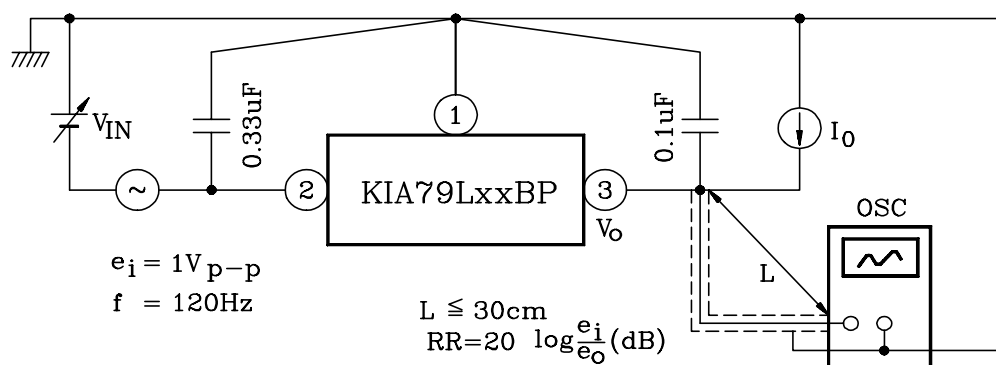
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	1	T _j =25℃		-25.0	-24.0	-23.0	V
Input Regulation	Reg line	1	T _j =25℃	-38V ≤ V _{IN} ≤ -27V	-	35	350	mV
				-38V ≤ V _{IN} ≤ -28V	-	30	300	
Load Regulation	Reg load	1	T _j =25℃	1.0mA ≤ I _{OUT} ≤ 100mA	-	40	200	mV
				1.0mA ≤ I _{OUT} ≤ 40mA	-	20	100	
Output Voltage	V _{OUT}	1	-38V ≤ V _{IN} ≤ -27V 1.0mA ≤ I _{OUT} ≤ 40mA		-25.2	-	-22.8	V
			V _{IN} =-33V, 1.0mA ≤ I _{OUT} ≤ 70mA		-25.2	-	-22.8	
Quiescent Current	I _B	1	T _j =25℃		-	3.5	6.5	mA
			T _j =125℃		-	-	6.0	
Quiescent Current Change	ΔI _{BI}	1	-38V ≤ V _{IN} ≤ -28V		-	-	1.5	mA
	ΔI _{BO}		1.0mA ≤ I _{OUT} ≤ 40mA		-	-	0.1	
Output Noise Voltage	V _{NO}	3	T _a =25℃, 10Hz ≤ f ≤ 100kHz		-	200	-	μV _{rms}
Long Term Stability	ΔV _{OUT} /Δt	1			-	56	-	mV/ 1.0kHrs
Ripple Rejection Ratio	RR	2	-35V ≤ V _{IN} ≤ -29V, T _j =25℃, f=120Hz		31	47	-	dB
Dropout Voltage	V _{IN} - V _{OUT}	1	T _j =25℃, I _{OUT} =40mA		-	1.7	-	V
Average Temperature Coefficient of Output Voltage	TC _{VO}	1	I _{OUT} =5mA		-	-2.0	-	mV/℃

KIA79L05BP ~ KIA79L24BP

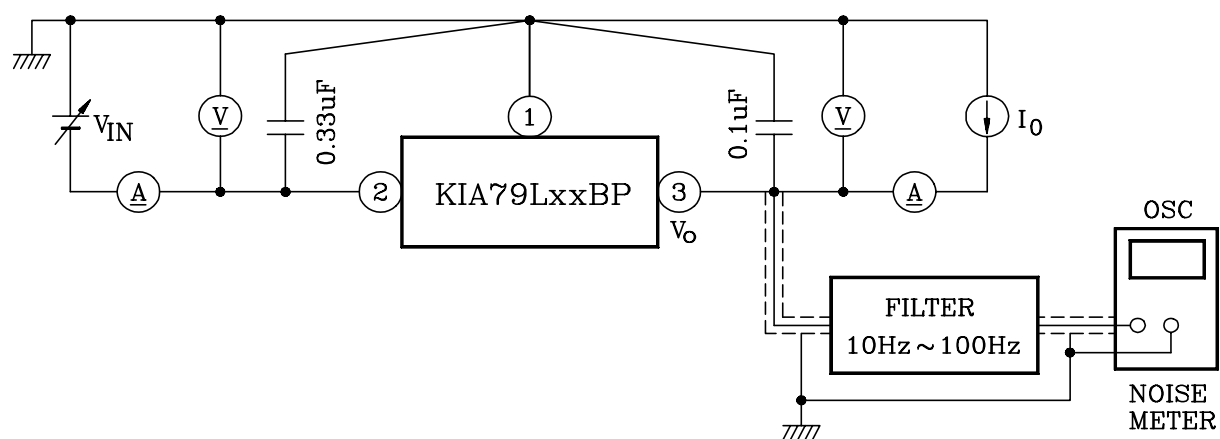
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



KIA79L05BP ~ KIA79L24BP

