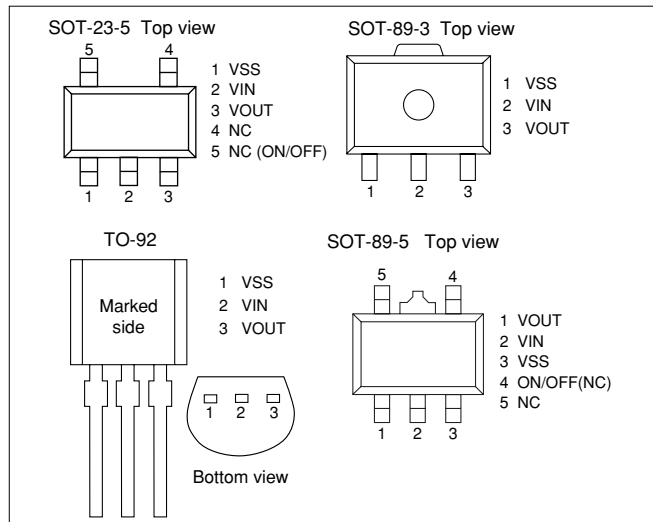


The S-812C series is a high operating voltage LDO voltage regulator developed using CMOS technology. The maximum operating voltage of the S-812C series is 16 V, making it ideal for high voltage applications. The low current consumption and power-off function of the S-812C series also make it suitable for portable devices that require low current consumption.

The S-812C series can be used with ceramic capacitors.

