

Product Overview

MC78L: Linear Voltage Regulator, 100 mA, 5 to 24 V, Positive

For complete documentation, see the data sheet.

The MC78L00A Series of linear voltage regulators are inexpensive, easy-to-use devices suitable for a multitude of applications that require a regulated supply of up to 100 mA. Like their higher powered MC7800 and MC78M00 Series cousins, these regulators feature internal current limiting and thermal shutdown making them remarkably rugged. No external components are required with the MC78L00 devices in many applications. These linear voltage regulators offer a substantial performance advantage over the traditional zener diode-resistor combination, as output impedance and quiescent current are substantially reduced.

Specifications:

	MC78L00AB	MC78L00AC
Tolerance	4%	4%
Temperature Range	-40°C to +125°C	0°C to +125°C
Package	SOIC-8, TO-92	SOIC-8, TO-92, SOT-89

Features

- Wide Range of Available, Fixed Output Voltages
- Low Cost
- Internal Short Circuit Current Limiting
- Internal Thermal Overload Protection
- No External Components Required
- Complementary Negative Regulators Offered (MC79L00 Series)
- Pb-Free Packages are Available

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V _O (V)	I _{O Typ} (A)	V _{I Min} (V)	V _{I Max} (V)	V _{DO Typ} (V)	I _{Q Typ} (mA)	PSR R (dB)	Noise (μV _{rms})	Enable	PowerGood	Application	Package Type
MC78L05ABDR2G	0.1143	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	SOIC-8
MC78L05ABPG	0.1285	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ABPRAG	0.1385	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ABPREG	0.1349	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ABPRMG	0.1151	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ACDR2G	0.0972	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	SOIC-8
MC78L05ACHT1G	0.1568	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	SOT-89-3
MC78L05ACPG	0.1127	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ACPRAG	0.1072	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ACPREG	0.1176	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ACPRMG	0.1167	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L05ACPRPG	0.1032	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Industrial	TO-92
MC78L08ABDR2G	0.1125	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	SOIC-8
MC78L08ABPG	0.1292	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L08ABPRAG	0.1343	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L08ABPRPG	0.1	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92

MC78L08ACDR2G	0.1251	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	SOIC-8
MC78L08ACPG	0.1867	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L08ACPRAG	0.1193	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L08ACPREG	0.1123	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L08ACPRPG	0.1064	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L09ABDR2G	0.1291	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	9	0.1	10.7	30	1.7	3	57	60	No	No	Industrial	SOIC-8
MC78L09ABPRAG	0.1484	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	9	0.1	10.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L09ABPRPG	0.1	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	9	0.1	10.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L09ACDR2G	0.1211	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	9	0.1	10.7	30	1.7	3	57	60	No	No	Industrial	SOIC-8
MC78L09ACPG	0.1219	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	9	0.1	10.7	30	1.7	3	57	60	No	No	Industrial	TO-92
MC78L12ABDR2G	0.1199	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	SOIC-8
MC78L12ABPG	0.1319	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L12ABPRPG	0.1412	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L12ACDR2G	0.1199	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	SOIC-8
MC78L12ACPG	0.1249	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L12ACPRAG	0.1417	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L12ACPREG	0.1049	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92

MC78L12ACPRMG	0.122	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L12ACPRPG	0.1295	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	12	0.1	13.7	35	1.7	4.2	42	80	No	No	Industrial	TO-92
MC78L15ABDR2G	0.1216	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	SOIC-8
MC78L15ABPG	0.1228	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L15ABPRAG	0.1709	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L15ABPRPG	0.2448	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L15ACDR2G	0.1199	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	SOIC-8
MC78L15ACPG	0.1248	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L15ACPRAG	0.1255	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L15ACPRPG	0.1233	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	15	0.1	16.7	35	1.7	4.4	39	90	No	No	Industrial	TO-92
MC78L18ABPG	0.1451	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	18	0.1	19.7	35	1.7	3.1	48	150	No	No	Industrial	TO-92
MC78L18ACPG	0.1141	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	18	0.1	19.7	35	1.7	3.1	48	150	No	No	Industrial	TO-92
MC78L18ACPRAG	0.1236	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	18	0.1	19.7	35	1.7	3.1	48	150	No	No	Industrial	TO-92
MC78L18ACPRMG	0.1301	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	18	0.1	19.7	35	1.7	3.1	48	150	No	No	Industrial	TO-92
MC78L18ACPRPG	0.1025	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	18	0.1	19.7	35	1.7	3.1	48	150	No	No	Industrial	TO-92
MC78L24ABPG	0.1409	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	24	0.1	25.7	40	1.7	3.1	45	200	No	No	Industrial	TO-92
MC78L24ACPG	0.1207	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	24	0.1	25.7	40	1.7	3.1	45	200	No	No	Industrial	TO-92

MC78L24ACPRAG	0.0955	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	24	0.1	25.7	40	1.7	3.1	45	200	No	No	Industrial	TO-92
MC78L24ACPRPG	0.1255	Pb-free Halide free non AEC-Q and PPAP	Active	Single	Positive	24	0.1	25.7	40	1.7	3.1	45	200	No	No	Industrial	TO-92
NCV78L05ABDR2G	0.1292	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Automotive	SOIC-8
NCV78L05ABPG	0.2244	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Automotive	TO-92
NCV78L05ABPREG	0.204	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Automotive	TO-92
NCV78L05ABPRPG	0.2244	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.1	6.7	30	1.7	3	49	40	No	No	Automotive	TO-92
NCV78L08ABDR2G	0.1115	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	8	0.1	9.7	30	1.7	3	57	60	No	No	Automotive	SOIC-8
NCV78L12ABDR2G	0.1204	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	12	0.1	13.7	35	1.7	3	49	40	No	No	Automotive	SOIC-8
NCV78L15ABDR2G	0.288	AEC Qualified PPAP Capable Pb-free Halide free	Active													Automotive	SOIC-8
NCV78L24ABPRPG	0.2244	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	24	100	25.7	40	1.7				No	No	Automotive	TO-92

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