

1A THREE TERMINAL NEGATIVE VOLTAGE REGULATORS -5V, -6V, -7V, -8V, -9V, -10V, -12V, -15V, -18V, -20V, -24V.

FEATURES

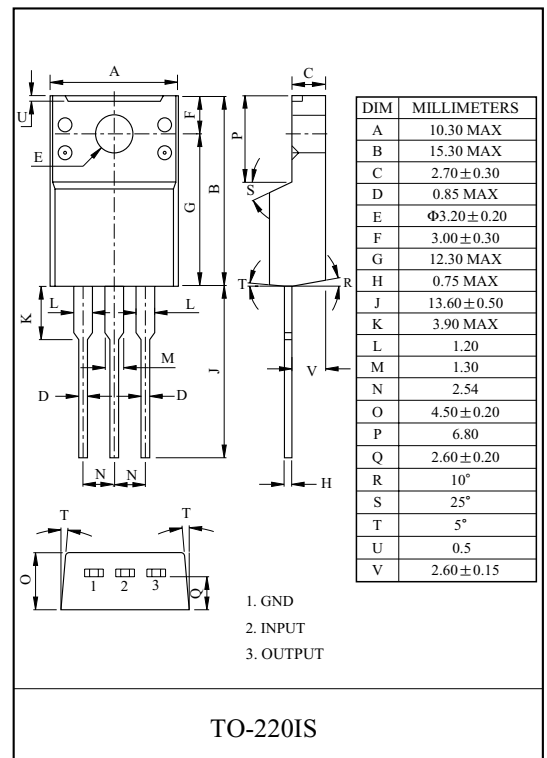
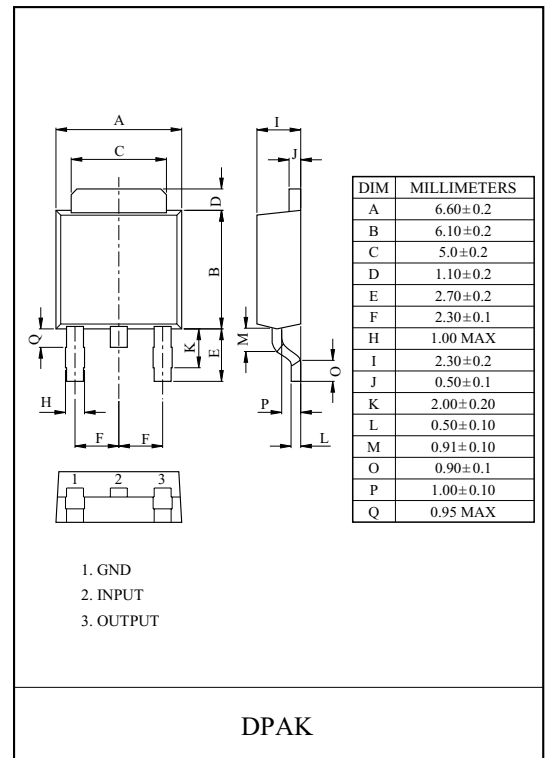
- Suitable for C-MOS, TTL, and the other digital IC power supply.
- Internal thermal overload protecting.
- Internal short circuit current limiting.
- Output current in excess of 1.0A.

LINE-UP

ITEM	OUTPUT VOLTAGE (Typ.)	UNIT
KIA7905F/PI	-5	F : DPAK PI : TO-220IS
KIA7906F/PI	-6	
KIA7907F/PI	-7	
KIA7908F/PI	-8	
KIA7909F/PI	-9	
KIA7910F/PI	-10	
KIA7912F/PI	-12	
KIA7915F/PI	-15	
KIA7918F/PI	-18	
KIA7920F/PI	-20	
KIA7924F/PI	-24	

