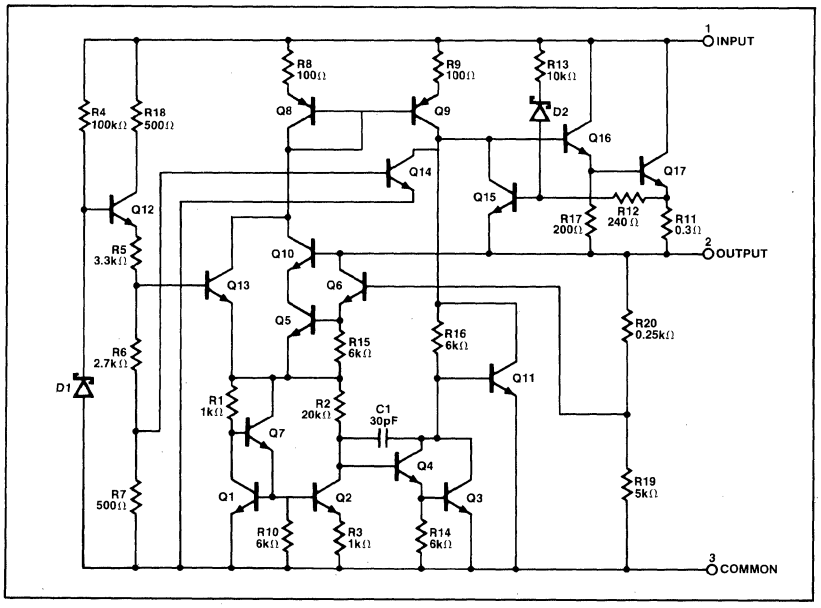
DESCRIPTION

The 78M00 series of monolithic Three Terminal Positive Voltage Regulators employs internal current limiting, thermal shut down, and safe-area compensation making them essentially indestructible. If adequate heat sinking is provided, the device can deliver over 500mA output current. They are intended as fixed voltage regulators, but used with external components, can provide adjustable output voltages and currents.

FEATURES

- **Output current up to 500mA**
- **No external components**
- **Internal thermal overload protection**
- **Internal short circuit current limiting**
- **Output transistor safe-area compensation**
- **Available in the TO-220 and the TO-39 package**
- **Output voltages of 5,6,8,12,15,20, and 24 volts**

SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

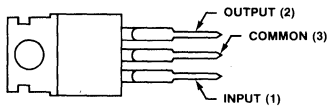
PARAMETER	RATING	UNIT
Input voltage (5V through 15V) (20V, 24V)[1]	35	V
Internal power dissipation	40	V
Storage temperature range	Internally limited	
TO-39	-65 to +150	°C
TO-220	-55 to +125	°C
Operating junction temperature range[2]		
78M00	-55 to +150	°C
SA78M00C	-40 to +125	°C
78M00C	0 to +125	°C
Lead temperature		
TO-39 package (soldering, 60 second time limit)	300	°C
TO-220 package (soldering, 10 second time limit)	230	°C

NOTES

1. Thermal resistance of the packages (without a heat sink)
   Junction to case: TO-220 package 2°C/W TO-39 package 20°C/W.
   Junction to ambient: TO-220 package 50°C/W TO-39 package 170C/W.
2. Operating ambient temperature range
   78M00 -55°C to +125°C
   SA78M00C -40°C to -125°C
   78M00C 0°C to +85°C

PIN CONFIGURATIONS

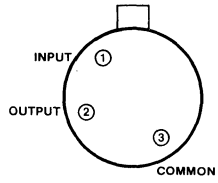
U PACKAGE (TO-220)



ORDER INFORMATION

OUTPUT VOLTAGE	ORDER PART NO.
5V	78M05CU/SA78M05CU
6V	78M06CU/SA78M06CU
8V	78M08CU/SA78M08CU
12V	78M12CU/SA78M12CU
15V	78M15CU/SA78M15CU
20V	78M20CU/SA78M20CU
24V	78M24CU/SA78M24CU

DB PACKAGE (TO-39)



OUTPUT VOLTAGE	ORDER PART NO.
5V	78M05DB
6V	78M06DB
8V	78M08DB
12V	78M12DB
15V	78M15DB
20V	78M20DB
24V	78M24DB
5V	78M05CDB
6V	78M06CDB
8V	78M08CDB
12V	78M12CDB
15V	78M15CDB
20V	78M20CDB
24V	78M24CDB

DC ELECTRICAL CHARACTERISTICS

I_{OUT} = 350mA, C_{IN} = 0.33μF, C_{OUT} = 0.1μF, T_J = 25°C unless otherwise specified.

