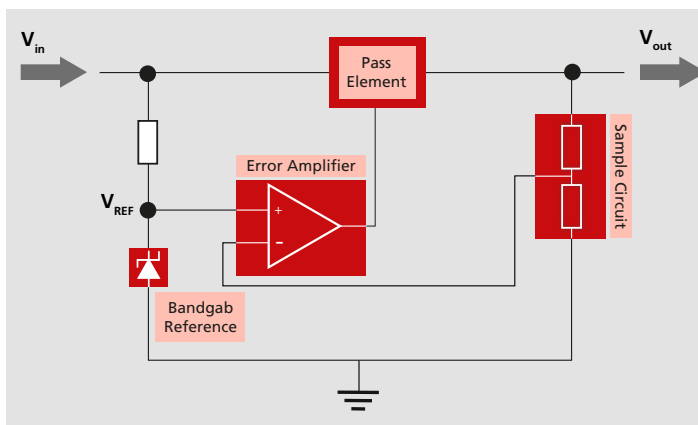




LINEAR
VOLTAGE REGULATORS



Designed for High Performance

Features/Benefits

- › Adjustable and fixed Output Voltage Versions
- › Adjustable Output Voltage Range: 1.25 V ... 13.65 V
- › Fixed Output Voltage Range from: -0.5 V ... 24 V
- › Maximum Output Currents up to 1A
- › Output Voltage Accuracy: $\pm 1\%$, $\pm 2\%$ and $\pm 5\%$
- › Typical Quiescent Current: 8 μ A ... 6.5 mA
- › Typical Dropout Voltage: 0.075 V ... 2.0 V
- › Thermal Overload and short Circuit Protection

Applications

- › Post Regulators for Switch Mode Power Supply
- › DC/DC Converters
- › Active SCSI Termination Regulators
- › Battery Powered Electronics
- › Mobile / Smart Phones
- › Home Automation Systems
- › Game Consoles

Linear Voltage Regulators:

Positive Fixed Voltage Regulators

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _o [A]	V _D [V] Typ	Tolerance	IQ [mA] Typ	Package
DI78L3.3xAB	30 V	3.3 V	0.1 A	1.7 V	5 %	6 mA	x = D is SO-8 x = U is SOT-89 x = Z is TO-92
DI78L05xAB	30 V	5.0 V	0.1 A	1.7 V	5 %	6 mA	
DI78L06xAB	30 V	6.0 V	0.1 A	1.7 V	5 %	6 mA	
DI78L08xAB	30 V	8.0 V	0.1 A	1.7 V	5 %	6 mA	
DI78L09xAB	30 V	9.0 V	0.1 A	1.7 V	5 %	6 mA	
DI78L10xAB	35 V	10 V	0.1 A	1.7 V	5 %	6 mA	
DI78L12xAB	35 V	12 V	0.1 A	1.7 V	5 %	6 mA	
DI78L15xAB	35 V	15 V	0.1 A	1.7 V	5 %	6 mA	
DI78L18xAB	40 V	18 V	0.1 A	1.7 V	5 %	6 mA	
DI78L20xAB	40 V	20 V	0.1 A	1.7 V	5 %	6 mA	
DI78L24xAB	40 V	24 V	0.1 A	1.7 V	5 %	6 mA	

Features/Benefits

- › Fixed output voltage range: 3.3 V ... 24 V
- › Typical dropout voltage: 1.7 V
- › Junction temperature -40°C ... 125°C
- › Thermal overload and short circuit protection

Negative Fixed Voltage Regulators

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _o [A]	V _D [V] Typ	Tolerance	IQ [mA] Typ	Package
DI79L05xAB	- 20 V	- 5.0 V	0.1 A	1.7 V	5 %	6 mA	x = D is SO-8 x = U is SOT-89 x = Z is TO-92
DI79L06xAB	- 20 V	- 6.0 V	0.1 A	1.7 V	5 %	6 mA	
DI79L08xAB	- 23 V	- 8.0 V	0.1 A	1.7 V	5 %	6 mA	
DI79L09xAB	- 24 V	- 9.0 V	0.1 A	1.7 V	5 %	6 mA	
DI79L10xAB	- 25 V	- 10 V	0.1 A	1.7 V	5 %	6 mA	
DI79L12xAB	- 27 V	- 12 V	0.1 A	1.7 V	5 %	6 mA	
DI79L15xAB	- 30 V	- 15 V	0.1 A	1.7 V	5 %	6 mA	
DI79L18xAB	- 33 V	- 18 V	0.1 A	1.7 V	5 %	6 mA	
DI79L24xAB	- 39 V	- 24 V	0.1 A	1.7 V	5 %	6 mA	

