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blocks. From Chip Inductors to Chip Choke Coils, **Panasonic manufactures a wide range of inductive components.** With Panasonic Electronic Components, enter the next dimension.

A Wide Range of Inductive Components

Panasonic Electronic Components offers a wide range of Inductor Products. These comprehensive guides provide a quick and easy snapshot of Panasonic's offering of chip inductors and choke coils which will make choosing the appropriate part for the application easy.

ELJ Series Chip Inductors

Panasonic Electronic Components offers a variety of Chip Inductors ranging from Laser-cut 0402 and 0603 case sizes to 0805 through 1812 case sizes with wirewound construction.



Laser-cut Inductors provide tight control of inductance value and mounting in any direction. For higher Q, there are ELJ-QF (0402) and ELJ-QE (0603) with higher Q than the general use ELJ-RF and ELJ-RE, respectively. While wirewound devices offer a bit better Q in high frequency circuits, the ELJ-QF and ELJ-QE Series provide adequate Q in a cost effective solution. For higher current there are the ELJ-PF and ELJ-PE Series.

ELL Series Chip Choke Coils







Panasonic offers a selection of SMT Chip Choke Coils in different form factors and footprints for a variety of applications. There are both magnetically shielded and non-shielded Series.

Panasonic Electronic Components SMT Chip Choke Coils are available with a wide variety of specifications, including, magnetically shielded, low profile, thin, low DC resistance, large current capability, and vibration resistant.

ETQ Series Power Choke Coils

Panasonic Power Choke Coils offer high heat resistance, excellent DC bias characteristic. Hi-BS With Ferrous alloy magnetic material and great reliability at high temperatures with a high tolerance for vibration. These Power Choke Coils also have very low audible noise and are extremely efficient with low DCR and eddy current loss reduction. Metal composite core material, with distributed airgap. and stamped frame coils on some series provide near linear Inductance vs Current and do not saturate, while also offering a cost effective design solution.

ELC Series Radial Leaded Choke Coils

Panasonic offers both magnetically shielded and non-shielded Radial Leaded Choke Coils. The magnetically shielded series are, ELC-10E-L. ELC-12E-L, ELC-15E-L, and ELC-18E-L while the non-shielded Series include ELC-09D, ELC-11D, ELC-12D, ELC-16B,



and ELC-18B. Both are primarily used for noise filtering and energy storage applications.

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Inductors, Chips and Chokes Quick Selection Guide Making easy to use Panasonic SMT Chip Choke Coils (CCC) and Power Choke Coils easy to choose as well,

Making easy to use Panasonic SMT Chip Choke Coils (CCC) and Power Choke Coils easy to choose as well, we now have selection guides to facilitate SMT choke coil selection. With Inductance values down the left column and Series with their form factors across the top rows, it is now easy to locate available values. Also shown are Rated Current and DC Resistance (DCR).