PARAMETER		TEST CONDITIONS	78M05[1]			78M05C[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 10V			V_{IN} = 10V		
			4.8	5.0	5.2	4.8	5.0	5.2	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		8V ≤ V_{IN} ≤ 20V			7V ≤ V_{IN} ≤ 20V		
			4.7		5.3	4.75		5.25	V
	Line regulation	I_{OUT} = 200mA		7V ≤ V_{IN} ≤ 25V			7V ≤ V_{IN} ≤ 25V		
				3	50		3	100	mV
				8V ≤ V_{IN} ≤ 20V			8V ≤ V_{IN} ≤ 25V		
				1	25		1	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		20	50		20	100	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	25		10	50	mV
I_{CC}				4.5	6.0		4.5	6.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		8V ≤ V_{IN} ≤ 25V			8V ≤ V_{IN} ≤ 25V		
					0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		40			40		μV
	Voltage drift	mV/1000hrs.			20			20	mV
	Ripple rejection	Over temp.[1], f = 120Hz		8V ≤ V_{IN} ≤ 18V					
			68	80		62	80		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		300			300		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA	0°C ≤ T_J ≤ 150°C			0°C ≤ T_J ≤ 125°C			
				-1.0			-1.0		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd)

PARAMETER		TEST CONDITIONS	78M06[1]			78M06C[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 11V			V_{IN} = 11V		
			5.75	6.0	6.25	5.75	6.0	6.25	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		9V ≤ V_{IN} ≤ 21V			8.0V ≤ V_{IN} ≤ 21V		
			5.7		6.3	5.7		6.3	V
	Line regulation	I_{OUT} = 200mA		8V ≤ V_{IN} ≤ 25V			8V ≤ V_{IN} ≤ 25V		
				5	60		5	100	mV
				9V ≤ V_{IN} ≤ 20V			9V ≤ V_{IN} ≤ 25V		
				1.5	30		1.5	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		20	60		20	120	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	30		10	60	mV
I_{CC}				4.5	6.0		4.5	8.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		9V ≤ V_{IN} ≤ 25V			9V ≤ V_{IN} ≤ 25V		
					0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		45			45		μV
	Voltage drift	mV/1000hrs.			24			24	mV
	Ripple rejection	Over temp.[1], f = 120Hz		9V ≤ V_{IN} ≤ 19V			9V ≤ V_{IN} ≤ 19V		
			59	80		59	80		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		270			270		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA	0°C ≤ T_J ≤ 150°C			0°C ≤ T_J ≤ 125°C			
				-0.5			-0.5		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd) I_{OUT} = 350mA, C_{IN} = 0.33μF, C_{OUT} = 0.1μF, T_J = 25°C unless otherwise specified.

PARAMETER		TEST CONDITIONS	78M08[1]			78M08C[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 14V			V_{IN} = 14V		
			7.7	8.0	8.3	7.7	8.0	8.3	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		11.5V ≤ V_{IN} ≤ 23V			10.5V ≤ V_{IN} ≤ 23V		
			7.6		8.4	7.6		8.4	V
	Line regulation	I_{OUT} = 200mA		10.5V ≤ V_{IN} ≤ 25V			10.5V ≤ V_{IN} ≤ 25V		
				6	60		6	100	mV
				11V ≤ V_{IN} ≤ 20V			11V ≤ V_{IN} ≤ 25V		
				2	30		2	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		25	80		25	160	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	40		10	80	mV
I_{CC}				4.6	6.0		4.6	6.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		11.5V ≤ V_{IN} ≤ 25V			10.5V ≤ V_{IN} ≤ 25V		
					0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		52			52		μV
	Voltage drift	mV/1000hrs.			32			32	mV
	Ripple rejection	Over temp.[1], f = 120Hz		11.5V ≤ V_{IN} ≤ 21.5V			11.5V ≤ V_{IN} ≤ 21.5V		
			56	80		56	80		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		250			250		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA		0°C ≤ T_J ≤ 150°C			0°C ≤ T_J ≤ 125°C		
				-0.5			-0.5		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd)

