AN78M00/AN78M00F Series

3-Terminal Positive Output Voltage Regulators (500 mA Type)

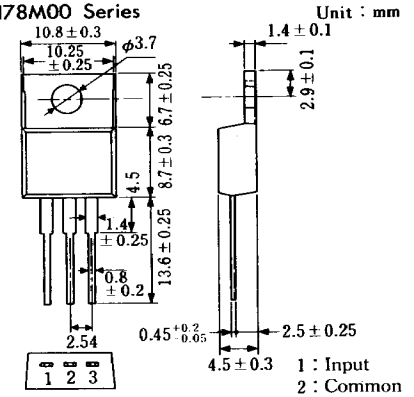
■ Outline

The AN78M00 and the AN78M00F series are 3-terminal fixed positive output voltage regulators. Stabilized fixed output voltage is obtained from unstable DC input voltage without using any external components. 11 types of fixed output voltage are available, 5V, 6V, 7V, 8V, 9V, 10V, 12V, 15V, 18V, 20V and 24V. They can be used widely in power circuits with current capacity up to 500mA.

■ Features

- No external components
- Output current in excess of 500mA
- Output voltage : 5V, 6V, 7V, 8V, 9V, 10V, 12V, 15V, 18V, 20V, 24V
- Short-circuit current limiting built in
- Thermal overload protection built in
- Output transistor safe area compensation

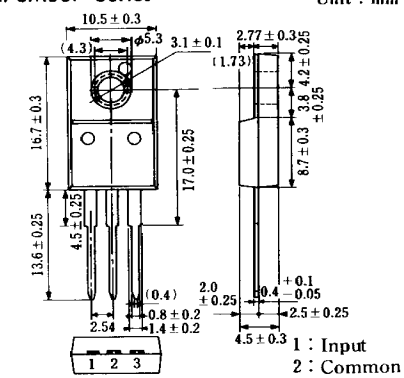
AN78M00 Series Unit : mm



1 : Input
2 : Common
3 : Output

JEDEC : TO-220AB

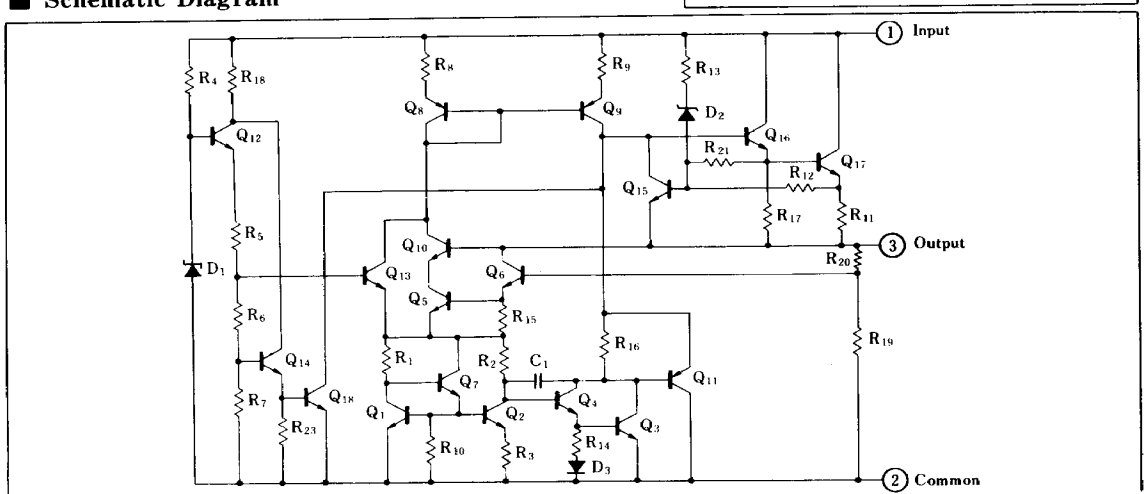
AN78M00F Series Unit : mm



1 : Input
2 : Common
3 : Output

TO-220 Full Pack Package

■ Schematic Diagram



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■ Absolute Maximum Ratings (Ta=25℃)

Item	Symbol	Rating	Unit
Input Voltage	V_I	35*1	V
		40*2	V
Power Dissipation	P_D	15*3	mW
Operating Ambient Temperature	T_{opr}	−20～+80	℃
Storage Temperature	T_{stg}	−55～+150	℃

*1 AN78M05/F, AN78M06/F, AN78M07/F, AN78M08/F, AN78M09/F, AN78M10/F, AN78M12/F, AN78M15/F, AN78M18/F
*2 AN78M20/F, AN78M24/F *3 Follow the derating curve. When T_j exceeds 150℃, the internal circuit cuts off the output.

