

A collage of three images: a smartphone on a laptop keyboard, a medical ultrasound screen, and telecommunications towers.

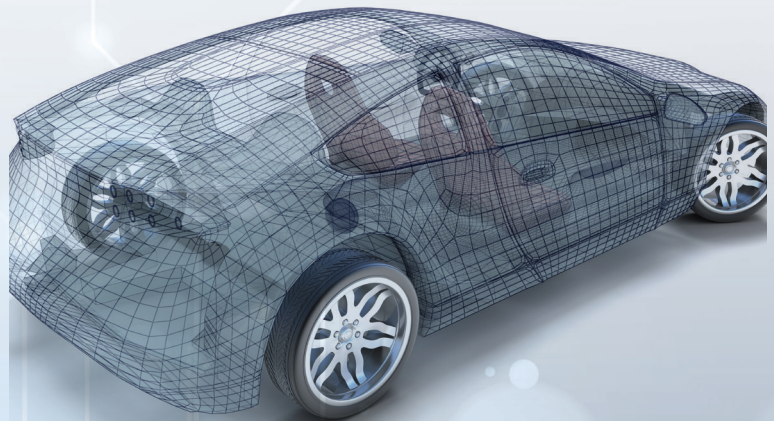


BOURNS®

Introduction

Today's electronic devices have become increasingly power hungry and are operating at higher switching frequencies, starving for speed and shrinking in size as never before. Inductors are a fundamental element in the voltage regulator topology, and virtually every circuit that regulates power in automobiles, industrial and consumer electronics, and in DC/DC converters requires an inductor. Conventional inductor technology has been falling behind in meeting the high performance demand of these advanced electronic devices. As a result, Bourns has developed several inductor models with rated DC current up to 55 A to meet the challenges of the market.

Bourns® inductive components include surface mount chip inductors, power inductors, AEC-Q200 compliant inductors, power chokes and common mode chokes, as well as torroid, radial leaded and axial leaded inductors. These components are used in automotive, computer, communication, consumer, instrumentation, industrial, and non-life-critical medical applications.



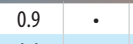
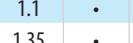
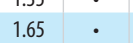
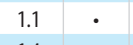
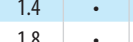
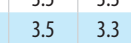
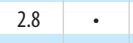
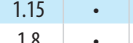
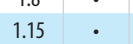
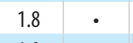
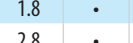
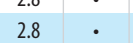
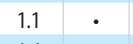
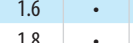
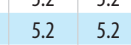
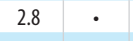
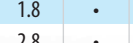
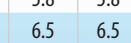
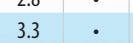
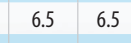
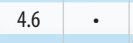
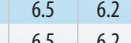
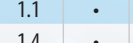
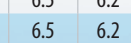
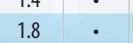
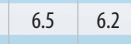
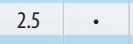
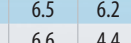
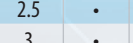
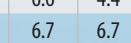
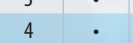
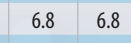
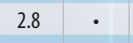
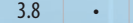
High Current, Shielded Power Inductors