PARAMETER		TEST CONDITIONS	78M12[1]			78M12C[1]			78M15[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 19V			V_{IN} = 19V			V_{IN} = 23V		
			11.5	12.0	12.5	11.5	12.0	12.5	14.4	15.0	15.6	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		15.5V ≤ V_{IN} ≤ 27V		14.5V ≤ V_{IN} ≤ 27V			18.5V ≤ V_{IN} ≤ 30V			
			11.4		12.6	11.4		12.6	14.5		15.75	V
	Line regulation	I_{OUT} = 200mA		14.5V ≤ V_{IN} ≤ 30V		14.5V ≤ V_{IN} ≤ 30V			17.5V ≤ V_{IN} ≤ 30V			
				8	60		8	100		10	60	mV
				16V ≤ V_{IN} ≤ 25V		16V ≤ V_{IN} ≤ 30V			20V ≤ V_{IN} ≤ 30V			
				2	30		2	50		3	30	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		25	120		25	240		25	150	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	60		10	120		10	75	mV
I_{CC}				4.8	6.0		4.8	6.0		4.8	6.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		15V ≤ V_{IN} ≤ 30V			14.5V ≤ V_{IN} ≤ 30V			18.5V ≤ V_{IN} ≤ 30V		
					0.8			0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		75			75			90		μV
	Voltage drift	mV/1000hrs.			48			48			60	mV
	Ripple rejection	Over temp.[1], f = 120Hz		15V ≤ V_{IN} ≤ 25V			15V ≤ V_{IN} ≤ 25V			18.5V ≤ V_{IN} ≤ 28.5V		
			55	80		55	80		54	70		dB
	Dropout voltage			2.0			2.0			2.0		V
I_{SC}		V_{IN} = 35V		240			240			240		mA
	Peak output current			700			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA		0°C ≤ T_J ≤ 150°C			0°C ≤ T_J ≤ 125°C			0°C ≤ T_J ≤ 150°C		
				-1.0			-1.0			-1.0		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd) I_{OUT} = 350mA, C_{IN} = 0.33μF, C_{OUT} = 0.1μF, T_J = 25°C unless otherwise specified.

PARAMETER		TEST CONDITIONS	78M15C[1]			78M20[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 23V			V_{IN} = 29V		
			14.4	15.0	15.6	19.2	20	20.8	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		17.5V ≤ V_{IN} ≤ 30V			24V ≤ V_{IN} ≤ 35V		
			14.25		15.75	19		21	V
	Line regulation	I_{OUT} = 200mA		17.5V ≤ V_{IN} ≤ 30V			23V ≤ V_{IN} ≤ 35V		
				10	100		10	60	mV
				20V ≤ V_{IN} ≤ 30V			24V ≤ V_{IN} ≤ 35V		
				3	50		5	30	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		25	150		30	200	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	75		10	100	mV
I_{CC}				4.8	6.0		4.9	6.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		17.5V ≤ V_{IN} ≤ 30V			24V ≤ V_{IN} ≤ 35V		
					0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		90			110		μV
	Voltage drift	mV/1000hrs.			60			80	mV
	Ripple rejection	Over temp.[1], f = 120Hz		18.5V ≤ V_{IN} ≤ 28.5V			24V ≤ V_{IN} ≤ 34V		
			54	70		53	70		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		240			240		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA		0°C ≤ T_J ≤ 125°C			0°C ≤ T_J ≤ 150°C		
				-1.0			-1.1		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd)

