

Voltage Regulators (Continued)

Linear Voltage Regulators (Continued)

Fixed Output (Continued)

Mfr.'s Type								V _{out} (V)	Tot.* (V)	I _o (mA) Max.	V _{in} (V) Min./Max.	Reg _{line} (mV)	Reg _{load} (mV)	ΔV _o /ΔT (mV/°C) Typ.
Positive Regulator				Negative Regulator										
Case 29/T0-92	Case 221A	Case 369A	Case 751/SO-8	Case 29/T0-92	Case 221A	Case 369A	Case 751/SO-8							
—	LM340AT-5.0	—	—	—	—	—	—	5.0	±0.20	1500	7.0/35	10	25	0.60
—	MC78T05CT	—	—	—	—	—	—	5.0	±0.25	3000	7.3/35	25	30	0.10
—	MC78T05ACT	—	—	—	—	—	—	5.0	±0.20	3000	7.3/35	10	25	0.10
—	LM323AT	—	—	—	—	—	—	5.0	±0.20	3000	7.5/20	15	50	0.10
—	MC7806CT	—	—	—	MC7906CT	—	—	6.0	±0.30	1500	8.0/35	120	120	0.70
MC78L08ACP	—	—	—	—	—	—	—	8.0	±0.80	100	9.7/30	175	80	—
—	MC78M08CT	MC78M08CDT	—	—	—	—	—	8.0	±0.40	500	10.0/35	100	160	1.00
—	MC7808CT	—	—	—	MC7908CT	—	—	8.0	±0.40	1500	10.5/35	160	160	1.00
—	MC78T08CT	—	—	—	—	—	—	8.0	±0.40	3000	10.4/35	35	30	0.16
MC78L12ACP	—	—	MC78L12ACD	MC79L12ACP	—	—	—	12.0	±0.60	100	13.7/35	250	100	—
—	MC78M12CT	MC78M12CDT	—	—	—	—	—	12.0	±0.60	500	14.0/35	100	240	1.00
—	MC7812CT	—	—	—	MC7912CT	—	—	12.0	±0.60	1500	14.5/35	240	240	1.50
—	MC7812ACT	—	—	—	—	—	—	12.0	±0.50	1500	14.8/35	18	100	1.50
—	LM340T-12	—	—	—	—	—	—	12.0	±0.60	1500	14.5/35	120	120	1.50
—	LM340AT-12	—	—	—	—	—	—	12.0	±0.50	1500	14.5/35	18	32	1.50
—	MC78T12CT	—	—	—	—	—	—	12.0	±0.60	3000	14.5/35	45	30	0.20
—	MC78T12ACT	—	—	—	—	—	—	12.0	±0.50	3000	14.5/35	18	25	0.20
MC78L15ACP	—	—	—	MC79L15ACP	—	—	—	15.0	±0.75	100	16.7/35	300	150	—
—	MC78M15CT	—	—	—	—	—	—	15.0	±0.75	500	17.0/35	100	300	1.00
—	MC7815BT	—	—	—	—	—	—	15.0	±0.75	1500	18.5/35	300	300	1.80
—	MC7815CT	—	—	—	MC7915CT	—	—	15.0	±0.75	1500	17.5/35	300	300	1.80
—	MC7815ACT	—	—	—	MC7915ACT	—	—	15.0	±0.60	1500	17.9/35	22	100	1.80
—	LM340T-15	—	—	—	—	—	—	15.0	±0.75	1500	17.5/35	150	150	1.80
—	LM340AT-15	—	—	—	—	—	—	15.0	±0.60	1500	17.5/35	22	35	1.80
—	MC78T15CT	—	—	—	—	—	—	15.0	±0.75	3000	17.5/40	55	30	0.30
—	MC78T18CT	—	—	—	MC7918CT	—	—	18.0	±0.70	1500	21.0/35	360	360	2.30
—	MC78M20CT	—	—	—	—	—	—	20.0	±1.00	500	22.0/40	10	400	1.10
MC78L24ACP	—	—	—	—	—	—	—	24.0	±1.20	100	25.7/40	300	200	—
—	MC78M24CT	—	—	—	—	—	—	24.0	±1.20	500	26.0/40	100	480	1.20
—	MC7824BT	—	—	—	—	—	—	24.0	±1.20	1500	28.0/40	480	480	3.00
—	MC7824CT	—	—	—	MC7924CT	—	—	24.0	±1.20	1500	27.0/40	480	480	3.00