Power Inductors - SRP Series, SMD High Current, Shielded

Model	Photo	Size (mm)			Core		Inductance Range (μH)				I _{rms} Current Range (A)			Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height	Ferrite	Metal Alloy	0.1	1	10	100	1	10	100		
SRP2010		2	1.6	1		•	0.24		2.2		1.7		4.5	-40 to +125	No
SRP2510A		2.5	2	1		•	0.22		4.7		1.36		5.9	-40 to +125	Yes
SRP2512		2.5	2	1.2		•	0.47		2.2		2.1		4.5	-40 to +125	No
SRP2512A		2.5	2	1.2		•	0.47		4.7		2.1		4.5	-40 to +125	Yes
SRP3012TA		3.5	3.2	1.2		•	0.15			10	1		10	-40 to +150	Yes
SRP3020TA		3.5	3.2	2		•	0.1			10	1.4		10.5	-40 to +150	Yes
SRP4020FA		4.1	4.1	2.1		•	0.47			4.7			5.1 13.2	-55 to +155	Yes
SRP4030FA		4.1	4.1	3		•			0.9 6.8				4 11.2	-55 to +155	Yes
SRP4012TA		4.45	4.06	1		•	0.1			10	1.3		11.5	-40 to +150	Yes
SRP4020TA		4.45	4.06	1.8		•	0.1			22	1.2		12	-40 to +150	Yes
SRP5030CA		5.4	5.3	3.1		•	0.15			4.7			5.9 22.2	-55 to +155	Yes
SRP5050FA		5.5	5.3	4.8		•			5.6 8.2				6.1 7.2	-55 to +155	Yes
SRP5015TA		5.7	5.2	1.3		•	0.15			22	1.2		16	-40 to +150	Yes
SRP5020TA		5.7	5.2	1.8		•	0.33			10	2.3		12	-40 to +150	Yes
SRP5030TA		5.7	5.2	2.8		•	0.33			15	2.1		14	-40 to +150	Yes
SRP6030CA		6.6	6.4	3		•	0.18			4.5			7 32	-55 to +155	Yes
SRP6050CA		6.6	6.4	5		•			1 4.7				8.5 20	-55 to +155	Yes
SRP6060FA		6.6	6.4	6		•			4.7 22				5 11	-55 to +155	Yes
SRP7028C		7.1	6.6	2.8		•	0.1			22	2.2		37	-40 to +125	No
SRP6540		7.2	6.5	4		•	0.56			47	1.6		18	-55 to +125	No
SRP7028A		7.3	6.6	2.8		•	0.1			33	2		32	-40 to +150	Yes
SRP7050TA		7.3	6.6	4.8		•	0.33			68	1.2		25	-40 to +150	Yes
SRP7030CA		7.8	7.6	2.9		•			1 8.2				5.9 21	-55 to +150	Yes
SRP1038A		11	10	3.8		•	0.2			47	3		35	-40 to +150	Yes
SRP1038C		11	10	3.8		•	0.1			47	3.2		53	-40 to +125	No
SRP1204		12.5	12.5	4	•		0.75		2				10 13	-40 to +125	No
SRP1205		12.5	12.5	5.6	•		0.54			7.4			8.3 18	-40 to +125	No
SRP1206		12.5	12.5	5.7	•		0.7			3.5			14 30	-55 to +150	No
SRP1238A		13.5	12.5	3.3		•	0.1			10			7 43	-40 to +150	Yes
SRP1245A		13.5	12.5	4.8		•	0.2			22			6.5 52	-40 to +150	Yes
SRP1265A		13.5	12.5	6.2		•	0.15			47			6.5 55	-40 to +150	Yes
SRP1770TA		17.6	16.9	6.7		•			1 100				5.3 52	-40 to +150	Yes
SRP1770C		17.8	16.9	6.7		•	0.47			47			8.7 60	-40 to +125	No
SRP2313AA		23.5	22	12.6		•			1 68				12 70	-55 to +155	Yes
PQ2614BHA		28	28	16	•				2.2 33				130	-40 to +155	Yes
PQ2614BLA		28	28	16	•				1 33				130	-40 to +155	Yes
PQ2617BHA		28	28	19	•				3.3 33				28	-40 to +155	Yes