	Size Code Inductor Range										Rated Current (mA)										
Series					Induct	or Range	е				Rated	Curren	t (mA)								
	Inch (mm)	1n	10n	100n	1u	10u	100u	1m	10m	10	100	1K	10K	100K							
Chip Inducto	ors																				
ELJ-RF,QF	0402 (0603mm)	1nH			100nH	1116,9736					90 ■	400									
ELJ-QF	0402 (0603mm)	1.1nH		36nH	TOOTIIT						90	400									
ELJ-PF	0402 (0603mm)	2.2r	Н	10nH								750	1900								
ELJ-RE	0603 (1608mm)	1nH			220nH						70	500									
ELJ-QE ELJ-PE	0603 (1608mm) 0603 (1608mm)	2.2r		56nl	1						70	500	-0100								
ELJ-ND	0805 (2012mm)	2.2n		22nH		11000-11					120	700 5 40	2100								
ELJ-*C	1008 (2520mm)		10nH 10nH			1000nH		100uH			60	475									
ELJ-*A	1210 (3225mm)			47nH				330uH			30	600									
ELJ-PA***2	1210 (3225mm)				1uH			220uH			85 ■		1200								
ELJ-DA	1210 (3225mm)					39ul	+	100uH			250										
ELJ-*B	1812 (4532mm)		1800	220	hHi	C/2 // // C/2	827	20/07/2009	1000uH		55222	700									
Chip Choke	Coile																				
ELL-VEG						9/4/9/4/4	2		54/25439		79	Wallship	11 3/2 20 10								
ELL-VEG ELL-VFG-C	(3.0x3.0x1.0) (3.0x3.0x1.2)				1uH		68	uH			180		1800								
ELC-3FN	(3.2x3.2x1.2)			0.2u).5uH		33uH	BuH			170	0	2000								
ELC-3GN	(3.2x3.2x1.55)			0.20	1uH			BuH			190		1300								
ELL-4FG	(3.8x3.8x1.2)				1uH		47uH					0	1900								
ELL-4LG	(3.8x3.8x1.8)				1uH			■ 150uH			22	0	1900								
ELL-4GG	(3.8x3.8x1.4)				1.2u			100uH			25	0	1900								
ELL-SFG ELL-5PR	(4.0x4.0x1.2) (5.0x5.0x2.0)			_	1uH			470ul	1		100		1700								
ELL-5PS	(5.0x5.0x2.0)			0.4	47uH 1.2u⊢		22uH	1400:11			120	800	3900								
ELL-6GG	(6.0x6.0x1.6)				1.2ur 1uH			100uH 100uH				0	2500								
ELC-6GN	(6.0x6.0x1.6)				1.5uH		68	BuH				00	2200								
ELL-6PG	(6.0x6.0x2.0)				0.8uH ■			100uH			3	80	2800								
ELL-6RH	(6.0x6.0x2.8)				1uH			220uH			200)	3000								
ELL-6SH ELL-6UH	(6.0x6.0x3.3)				1uH			6800	н		160		3400								