Adjustable Positive Output Regulators

Mfr.'s Type	I _o (mA) Max.	V _{out} (V)		V _{in} (V)		V _{in} - V _{out} Differential (V) Min.	P _D (W) Max.		Regulation % V _{out} @ T _A =25°C Max.		T _C V _{out} Typ. (°/°C)	T _J (°C) Max.	Package Type
		Max.	Min.	Min.	Min.		T _A =25°C	T _C =25°C	Line	Load			
LM317LZ	100	1.2	37	5.00	40	3.0	Internally Limited		0.04	0.5	0.0060	125	Case 29 Case 314D
LM2931CT	100	3.0	24	3.16	40	0.6	Internally Limited		0.15	1.0	—	125	
LM317MT	500	1.2	37	5.00	40	3.0	1.50	—	0.10	0.3	0.0020	175	Case 221A
LM317T	1500	1.2	37	5.00	40	3.0	Internally Limited		0.04	0.5	0.0060	125	Case 221A Case 221A
LM350T	3000	1.2	33	5.00	36	3.0	Internally Limited		0.03	0.5	0.0080	125	

Adjustable Negative Output Regulators

LM337T	1500	−1.2	−37	5.00	4	3.0	Internally Limited		0.04	1.0	0.0048	125	Case 221A
--------	------	------	-----	------	---	-----	--------------------	--	------	-----	--------	-----	-----------

Switching Regulator Control Circuits

Single Ended Controllers

Mfr.'s Type		I _o (mA) Max.	Minimum Operating Voltage Range (V)	Operating Mode	Reference (V)	Maximum Useful Oscillator Frequency (kHz)	T _A (°C)	No. of Leads
PDIP	SOIC							
UC3842AN	—	1000 [†]	11.5 to 30	Current	5.00 ±2.0%	500 [‡]	0 to +70	8
UC3843AN	—	1000 [†]	8.2 to 30	Current	5.00 ±2.0%	500 [‡]	0 to +70	8
UC3844N	—	1000 [†]	11.5 to 30	Current	5.00 ±2.0%	500 [‡]	0 to +70	8
UC3845N	—	1000 [†]	8.2 to 30	Current	5.00 ±2.0%	500 [‡]	0 to +70	8
UC2845N	—	1000 [†]	8.2 to 30	Current	5.00 ±1.0%	500 [‡]	−25 to +85	8
UC3842AN	—	1000 [†]	11.5 to 30	Current	5.00 ±2.0%	500 [‡]	0 to +70	8

Single Ended Controllers with On-Chip Power Switch

MC34063AP1	MC34063AD	1500 [†]	2.5 to 40	Voltage	1.25 ±2.0%	100	0 to +70	8
MC33063AP1	—	1500 [†]	2.5 to 40	Voltage	1.25 ±2.0%	100	−40 to +85	8
MC34166T [‡]	—	3400 [†]	7.5 to 40	Voltage	5.05 ±2.0%	72 ±12% [‡]	0 to +70	5
MC34167T [‡]	—	5500 [†]	7.5 to 40	Voltage	5.05 ±2.0%	72 ±12% [‡]	0 to +70	5

Double Ended Controllers

TL494CN	—	500 [†]	7.0 to 40	Voltage	5.00 ±5.0%	200	0 to +70	16
SG3525AN	—	±500 [†]	8.0 to 40	Voltage	5.10 ±2.0%	400	0 to +70	16
SG3526N	—	±200 [†]	8.0 to 40	Voltage	5.00 ±2.0%	400	0 to +125	18

[†]Uncommitted Drive Output. [‡]Totem Pole MOSFET Drive Output. [‡]Guaranteed at 250. [‡]50% Duty Cycle Limit. [‡]Improved oscillator specifications with frequency guaranteed at 250 KHz. [‡]Case Style is 314D. [‡]Uncommitted Power Switch. [‡]Dedicated Power Switch. [‡]Internally Fixed.