Surface Mount Shielded Power Inductors

Power Inductors - SRR & SRU Series, SMD Shielded

Model	Photo	Size (mm)			Core	Inductance Range (µH)							I _{rms} Current Range (A)				Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height		Ferrite	0.1	1	10	100	1,000	10,000	100,000	0.01	0.1	1		
SRU2009		2.8	2.8	0.9	•		1		22					0.22		1.45	-40 to +125	No
SRU2011		2.8	2.8	1.1	•		1		33					0.23		1.65	-40 to +125	No
SRU2013		2.8	2.8	1.35	•		1			47				0.25		2.2	-40 to +125	No
SRU2016		2.8	2.8	1.65	•		1			100				0.19		2.2	-40 to +125	No
SRU3011		3.5	3.3	1.1	•		1.5		10					0.4		1.1	-40 to +125	No
SRU3014		3.5	3.3	1.4	•		1.2		22					0.32		1.85	-40 to +125	No
SRU3017		3.5	3.3	1.8	•		2.2			47				0.36		1.7	-40 to +125	No
SRU3028		3.5	3.3	2.8	•			10		100				0.19		0.72	-40 to +125	No
SRU3028A		3.5	3.3	2.8	•			10		33				0.47		0.72	-40 to +125	Yes
SRR3011		3.8	3.8	1.15	•		1.5			100				0.18		1.6	-40 to +125	No
SRR3818A		3.8	3.8	1.8	•		1			100				0.34		3.6	-40 to +150	Yes
SRR4011		4.8	4.8	1.15	•	0.47				150				0.25		3.2	-40 to +125	No
SRR4018		4.8	4.8	1.8	•		1			180				0.18		2.7	-40 to +125	No
SRR4818A		4.8	4.8	1.8	•		1			47				0.75		5.1	-40 to +150	Yes
SRR4028		4.8	4.8	2.8	•		1.2				560			0.22		3.1	-40 to +125	No
SRR4828A		4.8	4.8	2.8	•		1.2			220				0.5		5	-40 to +150	Yes
SRU5011		5.2	5.2	1.1	•		1.5			100				0.2		1.8	-40 to +125	No
SRU5016		5.2	5.2	1.6	•		1.8			100				0.3		1.75	-40 to +125	No
SRU5018		5.2	5.2	1.8	•		1			100				0.32		2.8	-40 to +125	No
SRU5028		5.2	5.2	2.8	•		1.2			100				0.47		3.5	-40 to +125	No
SRU5028A		5.2	5.2	2.8	•		1.2			100				0.47		3.5	-40 to +125	Yes
SRR5018		5.8	5.8	1.8	•		1.2			220				0.23		3	-40 to +125	No
SRR5028		5.8	5.8	2.8	•		2.6				680			0.13		3	-40 to +125	No
SRR0603		6.5	6.5	3.3	•		1.5			1000				0.1		2.2	-40 to +125	No
SRR0604		6.5	6.5	4.6	•		1.5				2200			0.1		2.8	-40 to +125	No
SRU6011		6.5	6.2	1.1	•		1.4			68				0.46		2.6	-40 to +125	No
SRU6013		6.5	6.2	1.4	•		1			68				0.6		3.2	-40 to +125	No
SRU6018		6.5	6.2	1.8	•		1.2			100				0.5		3.6	-40 to +125	No
SRU6025		6.5	6.2	2.5	•		1.2			220				0.42		4	-40 to +125	No
SRU6025A		6.5	6.2	2.5	•		1.2			220				0.42		4	-40 to +125	Yes
SRR6603		6.6	4.4	3	•		1				10000		0.02		3	-55 to +125	No	
SRR6040A		6.7	6.7	4	•		1			100				0.65		5	-40 to +125	Yes
SRR6028		6.8	6.8	2.8	•		1.5				1000			0.15		3.4	-40 to +125	No
SRR6038		6.8	6.8	3.8	•		3.3			100				0.65		3.5	-40 to +125	No