ELL-8UV	(6.0x6.0x5.0) (8.0x8.0x6.5)				4.0.11	10uH		000 11	1mH		180		1800								
ELL-ATV	(10x10x4.5)				1.3uH 1.5uH			220uH	1mH		00	660	5400 6700								
ELL-CTV	(12x12x4.5)				1.5ur 1.2uH				1mH		4	10	6500	(
Power Chok	*				1.2	175				272											
ETQ-P5M***YFM	(7.5x7.0x5.4)				4.7	uH I I ∠	8uH I I					1.6A	■ 4.5 _A								
ETQ-P5M***YFK ETQ-P5M***YFC	(8.5x8.0x5.4)				2.45ι		H ■ 48uH					1.8 _A	■ ■2.6 _A ■7.								
ETQ-P5M***YGC	(10.7x10x5.4) (10.7x10x5.0)				2.5ι	H ■ 4.7uH		97uH				4.0	7.2A	10a							
ETQ-P3LR**XFN	(7.5x6.5x3.0)			0.33	uH II			97un				1.6 _A	-	17 _A							
ETQ-P3LR**YFN	(6.5x6.0x3.0)				68uH I 1uH	■1.5uH							5.6a 1 7.								
ETQ-P4LR**AFC	(11.7x10x4.0)			0.36	uH ■									■30a							
ETQ-P4LR**XFC	(11.7x10x4.0)				68uH ■									■ 21 _A							
ETQ-P4LR**WFC ETQ-P5LR**XFA	(11.5x10x4.0) (14.5x12.5x5.0)				0.56u								21A								
ETQ-P3H**BFA	(13.0x12.9x3.9)				.5uH ■0.6uH								27A 12A	■30a ■23a							
ETQ-P2H**BFA	(13.0x12.9x4.9)				uH ∭ 0.8uH ∭ H	■ 1.43uH ■ 2.61uH								■23A ■36A							
ETQ-P1H**BFA	(13.0x12.9x6.0)				.6uH ■ 1uH								l	■ 36A							
ETQ-P6F**BFA	(12.5x12.5x6.0)					3.32uH								■19A							
ETQ-P6F***FA	(12.5x12.5x5.7)				0.8uH		10.2uH						6.5₄	14.2₄							
					and the same																
	ed Choke Co	ils	/		The second	NACO COLORO															
ELC-09D	(ø9.5×8.9) w/case				2.2u					10mH	.08a		3.5 _A								
ELC-11D	(ø11.5×13.9) w/case				2.2u	1				10mH	.16A		5.3 _A								
ELC-12D	(ø12.5×16.5)						100uH			10mH	.27 _A		1.9 _A								
ELC-16B ELC-18B	(ø16.0×23.0) (ø20.0×27.0)				3.3u					10mH	.26 _A			5.5A							
ELC-10E*L	(Ø20.0×27.0)				3.30					10mH	.36A		2.9 _A	.5 _A							
ELC-12E*L	(ø13.0×18.5)				3.9t	IH ZuH			18	200uH 10mH	.1a .13a		2.9A 4.4A								
ELC-15E*L	(ø16.0×22.0) 3 pin					5.6uH				10mH	.34 _A		5.4 _A								
ELC-18E*L	(ø19.0×25.1) 4 pin					5.6uH				10mH	334		5.5A								