Features/Benefits

- › Fixed output voltage range: -5.0 V... -24 V
- › Typical dropout voltage: 1.7 V
- › Junction temperature -40°C ... 125°C
- › Thermal overload and short circuit protection

Positive Fixed Voltage Regulators

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _o [A]	V _D [V] Typ	Tolerance	IQ [mA] Typ	Package
DI78M05xAB	35 V	5.0 V	0.5 A	2.0 V	5 %	6 mA	x = U is SOT-89

Features/Benefits

- › Fixed output voltage range: 5.0 V
- › Typical dropout voltage: 2.0 V
- › Junction temperature -40°C ... 125°C
- › Thermal overload and short circuit protection

Linear Voltage Regulators:

Adjustable and Fixed Low Dropout Voltage Regulators

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _O [A]	V _D [V] Typ	Tolerance	I _Q [mA] Typ	Package
LDI1117-ADx	20 V	1.25 V ... 13.65 V	1.0 A	1.15 V	1 %	5 mA	x = D is SO-8 x = U is SOT-89 x = H is SOT-223
LDI1117-1.2x	20 V	1.2 V	1.0 A	1.15 V	1 %	5 mA	
LDI1117-1.5x	20 V	1.5 V	1.0 A	1.15 V	1 %	5 mA	
LDI1117-1.8x	20 V	1.8 V	1.0 A	1.15 V	1 %	5 mA	
LDI1117-2.5x	20 V	2.5 V	1.0 A	1.15 V	1 %	5 mA	
LDI1117-3.3x	20 V	3.3 V	1.0 A	1.15 V	1 %	5 mA	
LDI1117-05x	20 V	5.0 V	1.0 A	1.15 V	1 %	5 mA	

Features/Benefits

- › Adjustable & Fixed output voltage range: 1.25 V ... 5.0 V
- › Typical dropout voltage: 1.15 V
- › Junction temperature -40°C ... 125°C
- › Thermal overload and short circuit protection

Fixed Ultra Low Power Low Dropout Voltage Regulators

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _O [mA]	V _D [V] Typ	Tolerance	I _Q [µA] Typ	Package
DI62061.5x1	7.0 V	1.5 V	60 mA	0.58 V	1 %	8.0 µA	x = S is SOT-23
DI62061.8x1	7.0 V	1.8 V	80 mA	0.35 V	1 %	8.0 µA	
DI62062.5x1	7.0 V	2.5 V	150 mA	0.35 V	1 %	8.0 µA	
DI62062.8x1	7.0 V	2.8 V	150 mA	0.35 V	1 %	8.0 µA	
DI62063.0x1	7.0 V	3.0 V	200 mA	0.25 V	1 %	8.0 µA	
DI62063.3x1	7.0 V	3.3 V	200 mA	0.25 V	1 %	8.0 µA	
DI62063.6x1	7.0 V	3.6 V	200 mA	0.25 V	1 %	8.0 µA	

Partnumber	V _{IN} Max [V]	V _{OUT} [V]	I _O [mA]	V _D [V] Typ	Tolerance	I _Q [µA] Typ	Package
DI62061.5x2	7.0 V	1.5 V	60 mA	0.58 V	2 %	8.0 µA	x = S is SOT-23
DI62061.8x2	7.0 V	1.8 V	80 mA	0.35 V	2 %	8.0 µA	
DI62062.5x2	7.0 V	2.5 V	150 mA	0.35 V	2 %	8.0 µA	
DI62062.8x2	7.0 V	2.8 V	150 mA	0.35 V	2 %	8.0 µA	
DI62063.0x2	7.0 V	3.0 V	200 mA	0.25 V	2 %	8.0 µA	
DI62063.3x2	7.0 V	3.3 V	200 mA	0.25 V	2 %	8.0 µA	
DI62063.6x2	7.0 V	3.6 V	200 mA	0.25 V	2 %	8.0 µA	

Features/Benefits

- › Fixed output voltage range: 1.5 V... 3.6 V
- › Output Voltage Accuracy: ±1% and ±2%
- › Very Low Quiescent Current: typ. 8 µA
- › Typical dropout voltage: 0.25 V ... 0.58 V
- › Junction temperature -40 ... 85°C
- › Compatible with Low ESR Ceramic Capacitors
- › Built in Current Limiting Circuit