Power Inductors - SRR & SRU Series, SMD Shielded

Model	Photo	Size (mm)			Core	Inductance Range (μH)						I _{rms} Current Range (A)				Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height		1	10	100	1,000	10,000	100,000	0.1	1	10	100		
SRR7032		7	7	3.2	•	2.2				1000		0.15		2.65		-40 to +125	No
SRR7045		7	7	4.5	•	1				1000		0.25		3.5		-40 to +125	No
SRR0735A		7.3	7.3	3.5	•		10			680		0.21		2.1		-40 to +125	Yes
SRR0745A		7.3	7.3	4.5	•		10			1000		0.2		2.1		-40 to +125	Yes
SRU8028		8	8	2.8	•	1			100			0.75			7	-40 to +125	No
SRU8028A		8	8	2.8	•	2.5			100			0.75			4.5	-40 to +125	Yes
SRU8043		8	8	4.3	•	2.2			100			1			5.4	-40 to +125	No
SRU8045A		8	8	4.5	•	3.5			100			1			5	-40 to +125	Yes
SRR0905		9.9	9.9	4.5	•		10			470		0.33		2.1		-40 to +125	No
SRR0906		10	9.5	6	•	2.7				10000		0.07		3.2		-40 to +125	No
SRR0908		10	9.5	7.5	•	1.5				15000		0.08			5.6	-40 to +125	No
SRU1028		10	10	2.8	•	1			150			0.7			7	-40 to +125	No
SRU1028A		10	10	2.8	•	1			150			0.65			7	-40 to +125	Yes
SRU1038		10	10	3.8	•	1.5			330			0.55			7.2	-40 to +125	No
SRU1038A		10	10	3.8	•	1.5			330			0.55			7.2	-40 to +125	Yes
SRU1048		10	10	4.8	•	0.8				560		0.47			7.8	-40 to +125	No
SRU1048A		10	10	4.8	•	1.5			330			0.65			7	-40 to +125	Yes
SRU1063		10	10	6.5	•	1.6			100			1.1			8	-40 to +125	No
SRU1063A		10	10	6.5	•	4.7			100			1.1			5.5	-40 to +125	Yes
SRR1050A		10.2	10	4.8	•	0.68			330			0.73			9.5	-40 to +125	Yes
SRR0804		10.5	8	3.8	•		5			470		0.16		1.7		-40 to +125	No
SRR0805		10.5	8	4.7	•	2.2				1000		0.15		2.5		-40 to +125	No
SRR1210		12	12	10	•	1				1000			0.75		11	-40 to +125	No
SRR1210A		12	12	10	•	1				1000			0.75		11	-40 to +125	Yes
SRR1240		12.5	12.5	4	•	1				1000		0.42			9.3	-40 to +125	No
SRR1260		12.5	12.5	6	•	1				1000			0.68		9.4	-40 to +125	No
SRR1260A		12.5	12.5	6	•	1				1000			0.68		9.4	-40 to +125	Yes
SRR1280		12.5	12.5	7.5	•	1.1				1000			0.68		10.2	-40 to +125	No
SRR1280A		12.5	12.5	7.5	•	4.7				1000			0.68		8.2	-40 to +125	Yes
SRR1305		12.5	12.5	5	•	0.9	2.7							6	20	-40 to +125	No
SRR1005		12.7	10	5.2	•	1				3300		0.1		4.5		-40 to +125	No
SRR1003		12.7	10.3	3	•	1.8				470		0.16		3		-40 to +125	No
SRR1205		12.7	12.7	5.5	•	2.5				820		0.3		5		-40 to +125	No
SRR1206		12.7	12.7	6.5	•	2.5				1500		0.2			6.2	-40 to +125	No
SRR1208		12.7	12.7	8.5	•	2.5					10000	0.18			7.5	-40 to +125	No
SRR1806		18.3	14	6.8	•		10			1000		0.45		4		-40 to +125	No