Chip Choke Coil Detailed Selection Guide

Ser	es	ELL-	VEG	ELL-VF	G-C	ELC-3F	-N***	ELC-3	GN***	ELL-4I	FG***A	ELL-4L	G***A	ELL-40	G***	ELL-SF	A***E	ELL-5F	PR***	ELL-5I	PS***	ELL-6	GG***	ELC-6	GN***	ELL-6	PG***	ELL-6	RH***	ELL-6	SH***	ELL-6	UH***	ELL-8	BUV***	ELL-	ATV***	ELL-C	TV***	Seri	es
Length x W			3.0 >				3.2 x	3.2				3.8 x	3.8			4.0 x 4			5.0x5					1			6.0	x 6.0		1					*8.0		*10.0	12.0 >		Foot Are	
Height May Hais		1.0	00	1.10		1.20	0	1.5		1.1		1.8	0	1.4	0	1.10		2.0		1.8		1.5	50 .6	- 1	.6	2	.0	2.			.0	5.	Λ		.5		.2 .5	4.		Height	
Max Heig Shield																																								Max Heig Shield	
Unshi		Shiel		Shield		Unshie		Unshie		Shie		Shiel		Shield		Shield		Shield		Shiel		Shie		Unshi			elded	Shiel			lded	Shie			elded		elded	Shie		Unshie	
	L value at 0A	Rated Current	DCR ±20%		DCR ±20%		DCR ±20%	Rated Current	DCR ±20%	Rated Current	DCR ±20%	Rated Current	DCR ±20%	Rated Current	DCR ±20%			Rated Current		Rated Current	DCR ±20%	Rated Current	DCR ±20%	Rated Current	DCR ±20%	Rated Current	DCR ±20%	Rated Current			L value at 0A										
Marking	Lo [uH]		[mOhm]	lo [A]		lo [A]			[mOhm]	lo [A]		lo [A]				lo [A] [r			[mOhm]					lo [A]			[mOhm]		[mOhm]		[mOhm]		[mOhm]		[mOhm]		[mOhm]	lo [A]		Marking	Lo [uH]
L=+-20%		ıH,"M"),+	30%(U	nder 10uh	H,"N")																																			I	
R10 R20	0.1					2.50	29.0											5.5	12																					R10 R20	0.1
R50	0.5			2.00	37	2.00	20.0											0.0	12																					1120	0.2
R08	0.8																									2.8	24													R08	0.8
1R0	1.0	1.60	61	1.50	50	1.40	80	1.30	64	1.90	45	1.90	43				49	4.5	21			2.5	27					3.00	19	3.40	19									1R0	1.0
1R2 1R3	1.2													1.90	50	1.55	58	4.2	21	2.50	22													5.40	7Ω			6.50	4.6	1R2 1R3	1.2 1.3
1R5	1.5	1.40	74	1.30	61							1.80	48					4	25	2.40	28	2.25	36	2.2	60	2.5	30	2.40	24	3.20	24			3.40	7.0	6.70	5.3			1R5	1.5
1R6	1.6							1.20	83																															1R6	1.6
1R8	1.8					1.10	110							1.55	71																									1R8	1.8
2R0 2R2	2.0	1 10	110	1.10	87	1.00	100	1.00	100	1.30	70	1.50	55	1.40	88	1.00	70	0.0	32	2.10	34	1.95	45	1.0	70	2.2	37	2.30	30	2.60	26			5.10	8.7	6.20	6.3	6.30	5.6	2R0 2R2	2.0
2R4	2.4	1.10	110	1.10	01	1.00	120	1.00	100			1.50	55	1.40	00	1.30	79	3.2	32	2.10	34	1.90	45	1.9	70	2.2	31	2.30	30							0.20	0.3			2R4	2.4
2R5	2.5																																							2R5	2.5
2R7	2.7					0.95	150					1.40	63							2.00	40	1.8	54					1.80	39	2.40	31			4.75	10			5.70	7.0	2R7	2.7
3R0	3.0	0.00	010	0.00	110			0.07	100	1 10	110	1 00	70	1.00	110	1 10	110	2.6	37	1 00	46			1.5	77	47	44	1.00	44	0.00	34					5.35	0.0			3R0	3.0
3R3 3R6	3.3	0.82	210	0.96	110			0.97	130	1.10	110	1.30	72	1.20	110	1.10	110			1.90	40			1.5	77	1.7	44	1.60	44	2.20	34					5.35	8.8			3R3 3R6	3.3
3R8	3.8																																							3R8	3.8
3R9	3.9													1.15	120							1.65	60			1.6	51											5.60	8.5	3R9	3.9
4R1	4.1																							1.40	90															400	10
4R2 4R3	4.2																																			5.00	10.0			4R2 4R3	4.2
4R7	4.7	0.75	240	0.74	150	0.75	280	0.78	200	0.86	160	1.10	96	1.00	160	1.00	130	2.2	56	1.50	61	1.4	70	1.3	115	1.5	58	1.58	49	2.00	42			4.20	12	0.00	10.0	5.20	9.9	4R7	4.7
5R1	5.1							0.76	220																			1.55	56							4.35	14			5R1	5.1
5R6	5.6					0.68	310							0.97	170											1.4	65			1.80	49							4.90	11	5R6	5.6