■ Electrical Characteristics (Ta=25℃)

● AN78M05 (5V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	4.8	5	5.2	V
Output Voltage Tolerance	V_O	1	V_I=7.5～20V, I_O=5～350mA, T_j=0～125℃, P_D≦15W	4.75		5.25	V
Line Regulation	REG_{IN}	1	V_I=7.5～25V, T_j=25℃		3	100	mV
			V_I=8～25V, T_j=25℃		1	50	mV
Load Regulation	REG_L	1	I_O=5～500mA, T_j=25℃		20	100	mV
			I_O=5～200mA, T_j=25℃		10	50	mV
Bias Current	I_{Bias}	2	T_j=25℃		4	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=8～25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	V_O=5～350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz～100kHz		40		μV
Ripple Rejection Ratio	RR	3	V_I=8～18V, I_O=100mA, f=120Hz	62			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0～125℃		−0.5		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2) When not specified, V_I=10V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

● AN78M06 (6V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	5.75	6	6.25	V
Output Voltage Tolerance	V_O	1	V_I=8.5～21V, I_O=5～350mA, T_j=0～125℃, P_D≦15W	5.7		6.3	V
Line Regulation	REG_{IN}	1	V_I=8.5～25V, T_j=25℃		5	100	mV
			V_I=9～25V, T_j=25℃		1.5	50	mV
Load Regulation	REG_L	1	I_O=5～500mA, T_j=25℃		20	120	mV
			I_O=5～200mA, T_j=25℃		10	60	mV
Bias Current	I_{Bias}	2	T_j=25℃		4	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=9～25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5～350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz～100kHz		45		μV
Ripple Rejection Ratio	RR	3	V_I=9～19V, I_O=100mA, f=120Hz	59			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0～125℃		−0.5		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
* Note 2) When not specified, V_I=11V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

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■ Electrical Characteristics (Ta=25℃)

● AN78M07/F (7V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	6.7	7	7.3	V
Output Voltage Tolerance	V_O	1	V_I=9.5~22V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	6.65		7.35	V
Line Regulation	REG_{IN}	1	V_I=9.5~25V, T_j=25℃		6	100	mV
			V_I=10~25V, T_j=25℃		2	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		20	140	mV
			I_O=5~200mA, T_j=25℃		10	70	mV
Bias Current	I_{Bias}	2	T_j=25℃		4	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=10~25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$		I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		48		μV
Ripple Rejection Ratio	RR	3	V_I=10~20V, I_O=100mA, f=120Hz	57			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−0.5		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2) When not specified, V_I=12V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

● AN78M08/F (8V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	7.7	8	8.3	V
Output Voltage Tolerance	V_O	1	V_I=10.5~23V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	7.6		8.4	V
Line Regulation	REG_{IN}	1	V_I=10.5~25V, T_j=25℃		6	100	mV
			V_I=11~25V, T_j=25℃		2	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		25	160	mV
			I_O=5~200mA, T_j=25℃		10	80	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.1	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=10~25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		52		μV
Ripple Rejection Ratio	RR	3	V_I=11.5~21.5V, I_O=100mA, f=120Hz	56			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−0.5		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2) When not specified, V_I=14V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

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■ Electrical Characteristics (Ta=25℃)

● AN78M09/F (9V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	8.65	9	9.35	V
Output Voltage Tolerance	V_O	1	V_I=11.5~24V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	8.55		9.45	V
Line Regulation	REG_{IN}	1	V_I=11.5~25V, T_j=25℃		7	100	mV
			V_I=12~25V, T_j=25℃		2	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		25	180	mV
			I_O=5~200mA, T_j=25℃		10	90	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.1	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=12~25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		60		μV
Ripple Rejection Ratio	RR	3	V_I=12~22V, I_O=100mA, f=120Hz	56			dB
Minimum Input/Output Voltage Difference	$V_{DI(F)min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−0.5		mV/℃

