

print2web code - Accessing datasheets quick & easy

The print2web code is a quick & easy search function to locate the precise datasheet you'll need.

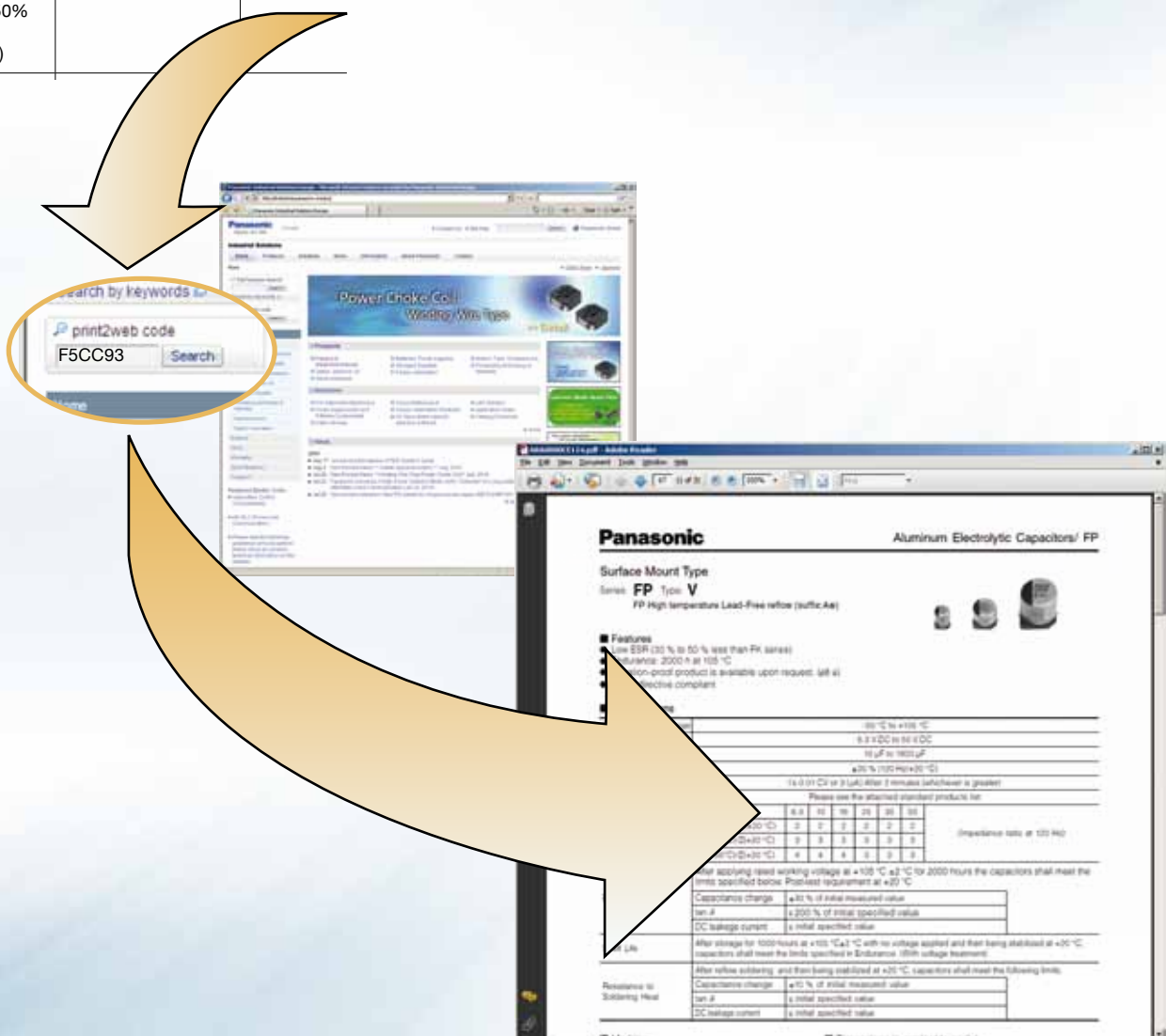
Our homepage <http://industrial.panasonic.com/eu/> offers the complete industrial product catalog, which is a quick & easy overview of our product portfolio.

If you need a detailed datasheet for the displayed series in this catalog a comfortable short cut exists.

This quick & easy short cut is called print2web code and is shown next to each product series within this catalog.

The print2web code allows you to access the datasheets within a few seconds as shown below.

Features	Part No.	print2web
Low ESR (30% to 50% less than FK series)	EEEFpxxxxxxx	B63F85



INDEX

Panasonic Industrial		Switches	
The „Technostory“ concept	4	Light Touch Switches - Top Push	20
„Total Solution“ – Components & Devices	6	Light Touch Switches - Side Push	24
Capacitors		Encoders	
Aluminum Electrolytic Capacitors	8	Rotary Potentiometers	25
Electric Double Layer Capacitors	10	Encoders	25
Ceramic Capacitors	10	Center Space Encoders	27
Polymer Aluminum Capacitors	10		
Film Capacitors	11	Fuses	
Resistors		Thermal Cutoffs	28
Thick Film Resistors	12	Wireless Modules	
Thin Film Resistors	12	Bluetooth	30
Shunt Resistors	13	Industrial-Scientific-Medical Solutions	32
High Power & Pulse Proof Resistors	14	nanoLOC	32
Anti-Sulfated Resistors	14	IEEE 802.15.4 (Mesh Networking)	32
Metal (Oxid) Film Resistors	14		
Network & Array Resistors	15	Others	
Trimmer Potentiometers	15	“PGS” Graphite Sheets	34
Inductors		ZNR Transient/Surge Absorbers	34
Chip Inductors	16	Imprint	
Choke Coils	16	Sales Bases	35
Voltage Step-up Coils	16	Caution and warning	35
Power Choke Coils	17		
EMC Components			
Ferrite Bead Core	18		
EMI Filters	19		
RS Networks	19		
ESD Suppressor	19		

Another side of Panasonic has a line of devices and advanced technologies for industry

Technostory





One of the large pillars of Panasonic's business is supporting manufacturing, which means we deliver key devices to manufacturing sites all over the world.