PIN CONFIGURATIONS



SELECTION GUIDE

Output voltage	With short-circuit protection and power-off functions		Without short-circuit protection and power-off functions			Dropout voltage (typ.) (I _{OUT} =10mA)	Output current (min.) (V _{OUT(S)+2V ≤ V_{IN} ≤ 16V}	Current consumption during operation (typ.) (V _{IN} =V _{OUT(S)+2V, no load)}
	SOT-23-5 (3000/reel)	SOT-89-3 (1000/reel)	TO-92*	SOT-23-5 (3000/reel)	SOT-89-3 (1000/reel)			
2.0V ± 2.0%	S-812C20BMC-C4A-T2	-	S-812C20AY-X	S-812C20AMC-C2A-T2	S-812C20AUA-C2A-T2	0.46V	30mA	0.9μA
2.1V ± 2.0%	S-812C21BMC-C4B-T2	-	S-812C21AY-X	S-812C21AMC-C2B-T2	S-812C21AUA-C2B-T2	0.46V	30mA	0.9μA
2.2V ± 2.0%	S-812C22BMC-C4C-T2	-	S-812C22AY-X	S-812C22AMC-C2C-T2	S-812C22AUA-C2C-T2	0.46V	30mA	0.9μA
2.3V ± 2.0%	S-812C23BMC-C4D-T2	-	S-812C23AY-X	S-812C23AMC-C2D-T2	S-812C23AUA-C2D-T2	0.46V	30mA	0.9μA
2.4V ± 2.0%	S-812C24BMC-C4E-T2	-	S-812C24AY-X	S-812C24AMC-C2E-T2	S-812C24AUA-C2E-T2	0.46V	30mA	0.9μA
2.5V ± 2.0%	S-812C25BMC-C4F-T2	-	S-812C25AY-X	S-812C25AMC-C2F-T2	S-812C25AUA-C2F-T2	0.32V	30mA	0.9μA
2.6V ± 2.0%	S-812C26BMC-C4G-T2	-	S-812C26AY-X	S-812C26AMC-C2G-T2	S-812C26AUA-C2G-T2	0.32V	30mA	0.9μA
2.7V ± 2.0%	S-812C27BMC-C4H-T2	-	S-812C27AY-X	S-812C27AMC-C2H-T2	S-812C27AUA-C2H-T2	0.32V	30mA	0.9μA
2.8V ± 2.0%	S-812C28BMC-C4I-T2	-	S-812C28AY-X	S-812C28AMC-C2I-T2	S-812C28AUA-C2I-T2	0.32V	30mA	1.0μA
2.9V ± 2.0%	S-812C29BMC-C4J-T2	-	S-812C29AY-X	S-812C29AMC-C2J-T2	S-812C29AUA-C2J-T2	0.32V	30mA	1.0μA
3.0V ± 2.0%	S-812C30BMC-C4K-T2	-	S-812C30AY-X	S-812C30AMC-C2K-T2	S-812C30AUA-C2K-T2	0.23V	50mA	1.0μA
3.1V ± 2.0%	S-812C31BMC-C4L-T2	-	S-812C31AY-X	S-812C31AMC-C2L-T2	S-812C31AUA-C2L-T2	0.23V	50mA	1.0μA
3.2V ± 2.0%	S-812C32BMC-C4M-T2	-	S-812C32AY-X	S-812C32AMC-C2M-T2	S-812C32AUA-C2M-T2	0.23V	50mA	1.0μA
3.3V ± 2.0%	S-812C33BMC-C4N-T2	S-812C33BUC-C4N-T2	S-812C33AY-X	S-812C33AMC-C2N-T2	S-812C33AUA-C2N-T2	0.23V	50mA	1.0μA
3.4V ± 2.0%	S-812C34BMC-C4O-T2	-	S-812C34AY-X	S-812C34AMC-C2O-T2	S-812C34AUA-C2O-T2	0.23V	50mA	1.0μA
3.5V ± 2.0%	S-812C35BMC-C4P-T2	-	S-812C35AY-X	S-812C35AMC-C2P-T2	S-812C35AUA-C2P-T2	0.19V	50mA	1.0μA
3.6V ± 2.0%	S-812C36BMC-C4Q-T2	-	S-812C36AY-X	S-812C36AMC-C2Q-T2	S-812C36AUA-C2Q-T2	0.19V	50mA	1.0μA
3.7V ± 2.0%	S-812C37BMC-C4R-T2	-	S-812C37AY-X	S-812C37AMC-C2R-T2	S-812C37AUA-C2R-T2	0.19V	50mA	1.0μA
3.8V ± 2.0%	S-812C38BMC-C4S-T2	-	S-812C38AY-X	S-812C38AMC-C2S-T2	S-812C38AUA-C2S-T2	0.19V	50mA	1.2μA
3.9V ± 2.0%	S-812C39BMC-C4T-T2	-	S-812C39AY-X	S-812C39AMC-C2T-T2	S-812C39AUA-C2T-T2	0.19V	50mA	1.2μA
4.0V ± 2.0%	S-812C40BMC-C4U-T2	-	S-812C40AY-X	S-812C40AMC-C2U-T2	S-812C40AUA-C2U-T2	0.16V	65mA	1.2μA
4.1V ± 2.0%	S-812C41BMC-C4V-T2	-	S-812C41AY-X	S-812C41AMC-C2V-T2	S-812C41AUA-C2V-T2	0.16V	65mA	1.2μA
4.2V ± 2.0%	S-812C42BMC-C4W-T2	-	S-812C42AY-X	S-812C42AMC-C2W-T2	S-812C42AUA-C2W-T2	0.16V	65mA	1.2μA