Note 1: The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2: When not specified, V_I=15V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

● AN78M10/F (10V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	9.6	10	10.4	V
Output Voltage Tolerance	V_O	1	V_I=12.5~25V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	9.5		10.5	V
Line Regulation	REG_{IN}	1	V_I=12.5~30V, T_j=25℃		7	100	mV
			V_I=13~25V, T_j=25℃		2	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		25	200	mV
			I_O=5~200mA, T_j=25℃		10	100	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.1	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=13~25V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		65		μV
Ripple Rejection Ratio	RR	3	V_I=13~23V, I_O=100mA, f=120Hz	56			dB
Minimum Input/Output Voltage Difference	$V_{DI(F)min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−0.5		mV/℃

Note 1: The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2: When not specified, V_I=16V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

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■ Electrical Characteristics (Ta=25℃)

● AN78M12/F (12V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	11.5	12	12.5	V
Output Voltage Tolerance	V_O	1	V_I=14.5~27V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	11.4		12.6	V
Line Regulation	REG_{IN}	1	V_I=14.5~30V, T_j=25℃		8	100	mV
			V_I=16~30V, T_j=25℃		2	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		25	240	mV
			I_O=5~200mA, T_j=25℃		10	120	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.3	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=14.5~30V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		75		μV
Ripple Rejection Ratio	RR	3	V_I=15~25V, I_O=100mA, f=120Hz	55			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−0.8		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2) When not specified, V_I=19V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

● AN78M15/F (15V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	14.4	15	15.6	V
Output Voltage Tolerance	V_O	1	V_I=17.5~30V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	14.25		15.75	V
Line Regulation	REG_{IN}	1	V_I=17.5~30V, T_j=25℃		10	100	mV
			V_I=20~30V, T_j=25℃		3	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		25	300	mV
			I_O=5~200mA, T_j=25℃		10	150	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.3	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=17.5~30V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		90		μV
Ripple Rejection Ratio	RR	3	V_I=18.5~28.5V, I_O=100mA, f=120Hz	54			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−1		mV/℃

Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2) When not specified, V_I=23V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

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■ Electrical Characteristics (Ta=25℃)

● AN78M18/F (18V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	17.3	18	18.7	V
Output Voltage Tolerance	V_O	1	V_I=21~33V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	17.1		18.9	V
Line Regulation	REG_{IN}	1	V_I=21~33V, T_j=25℃		10	100	mV
			V_I=22~33V, T_j=25℃		5	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		30	360	mV
			I_O=5~200mA, T_j=25℃		10	180	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.4	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=21~33V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		100		μV
Ripple Rejection Ratio	RR	3	V_I=22~32V, I_O=100mA, f=120Hz	53			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−1.0		mV/℃

Note 1: The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2: When not specified, V_I=27V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

● AN78M20/F (20V Type)

Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	19.2	20	20.8	V
Output Voltage Tolerance	V_O	1	V_I=23~35V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	19		21	V
Line Regulation	REG_{IN}	1	V_I=23~35V, T_j=25℃		10	100	mV
			V_I=24~35V, T_j=25℃		5	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		30	400	mV
			I_O=5~350mA, T_j=25℃		10	200	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.4	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=23~35V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		110		μV
Ripple Rejection Ratio	RR	3	V_I=24~34V, I_O=100mA, f=120Hz	53			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−1.0		mV/℃

Note 1: The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.
Note 2: When not specified, V_I=29V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

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■ Electrical Characteristics (Ta=25℃)

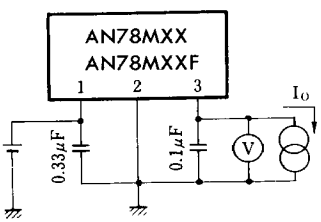
● AN78M24/F (24V Type)