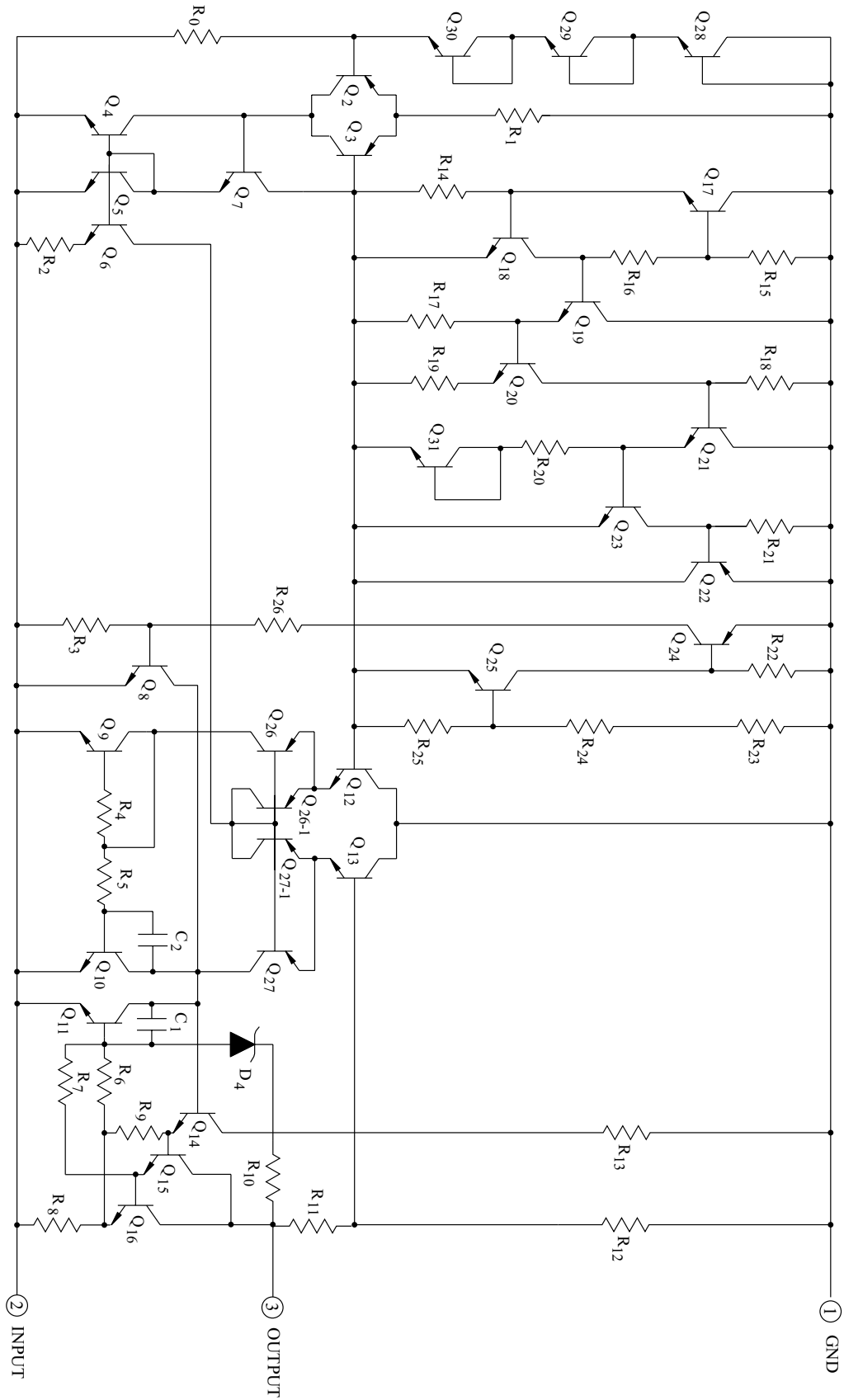
MAXIMUM RATINGS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Input Voltage	KIA7905 ~ KIA7915	V_{IN}	-35	V
	KIA7918 ~ KIA7924		-40	
Power Dissipation-1 (No Heatsink)	F	P_{D1}	1.3	W
	PI		2.0	
Power Dissipation-2 (Infinite Heatsink)	F	P_{D2}	12.0	W
	PI		20.8	
Operating Junction Temperature		T_j	-30 ~ 150	°C
Operating Temperature		T_{opr}	-30 ~ 75	°C
Storage Temperature		T_{stg}	-55 ~ 150	°C