Power Inductors & Common Mode Chip Inductors

Power Inductors - SRN Series, SMD Semi-Shielded

Model	Photo	Size (mm)			Core		Inductance Range (μH)					I _{rms} Current Range (A)				Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height	Ferrite	Metal Alloy	0.1	1	10	100	1,000	0.1	1	10	100		
SRN2009T		2	1.6	0.95	•		0.33		10			0.55	2.1			-40 to +125	No
SRN2010TA		2	1.6	1	•		0.47		22			0.27	2.3			-40 to +125	Yes
SRN2010		2	1.6	1.02	•		0.24	2.2					1.7	4.4		-55 to +125	No
SRN2508A		2.5	2	0.8	•		0.47		10			0.45	1.45			-55 to +125	Yes
SRN2510F		2.5	2	1	•		0.24	4.7					1.7	5.5		-40 to +125	No
SRN2510		2.5	2	1.02	•		0.24	2.2					1.5		3.1	-55 to +125	No
SRN3010		3	3	1	•			1			47	0.35	2.3			-40 to +125	No
SRN3010TA		3	3	1	•			1	22			0.6	2.1			-40 to +125	Yes
SRN3012TA		3	3	1.2	•			1	22			0.61	2.0			-40 to +125	Yes
SRN3015		3	3	1.5	•			1		100		0.29	2.35			-40 to +125	No
SRN3015TA		3	3	1.5	•			1		47		0.4	2.2			-40 to +125	Yes
SRN4012T		4	4	1.2	•		0.47		22			0.62			3.2	-40 to +125	No
SRN4012TA		4	4	1.2	•		0.47		22			0.62			3.2	-40 to +125	Yes
SRN4018		4	4	1.8	•		0.82			330		0.2	4			-40 to +125	No
SRN4018TA		4	4	1.8	•			1		220		0.3	3.7			-55 to +125	Yes
SRN4026		4	4	2.5	•			1		220		0.2	3			-40 to +125	No
SRN5020		5	5	2	•			1	33			0.9	3.6			-25 to +120	No
SRN5020TA		5	5	2	•			1	47			0.7	4.1			-55 to +125	Yes
SRN5040		5	5	4	•			1.5		47		0.9	3.6			-40 to +125	No
SRN5040TA		5	5	4	•			0.6		100		0.72	8			-55 to +125	Yes
SRN6028		6	6	2.8	•			0.9		100		0.66			4.6	-40 to +125	No
SRN6045TA		6	6	4.2	•			1		470		0.4			8	-55 to +125	Yes
SRN6045		6	6	4.5	•			1		220		0.6			4.2	-40 to +125	No
SRN8040		8	8	4	•		0.5			100		1		10		-40 to +125	No
SRN8040TA		8	8	4.2	•		0.5			330		0.7		12		-55 to +125	Yes
SRN1060		10	9.8	6	•				10		470		0.8		5.4	-40 to +125	No

Common Mode Chokes & Line Filters - SRF & DR Series, SMD Shielded

Model	Photo	Size (mm)			Core		Inductance Range (μH)						Impedance Range (Ω)					I _{rms} Current Range (mA)					Operating Temp Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height	Ferrite	Metal Alloy	0.1	1	10	100	1,000	10,000	10	100	1,000	10,000	100,000	10	100	1,000	10,000	100,000		
SRF0504		5	4.8	4.8	•		0.6	2.8						190			4000	200			5000		-40 to +125	No
DR221		6	3.3	3.3	•			11			470			450		1100		100		250			-40 to +125	No
SRF0602		6.5	3.6	1.65	•				10	330				140		900					300		-40 to +125	No
SRF0703A		7.6	7.6	3.4	•			8.2			1335							211				2190	-40 to +125	Yes
DR331		9	5.4	4.7	•				11		4700							200			500		-40 to +135	No
SRF0905		9.2	6	5	•				10		6500			200			5000	300			1600		-40 to +105	No
SRF0905A		9.2	6	5	•				10		6500			200			5000	300			1600		-40 to +105	Yes
SRF1006		10	8.7	6.5	•					120	5000			200			6200	250			1400		-40 to +105	No
SRF1010DA		12	9.6	11.3	•		0.43	15										4.6	27				-55 to +155	Yes
SRF1260A		12.5	12.5	6	•		0.47				4000							283			17600		-40 to +125	Yes
SRF1280A		12.5	12.5	8	•		0.47				4000							307			17900		-40 to +125	Yes
SRF1306		12.7	10.5	5.75	•				35		1000			400			2200	350			2700		-40 to +105	No