6R2 6R8	6.2	0.58	350	0.60	230	0.62	360	0.68	250	0.80	220	0.93	140	0.93	200	0.80	180	1.7	85			1.15	110	1.10	150	1.4	70	1.40	62	1.50	52			3.80	16	4.00	16	4.50	14	6R2 6R8	6.2 6.8
7R0	7.0	0.56	330	0.00	230	0.02	300	0.00	230	0.00	220			0.90	200	0.00	100	1.7	00			1.10	110	1.10	130	1.4	70			1.50	52					4.00	10	4.50	14	7R0	7.0
7R5	7.5					0.60	390																					1.25	80					3.30	17					7R5	7.5
8R2	8.2							0.54	410					0.87	220													1.20	87	1.40	61					3.70	18	4.40	15	8R2	8.2
9R1	9.1	0.50	400	0.55	200	0.50	100	0.50	400	0.65	000	0.00	200	0.77	050	0.74	000	1.1	150	1.00	100	0.0	170	10	170	10	110	110	OF	1.00	or.	1 00	60	2.00	00	0.00	00	2.00	17	9R1	9.1
100 120	10 12	0.52	480	0.55	380	0.53	430	0.53	430	0.65	290	0.80	200	0.77	250 380	0.74	230	1.4	150	1.00	120	0.9	170	1.0	170	1.3	110	1.10	95 130	1.30	65 71	1.80	63 71	3.00	22	3.30 2.90	23 25	3.90	22	100 120	10 12
150	15	0.43	710	0.48	540	0.37	1000	0.43	600	0.55	480	0.62	300	0.58	500	0.50	390			0.79	170	0.8	210			1.0	150	0.85		1.10	96	1.60	79	2.50	26	2.80	32	3.10		150	15
160	16																																							160	16
180	18	0.00	1000	0.05	710	0.00	1100	0.00	050	0.05	600	0.55	200	0.50	640	0.47	500			0.05	000	0.00	200	0.70	050	0.00	000	0.80	170	1.00	130	1.40	88	0.05	40	2.50	38	3.00	30	180	18
220 270	22 27	0.33	1200	0.35	710	0.33	1180	0.33	950	0.35	620	0.55	390	0.50	640	0.47	520			0.65	290	0.62	300	0.70	350	0.80	230 260	0.70	220 260	0.90	140 160	1.30	98	2.05	53	2.20	45 56	2.70	37 43	220 270	22 27
330	33	0.26	2300	0.28	1160	0.26	1900	0.28	1400	0.30	1.05	0.43	610	0.40	980	0.35	860			0.49	470	0.49	510	0.60	520	0.70	300	0.60	380	0.70	180	1.10	130	1.65	78	1.80	62	2.20	50	330	33
390	39																											0.55		0.65	240	1.00	150	1.50	90	1.60	74	2.10		390	39
470	47	0.22	2700			0.23	2450	0.24	1950	0.26	1.6	0.36	920	0.35			1150				620	0.40	610	0.50	720	0.55	470	0.50		0.60	270	0.90	160	1.25	100	1.55	94	1.90	69	470	47
560 680	56 68	0.18	3500			0.17	4200	0.19	3000			0.27	1300				1300			0.43	750	0.38	860	0.5	830 1170	0.5	520 700	0.45	540 770	0.55	290 520	0.80	230	1.10	130	1.35	100	1.60	100	560 680	56 68
820	82	5.10	5550			5	.230	3.75	5556			5.L7	.550			0.22				0.34		5.56	230	3.40		0.42	800	0.35	870		600	0.65	260		.50	1.10	150	1.40		820	82
101	100											0.25	2200	0.25	2400	0.21	2400					0.30	1480			0.38	1000	0.30	1000	0.40	680	0.60	360	0.82	160	1.00	180	1.20	150	101	100
121	120											0.00	0000			0.20												0.28	1500		750	0.58	480			0.84	190	1.10		121	120
151 181	150 180											0.22	3000			0.19	3800 4300											0.25	1800	0.35	860 1300	0.50 0.47	680 750			0.78	250 320	1.00 0.93		151 181	150 180
221	220															0.14													2300		1400	0.41	840	0.66	370	0.70	360	0.84		221	220
271	270																														2400	0.37	1200			0.60	0.46	0.81	400	271	270
331	330									April 1	The same	The same of the sa				0.128	3900													0.24	2700	0.33	1360			0.55	550	0.66	500	331	330
391 471	390 470															0.10 1	2300													0.21	2800 3200	0.30	1500 1680			0.52	690 780	0.63		391 471	390 470
561	560							1								0.10	2000															0.26				0.47		0.58		561	560
681	680											-																		0.16	4300	0.24	2830			0.37	1150	0.47	1010	681	680
821	820									100	4 1	All res																				0.20				0.34		0.44		821	820
102	1000											100	33																			0.18	3670			0.32	1750	0.41	1500	102	1000
122 272	1200 2700										10	St.																												122 272	1200 2700
	50						1																							s indi											2.20