PARAMETER		TEST CONDITIONS	78M20C[1]			78M24[1]			78M24C[1]			UNIT
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 29V			V_{IN} = 33V			V_{IN} = 33V		
			19.2	20	20.8	23.0	24.0	25.0	23.0	24.0	25.0	V
		Over temp.[1], 5mA ≤ I_{OUT} ≤ 350mA		23V ≤ V_{IN} ≤ 35V			28V ≤ V_{IN} ≤ 38V			27V ≤ V_{IN} ≤ 38V		
			19		21	22.8		25.2	22.8		25.2	V
	Line regulation	I_{OUT} = 200mA		23V ≤ V_{IN} ≤ 35V			27V ≤ V_{IN} ≤ 38V			27V ≤ V_{IN} ≤ 38V		
				10	100		10	60		10	100	mV
				24V ≤ V_{IN} ≤ 35V			30V ≤ V_{IN} ≤ 36V			28V ≤ V_{IN} ≤ 38V		
				5	50		5	30		5	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		30	400		30	240		30	480	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	200		10	120		10	240	mV
I_{CC}				4.9	6.0		5	6.0		5	6.0	mA
ΔI_{CC}	With line	Over temp.[1], I_{OUT} = 200mA		23V ≤ V_{IN} ≤ 35V			28V ≤ V_{IN} ≤ 38V			27V ≤ V_{IN} ≤ 38V		
					0.8			0.8			0.8	mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA			0.5			0.5			0.5	mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		110			170			170		μV
	Voltage drift	mV/1000hrs.			80			96			96	mV
	Ripple rejection	Over temp.[1], f = 120Hz		24V ≤ V_{IN} ≤ 34V			28V ≤ V_{IN} ≤ 38V			28V ≤ V_{IN} ≤ 38V		
			53	70		50	70		50	70		dB
	Dropout voltage			2.0			2.0			2.0		V
I_{SC}		V_{IN} = 35V		240			240			240		mA
	Peak output current			700			700			700		mA
V_{OUT}	Output temperature drift	I_{OUT} = 5mA	0°C ≤ T_J ≤ 125°C			0°C ≤ T_J ≤ 150°C			0°C ≤ T_J ≤ 125°C			
				-1.1			-1.2			-1.2		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd) I_{OUT} = 350mA, C_{IN} = 0.33μF, C_{OUT} = 0.1μF, T_J = 25°C unless otherwise specified.

PARAMETER		TEST CONDITIONS	SA78M05C[2]			SA78M06C[2]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 10V			V_{IN} = 11V		
			4.8	5.0	5.2	5.75	6.0	6.25	V
		Over temp.[2], 5mA ≤ I_{OUT} ≤ 350mA		7V ≤ V_{IN} ≤ 25V			8.0V ≤ V_{IN} ≤ 21V		
			4.7		5.3	5.7		6.3	V
	Line regulation	I_{OUT} = 200mA		7V ≤ V_{IN} ≤ 25V			8V ≤ V_{IN} ≤ 25V		
				3	100		5	100	mV
				8V ≤ V_{IN} ≤ 25V			9V ≤ V_{IN} ≤ 25V		
				1	50		1.5	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		20	100		20	120	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	50		10	60	mV
I_{CC}				4.5	6.0		4.5	8.0	mA
ΔI_{CC}	With line	Over temp.[2], I_{OUT} = 200mA		8V ≤ V_{IN} ≤ 25V			9V ≤ V_{IN} ≤ 25V		
				0.6			0.6		mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA		0.3			0.3		mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		40			45		μV
	Voltage drift	mV/1000hrs.			20			24	mV
	Ripple rejection	Over temp.[2], f = 120Hz		8V ≤ V_{IN} ≤ 18V			9V ≤ V_{IN} ≤ 19V		
			62	80		59	80		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		300			270		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	0°C ≤ T_J ≤ +125°C, I_{OUT} = 5mA		-1.0			-0.5		mV/°C

DC ELECTRICAL CHARACTERISTICS (Cont'd)

PARAMETER		TEST CONDITIONS	SA78M08C[2]			SA78M12C[2]			UNIT
			Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 14V			V_{IN} = 19V		
			7.7	8.0	8.3	11.5	12.0	12.5	V
		Over temp.[2], 5mA ≤ I_{OUT} ≤ 350mA		10.5V ≤ V_{IN} ≤ 23V			14.5V ≤ V_{IN} ≤ 27V		
			7.6		8.4	11.4		12.6	V
	Line regulation	I_{OUT} = 200mA		10.5V ≤ V_{IN} ≤ 25V			14.5V ≤ V_{IN} ≤ 30V		
				6	100		8	100	mV
				11V ≤ V_{IN} ≤ 25V			16V ≤ V_{IN} ≤ 30V		
				2	50		2	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		25	160		25	240	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	80		10	120	mV
I_{CC}				4.6	8.0		4.8	8.0	mA
ΔI_{CC}	With line	Over temp.[2], I_{OUT} = 200mA		10.5V ≤ V_{IN} ≤ 25V			14.5V ≤ V_{IN} ≤ 30V		
				0.6			0.6		mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA		0.3			0.3		mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		52			75		μV
	Voltage drift	mV/1000hrs.			32			48	mV
	Ripple rejection	Over temp.[2], f = 120Hz		11.5V ≤ V_{IN} ≤ 21.5V			15V ≤ V_{IN} ≤ 25V		
			56	80		55	80		dB
	Dropout voltage			2.0			2.0		V
I_{SC}		V_{IN} = 35V		250			240		mA
	Peak output current			700			700		mA
V_{OUT}	Output temperature drift	0°C ≤ T_J ≤ +125°C, I_{OUT} = 5mA		-0.5			-1.0		mV/°C

DC ELECTRICAL CHARACTERISTICS

(Cont'd) I_{OUT} = 350mA, C_{IN} = 0.33μF, C_{OUT} = 0.1μF, T_J = 25°C unless otherwise specified.