KIA7905F/PI~KIA7924F/PI

EQUIVALENT CIRCUIT



KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7905F/PI

(Unless otherwise specified, $V_{IN}=-10V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V _{OUT}	Fig.1	T _j =25 ℃		-5.2	-5.0	-4.8	V
Input Regulation	Reg line	Fig.1	T _j =25 ℃	-12V ≤ V _{IN} ≤ -8V	-	5	50	mV
				-25V ≤ V _{IN} ≤ -7V	-	10	100	
Load Regulation	Reg load	Fig.1	T _j =25 ℃	5mA ≤ I _{OUT} ≤ 1.5A	-	10	100	mV
				250mA ≤ I _{OUT} ≤ 750mA	-	3	50	
Output Voltage	V _{OUT}	Fig.1	-20V ≤ V _{IN} ≤ -7V 5mA ≤ I _{OUT} ≤ 1.0A		-5.25	-5.0	-4.75	V
Quiescent Current	I _B	Fig.1	T _j =25 ℃		-	3	6	mA
Quiescent Current Change	ΔI _{BI}	Fig.1	-25V ≤ V _{IN} ≤ -8V		-	0.1	1.3	mA
	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	0.05	0.5	
Output Noise Voltage	V _{NO}	Fig.2	Ta=25 ℃, 10Hz ≤ f ≤ 100kHz		-	100	-	μV _{rms}
Ripple Rejection Ratio	RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit	I _{SC}	Fig.1	T _j =25 ℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage	T _{CVO}	Fig.1	I _{OUT} =5.0mA		-	-0.4	-	mV/ ℃
Dropout Voltage	V _D	Fig.1	T _j =25 ℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7906F/PI

(Unless otherwise specified, $V_{IN}=-11V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-6.25	-6.0	-5.75	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-13V ≤ V _{IN} ≤ -9V	-	5	60	mV
					-25V ≤ V _{IN} ≤ -8V	-	10	120	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤ I _{OUT} ≤ 1.5A	-	10	120	mV
					250mA ≤ I _{OUT} ≤ 750mA	-	3	60	
Output Voltage		V _{OUT}	Fig.1	-21V ≤ V _{IN} ≤ -9V 5mA ≤ I _{OUT} ≤ 1.0A		-6.3	-6.0	-5.7	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-25V ≤ V _{IN} ≤ -9V		-	-	1.3	mA
	Load	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	-	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	130	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.5	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7907F/PI

(Unless otherwise specified, $V_{IN}=-12V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-7.28	-7.0	-6.72	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-15V ≤V _{IN} ≤-10V	-	10	70	mV
					-25V ≤V _{IN} ≤-9V	-	45	140	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤I _{OUT} ≤1.5A	-	20	140	mV
					250mA ≤I _{OUT} ≤750mA	-	7	70	
Output Voltage		V _{OUT}	Fig.1	-22V ≤V _{IN} ≤-9V 5mA ≤I _{OUT} ≤1.0A		-7.35	-	-6.65	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	4.3	8.0	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-25V ≤V _{IN} ≤-9V		-	-	1.0	mA
	Load	ΔI _{BO}		5mA ≤I _{OUT} ≤1.0A		-	-	0.5	
Output Noise Voltage		V _{NO}	Fig.2	T _a =25℃, 10Hz ≤f ≤100kHz		-	49	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		60	67	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	0.9	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7908F/PI