4.3V ± 2.0%	S-812C43BMC-C4X-T2	-	S-812C43AY-X	S-812C43AMC-C2X-T2	S-812C43AUA-C2X-T2	0.16V	65mA	1.2μA
4.4V ± 2.0%	S-812C44BMC-C4Y-T2	-	S-812C44AY-X	S-812C44AMC-C2Y-T2	S-812C44AUA-C2Y-T2	0.16V	65mA	1.2μA
4.5V ± 2.0%	S-812C45BMC-C4Z-T2	-	S-812C45AY-X	S-812C45AMC-C2Z-T2	S-812C45AUA-C2Z-T2	0.14V	65mA	1.2μA
4.6V ± 2.0%	S-812C46BMC-C5A-T2	-	S-812C46AY-X	S-812C46AMC-C3A-T2	S-812C46AUA-C3A-T2	0.14V	65mA	1.2μA
4.7V ± 2.0%	S-812C47BMC-C5B-T2	-	S-812C47AY-X	S-812C47AMC-C3B-T2	S-812C47AUA-C3B-T2	0.14V	65mA	1.2μA
4.8V ± 2.0%	S-812C48BMC-C5C-T2	-	S-812C48AY-X	S-812C48AMC-C3C-T2	S-812C48AUA-C3C-T2	0.14V	65mA	1.2μA
4.9V ± 2.0%	S-812C49BMC-C5D-T2	-	S-812C49AY-X	S-812C49AMC-C3D-T2	S-812C49AUA-C3D-T2	0.14V	65mA	1.2μA
5.0V ± 2.0%	S-812C50BMC-C5E-T2	S-812C50BUC-C5E-T2	S-812C50AY-X	S-812C50AMC-C3E-T2	S-812C50AUA-C3E-T2	0.12V	75mA	1.2μA
5.1V ± 2.0%	S-812C51BMC-C5F-T2	-	S-812C51AY-X	S-812C51AMC-C3F-T2	S-812C51AUA-C3F-T2	0.12V	75mA	1.2μA
5.2V ± 2.0%	S-812C52BMC-C5G-T2	-	S-812C52AY-X	S-812C52AMC-C3G-T2	S-812C52AUA-C3G-T2	0.12V	75mA	1.5μA
5.3V ± 2.0%	S-812C53BMC-C5H-T2	-	S-812C53AY-X	S-812C53AMC-C3H-T2	S-812C53AUA-C3H-T2	0.12V	75mA	1.5μA
5.4V ± 2.0%	S-812C54BMC-C5I-T2	-	S-812C54AY-X	S-812C54AMC-C3I-T2	S-812C54AUA-C3I-T2	0.12V	75mA	1.5μA
5.5V ± 2.0%	S-812C55BMC-C5J-T2	-	S-812C55AY-X	S-812C55AMC-C3J-T2	S-812C55AUA-C3J-T2	0.11V	75mA	1.5μA
5.6V ± 2.0%	S-812C56BMC-C5K-T2	-	S-812C56AY-X	S-812C56AMC-C3K-T2	S-812C56AUA-C3K-T2	0.11V	75mA	1.5μA
5.7V ± 2.0%	S-812C57BMC-C5L-T2	-	S-812C57AY-X	S-812C57AMC-C3L-T2	S-812C57AUA-C3L-T2	0.11V	75mA	1.5μA
5.8V ± 2.0%	S-812C58BMC-C5M-T2	-	S-812C58AY-X	S-812C58AMC-C3M-T2	S-812C58AUA-C3M-T2	0.11V	75mA	1.5μA
5.9V ± 2.0%	S-812C59BMC-C5N-T2	-	S-812C59AY-X	S-812C59AMC-C3N-T2	S-812C59AUA-C3N-T2	0.11V	75mA	1.5μA
6.0V ± 2.0%	S-812C60BMC-C5O-T2	-	S-812C60AY-X	S-812C60AMC-C3O-T2	S-812C60AUA-C3O-T2	0.11V	75mA	1.5μA

*1. "X" in the model number of TO-92 differs as follows:
 B: Bulk, T: Tape and reel (2000/reel), Z: Tape and ammo (2500/reel)

FEATURES

- Low current consumption: 1.0 μA typ., 1.8 μA max. (3.0 V output product, during operation)
- Output voltage range: 2.0 V to 6.0 V (Selectable in 0.1 V steps)
- Output voltage accuracy: ±2.0%
- Output current
 50 mA capable (3.0 V output product, when V_{IN} = 5 V)
 75 mA capable (5.0 V output product, when V_{IN} = 7 V)
- Dropout voltage:
 120 mV typ. (V_{OUT} = 5.0 V, I_{OUT} = 10 mA)
- Output capacitor: A ceramic capacitor can be used.
- Built-in shutdown circuit: Shutdown on/off function and output signal polarity (positive/negative) are selectable.
- Short-circuit protection: Function selectable
 Short-circuit current: 40 mA typ. (With protection function)
- Operating voltage range: 16 V max.