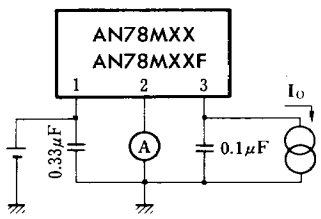
Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit
Output Voltage	V_O	1	T_j=25℃	23	24	25	V
Output Voltage Tolerance	V_O	1	V_I=27~38V, I_O=5~350mA, T_j=0~125℃, P_D≦15W	22.8		25.2	V
Line Regulation	REG_{IN}	1	V_I=27~38V, T_j=25℃		10	100	mV
			V_I=28~38V, T_j=25℃		5	50	mV
Load Regulation	REG_L	1	I_O=5~500mA, T_j=25℃		30	480	mV
			I_O=5~200mA, T_j=25℃		10	240	mV
Bias Current	I_{Bias}	2	T_j=25℃		4.5	6	mA
Input Bias Current Fluctuation	$\Delta I_{Bias(IN)}$	2	V_I=27~38V, T_j=25℃			0.8	mA
Load Bias Current Fluctuation	$\Delta I_{Bias(L)}$	2	I_O=5~350mA, T_j=25℃			0.5	mA
Output Noise Voltage	V_{no}	1	f=10Hz~100kHz		170		μV
Ripple Rejection Ratio	RR	3	V_I=28~38V, I_O=100mA, f=120Hz	50			dB
Minimum Input/Output Voltage Difference	$V_{DIF(min.)}$		I_O=500mA, T_j=25℃		2		V
Output Short Circuit Current	$I_{O(Short)}$	1	V_I=35V, T_j=25℃		300		mA
Peak Output Current	$I_{O(Peak)}$	1	T_j=25℃		700		mA
Output Voltage Temperature Coefficient	$\Delta V_O/T_a$		I_O=5mA, T_j=0~125℃		−1.2		mV/℃

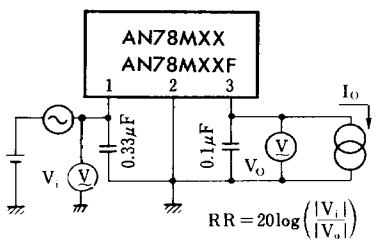
Note 1) The specified condition T_j=25℃ means that the test should be carried out with the test time so short (within 10ms) that the drift in characteristic value due to the rise in chip junction temperature can be ignored.

Note 2) When not specified, V_I=33V, I_O=350mA, C_I=0.33μF and C_O=0.1μF

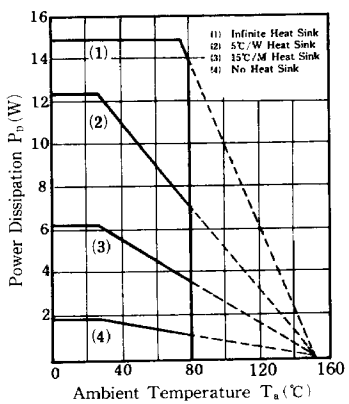
Test Circuit 1 (V_O, REG_{IN}, REG_L / V_{no}, $I_{O(Short)}$, $I_{O(Peak)}$) **Test Circuit 2** (I_{Bias}, $\Delta I_{Bias(IN)}$, $\Delta I_{Bias(L)}$) **Test Circuit 3** (RR)



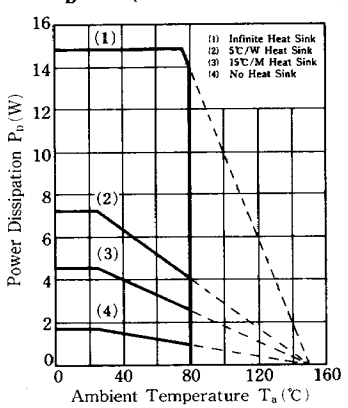




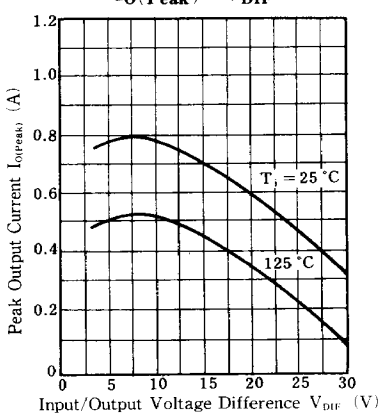
P_D−Ta (AN78M00 Series)