(Unless otherwise specified, $V_{IN}=-14V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-8.3	-8.0	-7.7	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-17V ≤ V _{IN} ≤ -11V	-	5	80	mV
					-25V ≤ V _{IN} ≤ -10.5V	-	10	100	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤ I _{OUT} ≤ 1.5A	-	12	160	mV
					250mA ≤ I _{OUT} ≤ 750mA	-	4	80	
Output Voltage		V _{OUT}	Fig.1	-23V ≤ V _{IN} ≤ -11.5V 5mA ≤ I _{OUT} ≤ 1.0A		-8.4	-8.0	-7.6	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-25V ≤ V _{IN} ≤ -11.5V		-	0.1	1.0	mA
	Load	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	0.05	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	175	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.6	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7909F/PI

(Unless otherwise specified, $V_{IN}=-15V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25 ℃		-9.3	-9.0	-8.7	V
Input Regulation		Reg line	Fig.1	T _j =25 ℃	-19V ≤V _{IN} ≤-13V	-	5	90	mV
					-26V ≤V _{IN} ≤-11.5V	-	10	100	
Load Regulation		Reg load	Fig.1	T _j =25 ℃	5mA ≤I _{OUT} ≤1.5A	-	10	150	mV
					250mA ≤I _{OUT} ≤750mA	-	5	120	
Output Voltage		V _{OUT}	Fig.1	-24V ≤V _{IN} ≤-11.5V 5mA ≤I _{OUT} ≤1.0A		-9.4	-9.0	-8.6	V
Quiescent Current		I _B	Fig.1	T _j =25 ℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-26.5V ≤V _{IN} ≤-13V		-	0.1	1.0	mA
	Load	ΔI _{BO}		5mA ≤I _{OUT} ≤1.0A		-	0.05	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25 ℃, 10Hz ≤f ≤100kHz		-	180	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25 ℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.7	-	mV/ ℃
Dropout Voltage		V _D	Fig.1	T _j =25 ℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7910F/PI

(Unless otherwise specified, $V_{IN}=-16V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-10.4	-10	-9.6	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-20V ≤ V _{IN} ≤ -14V	-	5	100	mV
					-27V ≤ V _{IN} ≤ -12.5V	-	10	110	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤ I _{OUT} ≤ 1.5A	-	10	180	mV
					250mA ≤ I _{OUT} ≤ 750mA	-	6	120	
Output Voltage		V _{OUT}	Fig.1	-25V ≤ V _{IN} ≤ -12.5V 5mA ≤ I _{OUT} ≤ 1.0A		-10.5	-10	-9.5	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-27.5V ≤ V _{IN} ≤ -14V		-	0.1	1.0	mA
	Load	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	0.05	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	190	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.7	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7912F/PI

(Unless otherwise specified, $V_{IN}=-18V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25 ℃		-12.5	-12	-11.5	V
Input Regulation		Reg line	Fig.1	T _j =25 ℃	-22V ≤V _{IN} ≤-16V	-	6	120	mV
					-30V ≤V _{IN} ≤-14.5V	-	12	240	
Load Regulation		Reg load	Fig.1	T _j =25 ℃	5mA ≤I _{OUT} ≤1.5A	-	12	240	mV
					250mA ≤I _{OUT} ≤750mA	-	4	120	
Output Voltage		V _{OUT}	Fig.1	-27V ≤V _{IN} ≤-15.5V 5mA ≤I _{OUT} ≤1.0A		-12.6	-12	-11.4	V
Quiescent Current		I _B	Fig.1	T _j =25 ℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-30V ≤V _{IN} ≤-15V		-	0.1	1.0	mA
	Load	ΔI _{BO}		5mA ≤I _{OUT} ≤1.0A		-	0.05	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25 ℃, 10Hz ≤f ≤100kHz		-	200	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25 ℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.8	-	mV/ ℃
Dropout Voltage		V _D	Fig.1	T _j =25 ℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7915F/PI

(Unless otherwise specified, $V_{IN}=-23V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-15.6	-15	-14.4	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-26V ≤ V _{IN} ≤ -20V	-	6	150	mV
					-30V ≤ V _{IN} ≤ -17.5V	-	12	300	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤ I _{OUT} ≤ 1.5A	-	12	300	mV
					250mA ≤ I _{OUT} ≤ 750mA	-	4	150	
Output Voltage		V _{OUT}	Fig.1	-30V ≤ V _{IN} ≤ -18V 5mA ≤ I _{OUT} ≤ 1.0A		-15.75	-15	-14.25	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-30V ≤ V _{IN} ≤ -17.5V		-	0.1	1.0	mA
	Load	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	0.05	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	250	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-0.9	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7918F/PI