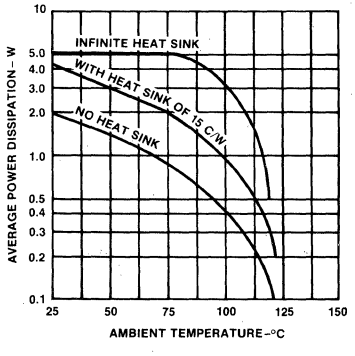
PARAMETER		TEST CONDITIONS	SA78M15C[2]			SA78M20C[2]			SA78M24C[2]			UNIT
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OUT}	Output voltage			V_{IN} = 23V			V_{IN} = 29V			V_{IN} = 33V		
			14.4	15.0	15.6	19.2	20	20.8	23.0	24.0	25.0	V
				17.5V ≤ V_{IN} ≤ 30V			23V ≤ V_{IN} ≤ 35V			27V ≤ V_{IN} ≤ 38V		
		Over temp[2], 5mA ≤ I_{OUT} ≤ 350mA	14.25		15.75	19		21	22.8		25.2	V
	Line regulation	I_{OUT} = 200mA		17.5V ≤ V_{IN} ≤ 30V			23V ≤ V_{IN} ≤ 35V			27V ≤ V_{IN} ≤ 38V		
				10	100		10	100		10	100	mV
				20V ≤ V_{IN} ≤ 30V			24V ≤ V_{IN} ≤ 35V			30V ≤ V_{IN} ≤ 38V		
				3	50		5	50		5	50	mV
	Load regulation	5mA ≤ I_{OUT} ≤ 500mA		25	150		30	400		30	480	mV
		5mA ≤ I_{OUT} ≤ 200mA		10	75		10	200		10	240	mV
I_{CC}				4.8	8.0		4.9	6.5		5	7	mA
ΔI_{CC}	With line	Over temp[2], I_{OUT} = 200mA		17.5V ≤ V_{IN} ≤ 30V			23V ≤ V_{IN} ≤ 35V			27V ≤ V_{IN} ≤ 38V		
				0.6			0.6			0.6		mA
ΔI_{CC}	With load	5mA ≤ I_{OUT} ≤ 350mA		0.3			0.3			0.3		mA
	Output noise voltage	10Hz ≤ f ≤ 100kHz, T_A = 25°C		90			110			170		μV
	Voltage drift	mV/1000hrs.			60			80			96	mV
	Ripple rejection	Over temp[2], f = 120Hz		18.5V ≤ V_{IN} ≤ 28.5V			24V ≤ V_{IN} ≤ 34V			28V ≤ V_{IN} ≤ 38V		
			54	70		53	70		50	70		dB
	Dropout voltage			2.0			2.0			2.0		V
I_{SC}		V_{IN} = 35V		240			240			240		mA
	Peak output current			700			700			700		mA
V_{OUT}	Output temperature drift	0°C ≤ T_J ≤ +125°C, I_{OUT} = 5mA		-1.0			-1.1			-1.2		mV/°C

NOTES

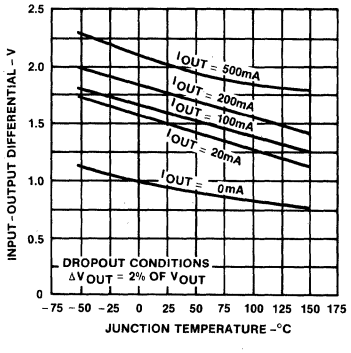
1. -55°C ≤ T_J ≤ +150°C for 78M00
   0°C ≤ T_J ≤ +125°C for 78M00C
2. -40°C ≤ T_J ≤ +125°C for SA78M00C

TYPICAL PERFORMANCE CHARACTERISTICS

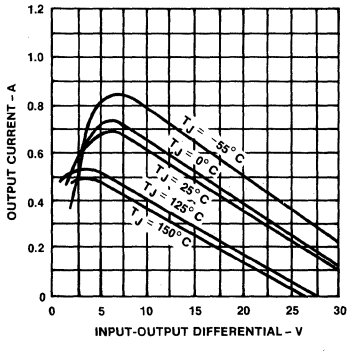
MAXIMUM AVERAGE POWER DISSIPATION AS A FUNCTION OF AMBIENT TEMPERATURE (TO-220, 78M00C, SA78M00C)



