

Power Supply Circuits

Voltage Regulators

Fixed Output Voltage Regulators

- Low-cost monolithic circuits for positive and/or negative regulation at currents from 100 mA to 3.0 A
- Ideal for on-card regulation of subsystems
- Internal current limiting thermal shutdown and safe-area compensation

Fixed/Voltage, 3-Terminal Regulators for Positive or Negative Polarity Power Supplies

V _{out} Volts	Tol.† Volts	I _O mA Max	Device Positive Output	Device Negative Output	V _{in} Min/Max	Regline mV	Regload mV	ΔV _O /ΔT mV/°C Typ	Case
5	± 0.5	100	MC78L05C	MC79L05C	6.7/30	200	60	—	29, 79, 751
	± 0.25		MC78L05AC	MC79L05AC		150			
	± 0.4	500	MC78M05C		7/35	100	100	1.0	79, 221A, 369A
			LM109	—		1.1			
		LM209	—	50	1.0	1, 79			
		LM309	—						
		± 0.25	MC78058#	—	8/35	100	1.0	221A	
		± 0.25	MC7805C	MC7905C	7/35			1, 221A	
		± 0.2	MC7805AC	MC7905AC	7.5/35	10	100	0.6	221A
		± 0.25	LM340-5	—	7.0/35	50	50		221A
		± 0.1	TL780-05C	—	7.0/35	5.0	25	0.06	221A
		± 0.25	3000	MC78T05C	—	7.3/35	25	30	0.1
± 0.2	MC78T05AC	—	7.3/35	10	25		221A		
± 0.25	LM323	—	7.5/20	25	100		221A		
5.2	± 0.26	1500	—	MC7905.2C	7.2/35	105	105	1.0	1, 221A
6	± 0.3	500	MC78M06C		8/35	100	120	1.0	79, 221A
	± 0.3	1500	MC7806C	MC7906C	8/35	120	120		221A
	± 0.24		MC7806AC	—	8.6/35	11	100		221A
	± 0.3	LM340-6	—	8/35	60	60		221A	
		3000	MC78T06C	—	8.3/35	30	30	0.12	221A
8	± 0.8	100	MC78L08C	—	9.7/30	200	80	—	29, 751
			MC78L08AC	—		175			
	± 0.4	500	MC78M08C	—	10/35	100	160	1.0	221A
	± 0.4	1500	MC7808C	MC7908C	10.5/35	160	160		221A
			LM340-8	—	10.5/35	80	80		221A
		3000	MC78T08C	—	10.4/35	35	30	0.16	221A
12	± 1.2	100	MC78L12C	MC79L12C	13.7/35	250	100	—	29, 79, 751
	± 0.6		MC78L12AC	MC79L12AC					
	± 0.6	500	MC78M12C	—	14/35	100	240	1.0	79, 221A, 369A
		1500	MC7812B#	—	15.5/35	240	240	1.5	221A
	MC7812C		MC7912C	14.5/35				221A	
	± 0.5	MC7812AC	MC7912AC	14.8/35	18	100		221A	
	± 0.6	LM140-12*	—	14.5/35	120	120	1.5	1	
	± 0.6	LM340-12	—		120	120		221A	
	± 0.24	TL780-12C	—		5.0		0.15	221A	
	± 0.6	3000	MC78T12C	—	14.5/35	45	30	0.24	1, 221A
	± 0.5	MC78T12AC	—		18	25		221A	

#T_J = -40 to +125°C
*T_J = -55 to +150°C

†Output Voltage Tolerance for Worst Case