(Unless otherwise specified, $V_{IN}=-27V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25 ℃		-18.7	-18	-17.3	V
Input Regulation		Reg line	Fig.1	T _j =25 ℃	-30V ≤V _{IN} ≤-24V	-	8	180	mV
					-33V ≤V _{IN} ≤-21V	-	15	360	
Load Regulation		Reg load	Fig.1	T _j =25 ℃	5mA ≤I _{OUT} ≤1.5A	-	15	360	mV
					250mA ≤I _{OUT} ≤750mA	-	5	180	
Output Voltage		V _{OUT}	Fig.1	-33V ≤V _{IN} ≤-22.5V 5mA ≤I _{OUT} ≤1.0A		-18.85	-18	-17.15	V
Quiescent Current		I _B	Fig.1	T _j =25 ℃		-	3	6	mA
Quiescent Current Change	Line	Δ I _{BI}	Fig.1	-33V ≤V _{IN} ≤-22V		-	-	1.0	mA
	Load	Δ I _{BO}		5mA ≤I _{OUT} ≤1.0A		-	-	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25 ℃, 10Hz ≤f ≤100kHz		-	300	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25 ℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-1.0	-	mV/ ℃
Dropout Voltage		V _D	Fig.1	T _j =25 ℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

KIA7920F/PI

(Unless otherwise specified, $V_{IN}=-30V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=2.2\mu F$, $C_{OUT}=1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-20.8	-20	-19.2	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-32V ≤ V _{IN} ≤ -26V	-	10	180	mV
					-35V ≤ V _{IN} ≤ -24V	-	18	360	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤ I _{OUT} ≤ 1.5A	-	18	360	mV
					250mA ≤ I _{OUT} ≤ 750mA	-	10	180	
Output Voltage		V _{OUT}	Fig.1	-35V ≤ V _{IN} ≤ -24 5mA ≤ I _{OUT} ≤ 1.0A		-21.0	-20	-19.0	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-36.5V ≤ V _{IN} ≤ -25V		-	-	1.0	mA
	Load	ΔI _{BO}		5mA ≤ I _{OUT} ≤ 1.0A		-	-	0.5	
Output Noise Voltage		V _{NO}	Fig.2	Ta=25℃, 10Hz ≤ f ≤ 100kHz		-	350	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-1.0	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _j =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