*Rated Current: This indicates the value of current when the inductance is 80% or more than nominal value and/or temperature rising 45deg lower at D.C superposition (at 20°)

Please ask a Panasonic Electronic Components representative to confirm product spec and availability prior to design in.

Power Choke Coil Detailed Selection Guide

22.7/0A

48.0/0A

156

±20%

±20%

48.0/0A 125

Ser	es			ETQ-P5M***YFK ETQ-P5M***YFC ETQ-P5M***YGC ETQ-P3W***WFN ETQ-P3L***XFN ETQ-P3M***YFN ETQ-P4L***AFM		ETQ-P4L***FC					ETQ-P5L***XFA ETQ-P3H***BFA)-P3H***BFA	ETQ-P2H***BFA ETQ-P1H***BFA				ETQ-P6F***BFA			ETQ-P6F****FA													
Length x V		7.5 x		8.5 x 8.0	10.7 x 10.0		7.0 x 6.6			7.5 X 6.5		6.5 X 6.0		8.7 X 7			11.5 X 10.0		11.7 X 10.	.0		14.5 X 12.5				_	13.0 x 12.9		4				x 12.5		
Max Heig		5.4n	nm	5.4mm	5.4mm 5.	0mm	3.0mm			3.0mm		3.0mm		4.0mr	ı		4.0mm		4.0mm			5.0mm			3.9mm		4.9mm		6.0mm		(6.0mm		5.7mm	
Magnetic Co		\A/iuo al	Call	Mine of Cail	Mired Ceil Mire	ad Cail	Minad Ca	.11	_	rana Cail	1	Composite	e 	\A/ina al C	i a il	T			France Cail							Га.	Dust Core (Fe	rrous Alloy	Powder)			Clot \		'n Ferrite C	Core
Winding Te	crinology	Wired		Wired Coil		ed Coil	Wired Co			rame Coil		Vired Coil	DOD 101	Wired C		L1 Value	L2 Value	DOD	Frame Coil	DOD	I	10)/61		L1 Value	LOVAL- DOD	L1 Value	ge Wise Coil	111/61-	10)/56-5	DOD 1	L1 Value		Vire Coil	141/61-	DOD
Marking	Inductance (uH) Tolerance	L0 Value Measured Current uH / lo [A]	DCR ±10% [mOhm]	Measured ±10% Current uH / [mOhm]	L0 Value DCR L0 Value Measured ±10% Measured Current uH / lo [A] Typ. UH / lo [A]	±10% Mea	ured Measured	±15% [mOhm]	Measured Current	Measured ±10% Current [mOhm]	Measured Current	Measured Current	±10% Meas [mOhm] Currer	sured Measur t uH / Currer [A] uH / A	ed ±10% t [mOhm]	Measured	Measured Current uH/A	±5% [mOhm]	L0 Value L1 Value Measured Measured Current uH Current / lo [A] uH/A	±5% [mOhm]	Measured Current uH /lo [A]	Measured Ourrent	DOB.	Measured Current uH / lo [A]	L2 Value DCR Measured ±20% Current ImOhn uH/A MAX	Measured Current uH/	L2 Value DCR Measured ±20% Current ImOhr uH/A MAX	Measured Current	Measured Current [r	±20% mOhm]	Measured Current uH/	L2 Value DCR Measured ±20% Current uH / A MAX	Saturation	Measured Current	±20% [mOhm]
R15	±20%	,,,,,	1360	1,75.	3.77.0 g 1,7p. 3.77.0 g	1,70.	G.1771	1,70	a. // 10 g y	GI 1774 Typ.	an in log g	GI 1771	1,50.	21//		l o p y	GII//	1,70.	7.004	1,76.		GI 1774		lo [A]	0.177	lo [A]	G. 1771	a moy y	G.1774		lo [A]		an no g g	an//	
R19	±20%															0.19/21A	0.17/28A	0.70 ±10%																	
R24	±20%												0.24	I/0A 0.2/24	A 1.0																				
R33	±20%								0.33/0A	0.28/17A 2.0																									
0R3	±20%																									0.29/36A	0.24/50A 0.54							'	
R36	±20%												0.36	6/0A 0.3/20	A 1.35	0.36/17A	0.34/24A	1.10	0.36/0A 0.29/30A	0.76															
0R4B	±20%																							0.36/23A	0.32/32A 1.04										
R42	±20%												0.42	2/0A 0.35/13	'A 1.5																				
R45	±20%															0.45/24A	0.38/25A	1.10																	
R50 R56	±20%															0.56/15A	0.53/21A	1.56			U.50/30A	0.46/42A	U.80 ±7%												