DROPOUT VOLTAGE AS A FUNCTION OF JUNCTION TEMPERATURE

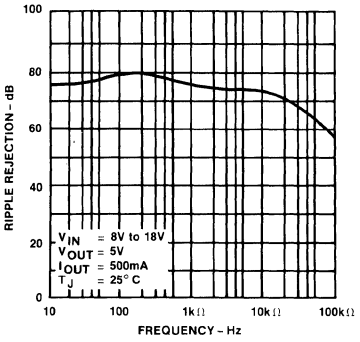


PEAK OUTPUT CURRENT AS A FUNCTION OF INPUT/OUTPUT DIFFERENTIAL VOLTAGE

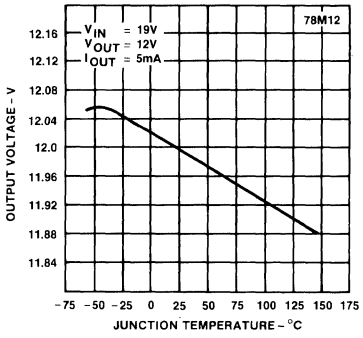


TYPICAL PERFORMANCE CHARACTERISTICS (Cont'd)

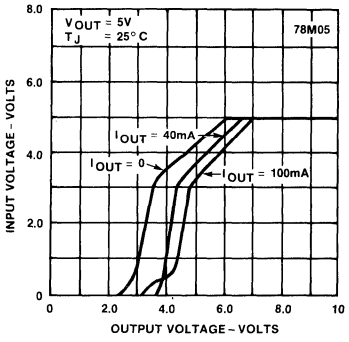
RIPPLE REJECTION AS A FUNCTION OF FREQUENCY



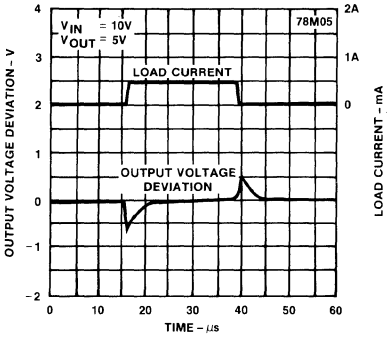
OUTPUT VOLTAGE AS A FUNCTION OF JUNCTION TEMPERATURE



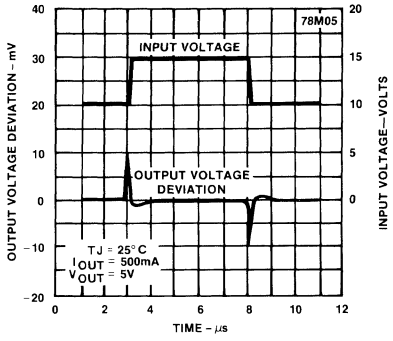
DROPOUT CHARACTERISTICS



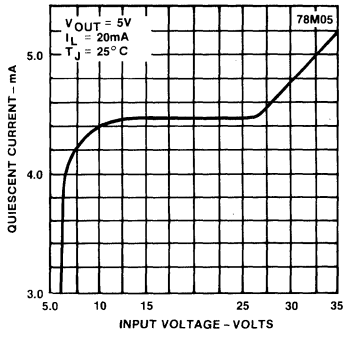
LOAD TRANSIENT RESPONSE



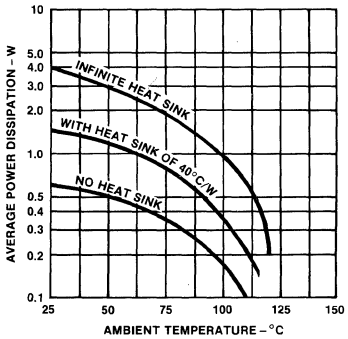
LINE TRANSIENT RESPONSE



QUIESCENT CURRENT AS A FUNCTION OF INPUT VOLTAGE



MAXIMUM AVERAGE POWER DISSIPATION AS A FUNCTION OF AMBIENT TEMPERATURE (TO-39, 78M00C)



MAXIMUM AVERAGE POWER DISSIPATION AS A FUNCTION OF AMBIENT TEMPERATURE (TO-39, 78M00)