ELECTRICAL CHARACTERISTICS

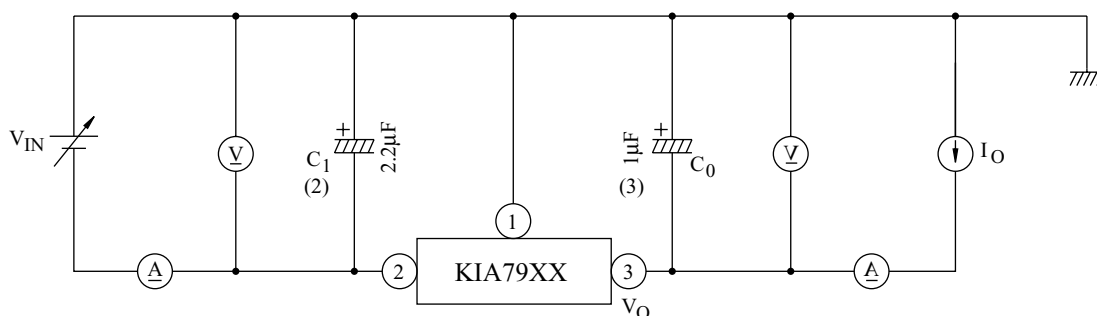
KIA7924F/PI

(Unless otherwise specified, $V_{IN}=-33V$, $I_{OUT}=500mA$, $0^{\circ}C \leq T_j \leq 125^{\circ}C$, $C_{IN}=0.33\mu F$, $C_{OUT}=0.1\mu F$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage		V _{OUT}	Fig.1	T _j =25℃		-25	-24	-23	V
Input Regulation		Reg line	Fig.1	T _j =25℃	-36V ≤V _{IN} ≤-30V	-	8	240	mV
					-38V ≤V _{IN} ≤-27V	-	15	480	
Load Regulation		Reg load	Fig.1	T _j =25℃	5mA ≤I _{OUT} ≤1.5A	-	15	480	mV
					250mA ≤I _{OUT} ≤750mA	-	5	240	
Output Voltage		V _{OUT}	Fig.1	-38V ≤V _{IN} ≤-27V 5mA ≤I _{OUT} ≤1.0A		-25.2	-24	-22.5	V
Quiescent Current		I _B	Fig.1	T _j =25℃		-	3	6	mA
Quiescent Current Change	Line	ΔI _{BI}	Fig.1	-38V ≤V _{IN} ≤-27V		-	-	1.0	mA
	Load	ΔI _{BO}		5mA ≤I _{OUT} ≤1.0A		-	-	0.5	
Output Noise Voltage		V _{NO}	Fig.2	T _a =25℃, 10Hz ≤f ≤100kHz		-	400	-	μV _{rms}
Ripple Rejection Ratio		RR	Fig.3	f=120Hz, I _{OUT} =20mA,		54	60	-	dB
Short Circuit Current Limit		I _{SC}	Fig.1	T _j =25℃		-	1.9	-	A
Average Temperature Coefficient of Output Voltage		T _{CVO}	Fig.1	I _{OUT} =5mA		-	-1.0	-	mV/℃
Dropout Voltage		V _D	Fig.1	T _a =25℃, I _{OUT} =1A		-	2.0	-	V

KIA7905F/PI~KIA7924F/PI

Fig.1 Standard Test Circuit



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_1 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