Power Inductors - SDE & SDR Series, SMD Non-Shielded

Model	Photo	Size (mm)			Core	Inductance Range (μH)						I _{rms} Current Range (A)					Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height		1	10	100	1,000	10,000	100,000	0.01	0.1	1	10	100		
SDR0302		3	2.8	2.5	•	1				1200		0.06		2.1			-40 to +125	No
SDE0403A		4.5	4	3.2	•	1			68				0.4		2.7		-40 to +125	Yes
SDR0403		4.5	4	3.2	•	1				1000			0.09		3.8		-40 to +125	No
SDR0503		5	4.8	3	•		10				15000	0.02		1.3			-40 to +125	No
SDE0604A		5.8	5.2	4.5	•	1.2			150				0.52			5.3	-40 to +125	Yes
SDR0603		5.8	5.8	3.9	•	1.5				470		0.15		3			-40 to +125	No
SDR0604		5.8	5.8	4.8	•	1.2				1000		0.12			4.2		-40 to +125	No
SDR0703		6.5	4.5	2.7	•	1				1000			0.08		2.2		-40 to +125	No
SDR6603		6.6	4.45	2.92	•	1				1000			0.07		2.9		-40 to +125	No
SDE0805A		7.8	7	5	•	1.5				470			0.55			5.8	-40 to +125	Yes
SDR7030		7	7	3	•	1				1000			0.15		3		-40 to +125	No
SDR7045		7	7	4.5	•	1.2				1000			0.22			3.8	-40 to +125	No
SDR0805		7.8	7.8	5.3	•	1.5					4700		0.08			6	-40 to +125	No
SDR1006		9.8	9.8	5.8	•	1.5					4700		0.1			6.4	-40 to +125	No
SDE1006A		10	9	5.4	•	1.5				820			0.45			7.2	-40 to +125	Yes
SDR1030		10	10	3	•	2.7				1000			0.2		3		-40 to +125	No
SDR1045		10	10	4.5	•	2.7				1000			0.38			4.8	-40 to +125	No
SDR1105		11.1	10	4.8	•		10		200					1	4		-40 to +125	No
SDR0906		12.5	10.5	6.3	•	2.2					10000		0.04		4		-40 to +125	No
SDR1005		12.7	10	5	•	0.68					10000		0.1			8.5	-40 to +125	No
SDR1305		12.7	12.7	4.8	•	2.5				1000			0.46			7.2	-40 to +125	No
SDR1307		13	13	7	•	1.5				1000			0.65			9.5	-40 to +125	No
SDR1307A		13	13	7	•	1.5				1000			0.65			9.5	-40 to +125	Yes
SDR1806		18.3	14	6.6	•	1				1000			0.5			10	-40 to +125	No
SDR2207		22	15	7	•	0.78				1000			0.6			15	-40 to +125	No

Common Mode Chip Inductors - SRF Series, SMD Non-Shielded

Model	Photo	Size (mm)			Core	Inductance Range (μH)				Impedance Range (Ω)				I _{rms} Current Range (mA)			Operating Temperature Range (°C)	AEC-Q200 Compliant, Automotive Grade
		Length	Width	Height		1	10	100	1,000	10	100	1,000	10,000	100	1,000	10,000		
SRF2012A		2	1.2	1.2	•					30			900	100		400	-55 to +125	No
SRF2012AA		2	1.2	1.2	•					67			360	300		400	-55 to +125	Yes
SRF3216		3.2	1.6	2	•						90		2200	200		400	-40 to +125	No
SRF3216A		3.2	1.6	2	•						90		2200	200		400	-55 to +125	Yes
SRF4532		4.5	3.2	2.8	•	1			100		68		5000	200		1200	-40 to +125	No



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