R60	±20%															U.56/15A	0.53/21A	1.00			0.60/304	0.54/42A	1 10 +5%												
OR6B	±20%																				5.30/30A	0.04/4ZM	1.10 ±0%								0.58/19A	0.54/27A 1.44			
0R6*	±20%																											0.60/26A	0.45/36A			1,44			
R68	±20%										0.68/0A	0.59/7.4A	6.3																						
0R7B	±20%																		0.68/0A 0.59/21A	1.58						0.69/21A	0.59/29A 1.30								
0R8B	±20%																							0.80/16A	0.71/22A 2.33										
0R8L	±30%																																1.8/20.0A	0.8/14.2A	2.24
1R0	±20%					1.0	OA 0.92/8.1A	6.9			1.0/0A	0.88/6.6A	7.9																						
1R0B	±20%																											1.00/19A	0.80/27A	1.56					
1R0S	±30%																																1.9/15.4A	1.0/14.2A	2.24
1R1B	±20%																														1.06/16A	0.99/22A 2.24			
1R2B 1R2H	±20%																									1.22/16A	1.04/22A 2.27						2.3/11.7A	1.2/14.2A	0.04
1R3L	±30%																																2.3/11.7A 2.5/15.8A	1.2/14.2A 1.3/12.5A	
1R4B	±20%																							1 43/12Δ	1.25/17A 4.52								2.0/10.6A	1.3/12.3A	3.30
1R5	±20%					1.5	/OA 1.33/6.6A	9.8			1.5/0A	1.36/5.6A	11.0											1.40/12A	1.23/1/A 4.02										
1R6S	±30%										1.0.0																						2.8/12.2A	1.6/12.5A	3.30
1R8B	±20%																														1.71/14A	1.50/20A 3.30			
1R8B	±20%																									1.83/14A	1.49/20A 3.48								
2R0H	±30%																																3.5/8.7A		
2R0L	±30%																																3.1/12.1A	2.0/10.8A	4.92
2R2	±20%					2.2	OA 1.95/5.8A	15.5																										'	
2R5S	±30%													4																			3.6/9.3A	2.5/10.8A	4.92
2R5B	±20%												_																	1	2.45/12A	2.17/17A 4.92			
2R5Y	±20%			2.45/0A 7.6	2001								1	1																					
2R5 2R6B	±20%				2.5/0A 5.3																					0.64/40*	2 12/474 4 00								
2R6B 2R9L	±20% ±30%												-	47.73		100	15	A								2.61/12A	2.12/17A 4.98						4.1/10.0A	2.9/9.3A	6.48
3R2H	±30%											1		1	-																		4.8/7.1A		
3R3	±20%				3.3/0A 7.1	3.3	OA 2.9/4.8A	25.0			A	201	48.0	NO.	-	2119																			
3R4B	±20%					5.0							157.00	10.00	1		A CO														3.32/10A	2.96/14A 6.48			
3R5S	±30%									-					4																		4.9/8.0A	3.5/9.3A	6.48
4R1L	±20%									1				1 1/15	200																			4.1/7.9A	
4R6H	±25%										100																						6.6/6.0A		
4R7	±20%	4.7/0A	20.4		4.7/0A 10.2	4.7	OA 4.2/3.8A	33.0			-																								
6R4H	±25%										100	-						10															8.3/5.2A	6.4/7.9A	8.64
8R2H	±25%										1		1					9															10.4/5.0A	8.2/7.2A	10.9
102H	±25%												No.	44			BELL																12.5/4.0A	10.2/6.5A	13.3
100Y	±20%				10.0/0A 23.8							Au							(1) "Rated Curre	nt" & "I 1	value/ mo	easured ou	ırrent" mo	ans CUP	RENT at which	the tempo	erature rises, the	coil itself	s 40°C with	DC curr	rent (not	actual working	operation	condition	
220YFC	±20%				21.5/0A 45.0						1								(1) Hated Guile	u L1	raide/ 1118	aouieu cu		OUN	LITT AL WINCH	ano tempe	(2) "Saturation								
220	±20%			22.0/0A 63.0								7													(3) Dust	Core and N	Metal Composite								_