Fig.2 V_{NO} Test Circuit

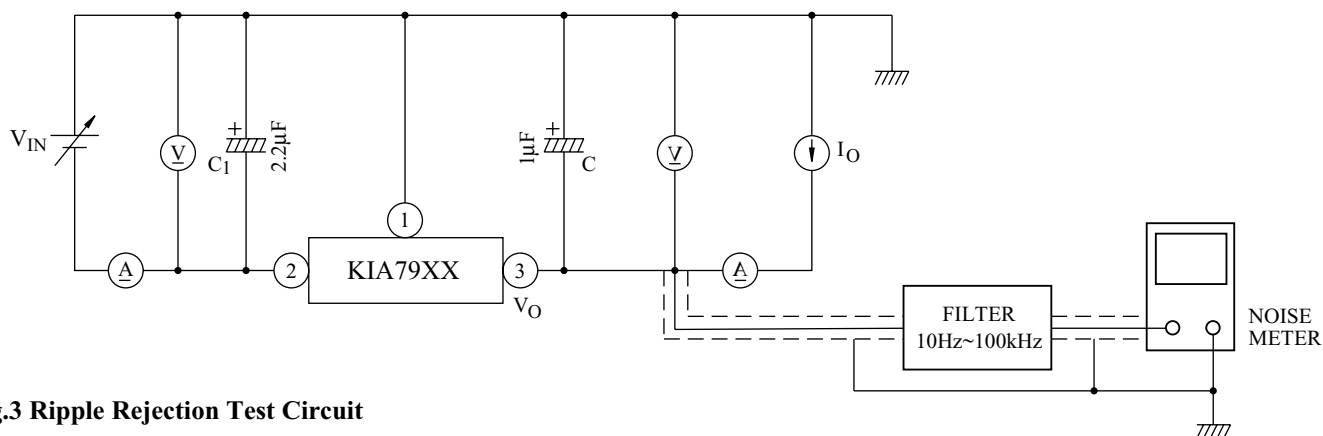
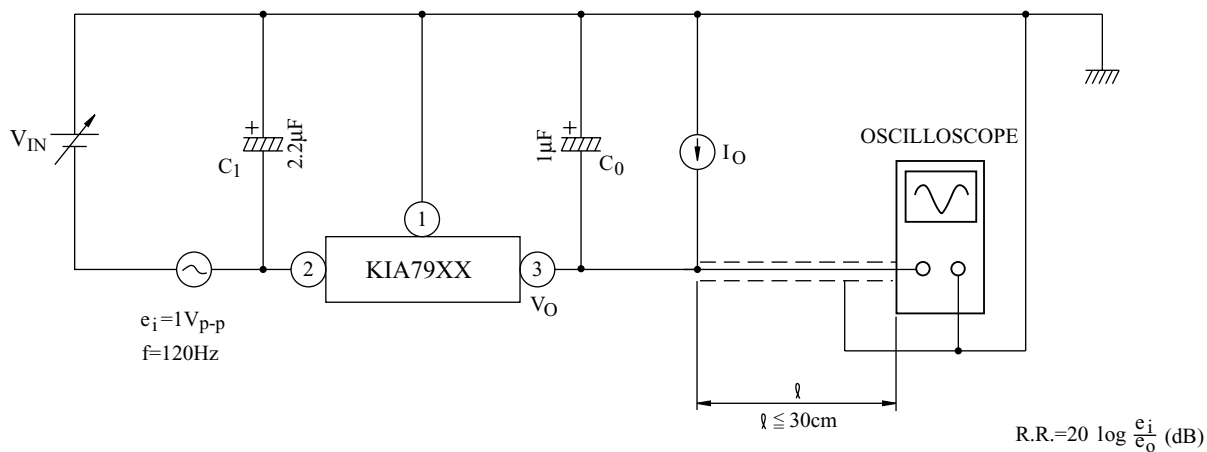