P_D−Ta (AN78M00F Series)



$I_{O(Peak)}$ − V_{DIF}



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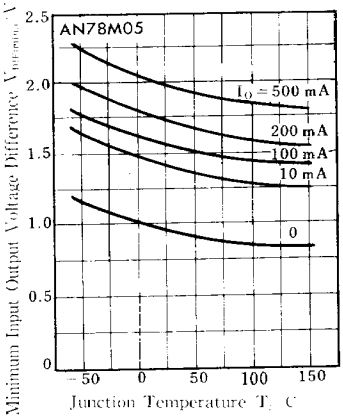
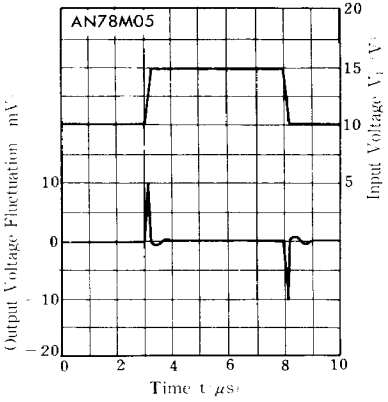
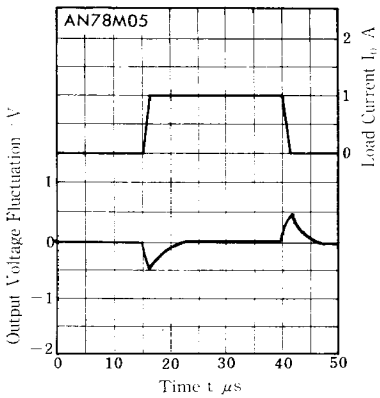
$V_{DIF(min.)} - T_j$



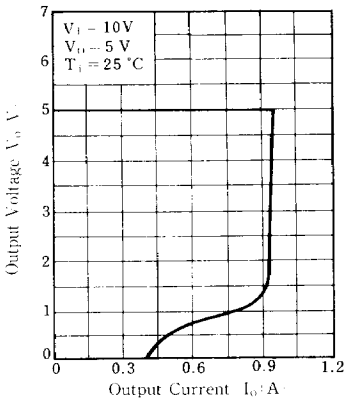
Input Response Characteristic



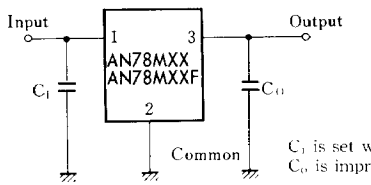
Load Response Characteristic



Current Limiting Characteristic

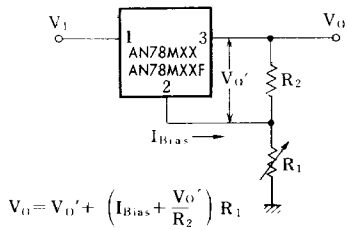


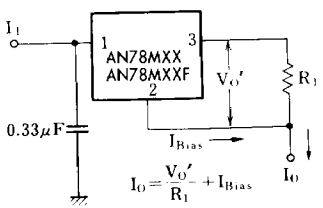
■ Basic Regulator Circuit

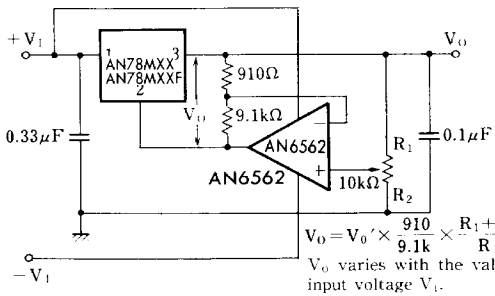


C_I is set when the input line is long.
C_O is improves the transient response.

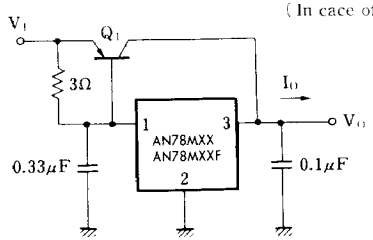
■ Application Circuits







V_O varies with the value of the input voltage V_I.
(In cace of $R_1+R_2=10k\Omega$)



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