(4) Inductance measurement; at 100kHz, at 20°C

(8) DCR measurement; at 20 °C.

(5) L1 Value (Mn-Zn, Mn-Ni Core Type); at Flat point (25 °C) with DC current applied. (6) L1 Value (Dust Core and Metal Composite Core Type); Measured at Rated current.

(9) Inductance Tolerance: at Flat point (Mn Core), at DC Current (Dust, MC)

(7) L2 Value (Dust Core and Metal Composite Type); Measured at 1.4 times higher than Rated current. (Rated current x 1.4)

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■ Cap	acitors		
ECA, EEA, EEU, ECE	Aluminum Electrolytic Cap. (Radial Lead)	ECQ	Thru Hole Polyester Film Cap.
ECC-T, ECK-T	SMT Ceramic Disc	ECW-F, ECW-H	Thru Hole Polypropylene Film Cap.
ECE, ECO, EET	Aluminum Electrolytic Cap. (Snap-in)	ECH, ECP, ECW-U	SMT Plastic Film Cap.
EEC	Electric Double Layer (Gold Cap.)	EZA	Networks: Chip Cap., RD, 3 Term.
EEE, EEV	SMT AL Lytic (Lead Free)	EEH	Hybrid Aluminum Electrolytic Cap.
EEF	Specialty Polymer Cap. (SP Cap)		
■ Res	istors		
ERA	Metal/Thin Film Chip Resistors	ERJ	Thick Film Chip Resistors
ERB	Micro Chip Fuse	ERX	Metal Film Resistors
ERF	Wirewound Resistors	ERQ	Metal (Oxide) Film Fuse Resistors
ERG	Metal (Oxide) Film Resistors	EVM	Trimmers: Carbon Chip; 6mm Carbon
EXB	Chip Res. Networks, Res. Array, Chip Attn, RC Fitter		
■ Indu	uctors and Filters		
EFC	Saw Devices	ELL	Choke Coils (SMD)
ELC	Choke Coils	EXC	Bead Cores; Chip Bead Cores; Chip Bead Arrays; EMI Filters
ELF	Line Filters	ELT	Voltage Step-Up Coils
ELJ	Chip Inductors	ELW	L-R Filter (Inductor)
ELK	Inductance Type EMI Filters	ETQ	Power Choke Coils (SMD)

■ Circ	uit Pro	tection											
EYG	Pyrolytic (Graphite Sheet (PGS)		ERZ		ZNR	(Metal Oxide Varistors)					
EZJ	Multilayer (Chip Varistor, ESD Protect	ion	EYP		Ther	mal Cut-offs (TCO)						
ERT-J	NTC Therr	mistors		EZA		ESD Suppressor							
■ Elec	trome	chanical											
ESB	Push Swit	ches		EVN		Cermet Trimmer Potentiometers							
ESE	Detector a	and Push Switches		EVP		Light Touch Switches							
EVE	Encoders			EVQ		Light	ght Touch Switches, Encoders						
EVC, EVU, EWV	Rotary Pot	tentiometers		EVW		Position Sensors, Rotary Potentiometers							
EVA	Slide Poter Position Se			EVB, E	WA	Slide	Potentiometers						
■ RF I	Module	es											
ENW	Wireless F	RF Modules		Bluet	ooth	® M	lesh Networking	ISM					
■ Sen	nicond	uctors New P.	rod	uct Gr	oup!								
MOS FET	F*,MTM	N Channel/P Channel	,	ASSP	AN,I	ΝN	DC-DC Converter IC, LE Matrix LED Driver, Lens LNA, Hall IC						
Diode	DA	Switching Diode	Tra	ansistor	DS		Small Signal Transistor						
Diode	DB	Schottky Barrier Diode	Tra	ansistor	DSK		Junction FET	Junction FET					
Diode	DA**F	Fast Recovery Diode	Tra	ansistor	DR		Transistor w/ Built-in Resistors						
Diode	DZ	Zener Diode	Tra	ansistor	DM		Composite Transistor	tor					

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