Fig.3 Ripple Rejection Test Circuit



KIA7905F/PI~KIA7924F/PI

Fig. 4

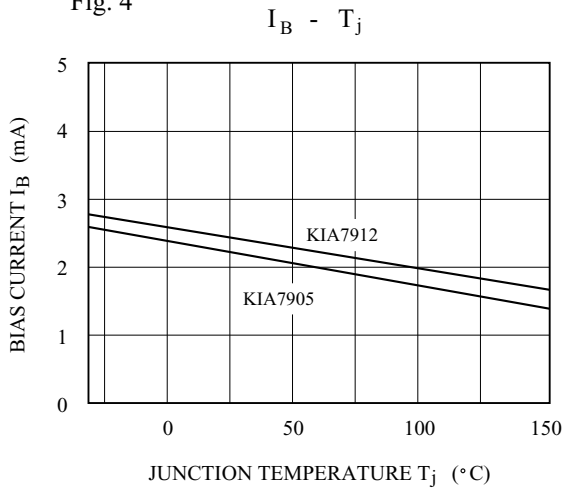


Fig. 5

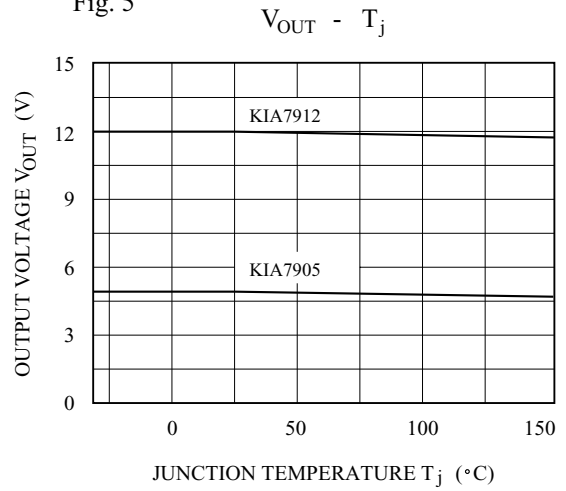


Fig. 6

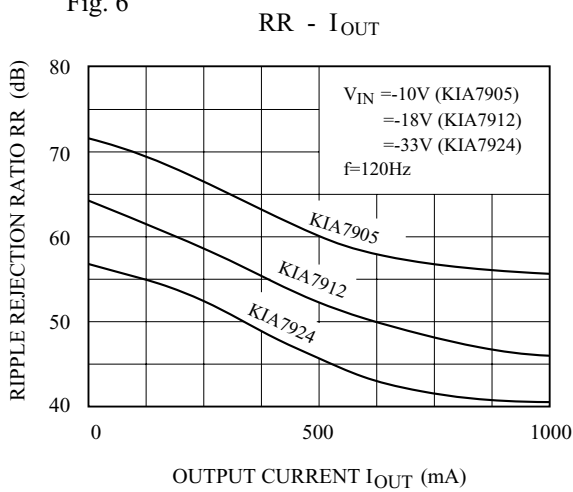


Fig. 7

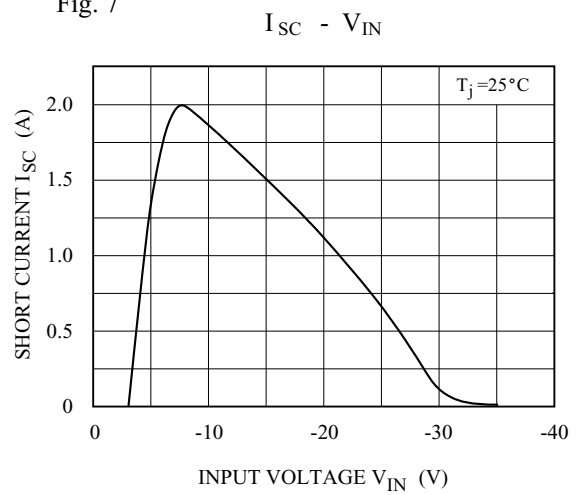


Fig. 8

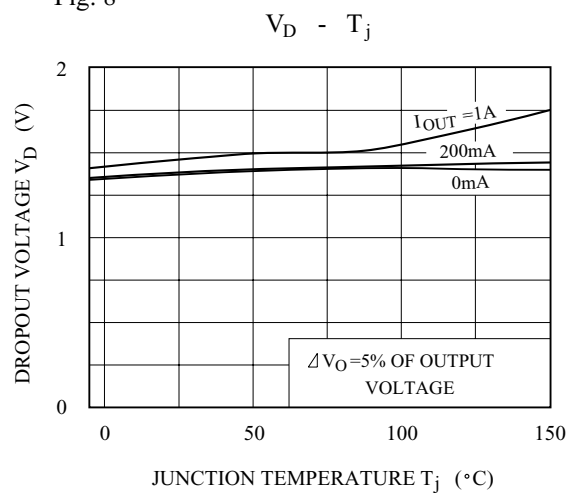
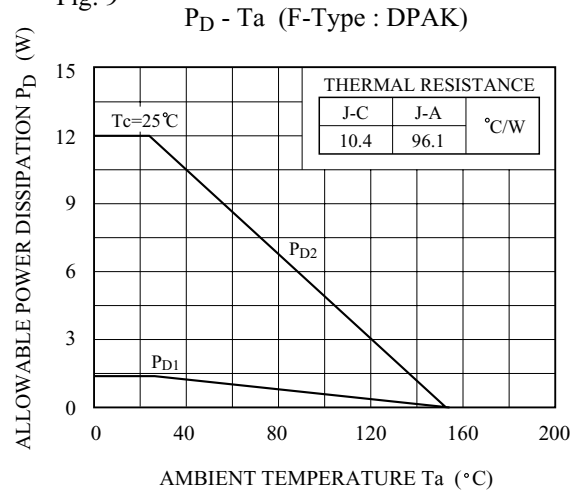


Fig. 9



KIA7905F/PI~KIA7924F/PI

