

Product Overview

MC33375: LDO Regulator, 300 mA, High PSRR, with On/Off Control

For complete documentation, see the data sheet.

The MC33375 series are micropower low dropout (LDO) linear voltage regulators available in a wide variety of output voltages as well as packages, SOT-223, and SOP-8 surface mount packages. These devices feature a very low quiescent current and are capable of supplying output currents up to 300mA. Internal current and thermal limiting protection are provided by the presence of a short circuit at the output and an internal thermal shutdown circuit. The MC33375 has a control pin that allows a logic level signal to turn-off or turn-on the regulator output. Due to the low input-to-output voltage differential and bias current specifications, these devices are ideally suited for battery powered computer, consumer, and industrial equipment where an extension of useful battery life is desirable.

Features

- Low Quiescent Current (0.3 mA in OFF mode; 125 mA in ON mode)
- Low Input-to-Output Voltage Differential of 25 mV at IO = 10 mA, and 260 mV at IO = 300 mA
- Extremely Tight Line and Load Regulation
- Stable with Output Capacitance of only 0.33 mF for 2.5 V Output Voltage
- Internal Current and Thermal Limiting
- Logic Level ON/OFF Control

Applications

- Battery Powered Consumer Products
- HandHeld Instruments
- Camcorders and Cameras

End Products

- Camcorders and Cameras

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 _g Typ (mA)	PSR R (dB)	Noise (μV _{rms})	Enable	Power Good	Application	Package Type
MC33375D-2.5G	0.3921	Pb-free	Active	Single	Positive	2.5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-2.5R2G	0.3921	Pb-free	Active	Single	Positive	2.5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-3.0G		Pb-free	Active	Single	Positive	3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-3.0R2G	0.4687	Pb-free	Active	Single	Positive	3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-3.3G	0.3756	Pb-free	Active	Single	Positive	3.3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-3.3R2G	0.2685	Pb-free	Active	Single	Positive	3.3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-5.0G	0.3107	Pb-free	Active	Single	Positive	5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375D-5.0R2G	0.3259	Pb-free	Active	Single	Positive	5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOIC-8
		Halide free non AEC-Q and PPAP															
MC33375ST-1.8T3G	0.2512	Pb-free	Active	Single	Positive	1.8	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOT-223-4 / TO-261-4D
		Halide free non AEC-Q and PPAP															
MC33375ST-2.5T3G	0.2512	Pb-free	Active	Single	Positive	2.5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOT-223-4 / TO-261-4D
		Halide free non AEC-Q and PPAP															
MC33375ST-3.0T3G	0.2231	Pb-free	Active	Single	Positive	3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOT-223-4 / TO-261-4D
		Halide free non AEC-Q and PPAP															
MC33375ST-3.3T3G	0.2231	Pb-free	Active	Single	Positive	3.3	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOT-223-4 / TO-261-4D
		Halide free non AEC-Q and PPAP															
MC33375ST-5.0T3G	0.2512	Pb-free	Active	Single	Positive	5	0.3	2.5	12	0.26	0.125	75	46	Yes	No	Industrial	SOT-223-4 / TO-261-4
		Halide free non AEC-Q and PPAP															

For more information please contact your local sales support at www.onsemi.com.

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