We have a large organization and network, specific product lineups manufacturers need, and unique technologies and know-how.

We refine and apply all of these to the devices we make, and they in turn contribute to your business development.

Sharing our common dreams, we want to create a new value - „Technostory“ is how we identify our business concept.

The „Technostory“ concept

Offering optimum solutions as we share the vision — customers' needs and

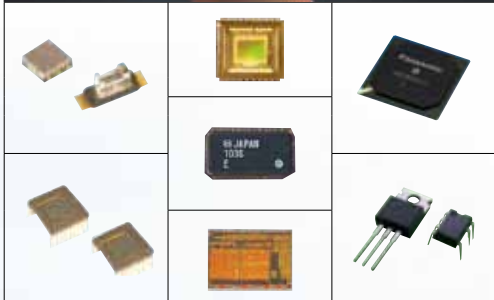
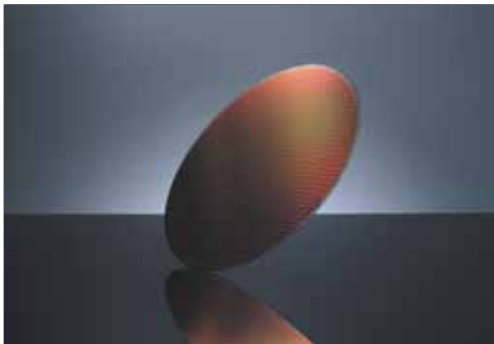
Panasonic Group's seeds are combined.

Our „Technostory“ is to envision the dreams for future together in a powerful „win-win partnership“.

Panasonic provides „Total Solutions“ trough various components and devices.

Panasonic delivers a wide range of products used in production, from semiconduc-
tors and devices to complete FA solutions. We contribute to your business development us-
ing our „One Stop Shopping“ or even our „One Windows“ global sales platform.

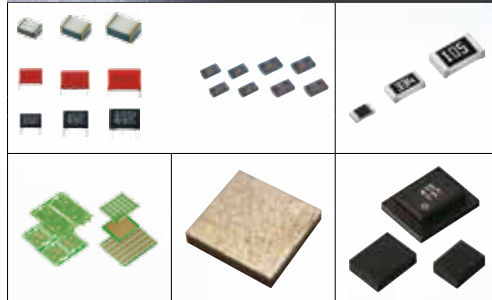
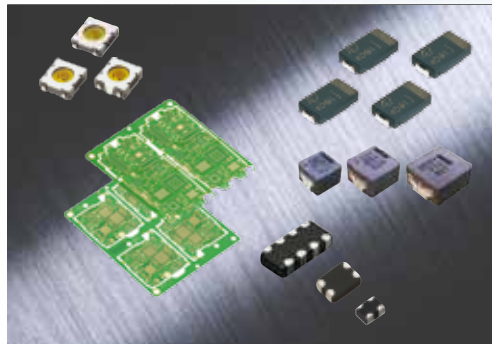
Semiconductors



Semiconductor

- Microcomputers
- Image Pickup Devices
- Application-Specific Stand-
ard-Product Ics
- Magnetic Field Sensors
- Multi Chip Discret Devices
- Transistors
- Diodes
- Gallium Arsenide Devices
- Opto Electronic Devices
- Fuses (Circuit Protector Elements)

Industrial Products (Electronic Components and Devices)



Passive & Electromechanic

- Resistors
- Capacitors
- Inductors
- Switches
- Encoders
- Filters
- RF/ Network Units
- EMC Components
- Fuses
- Thermistors



Batteries Power Supplies

- OEM Batteries
- Power Supply Units
- Power Circuit
Components

Components & Devices

Factory Automation



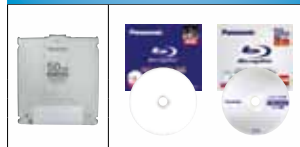
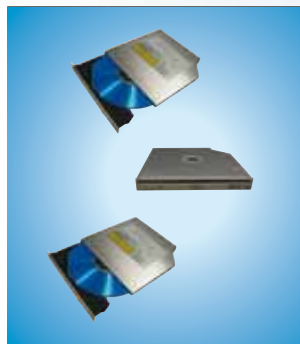
Motors, Fans, Compressors

- Motors
- Compressors
- Micro & Precision Motor Pumps



Optics, Sensors, Displays, Speakers

- Display Devices
- Tuners
- Input/ Output Units
- Sensors
- Optics Components
- Cameras
- Acoustic Components



Storages

- Driver Units
- Media

Production technology and mounting know-how built up from the manufacture of finished products. FA systems and other production equipment to manufacturing workplaces. They are Panasonic's expertise. Knowing the manufacturing process from A to Z, Panasonic offers unique solutions.



Capacitors

Aluminum Electrolytic Capacitors – Surface Mount Type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
 Type V - Series S High temp, reflow	-40 to +85 °C	2.000 h	6,3 to 50 V	0,1 to 1.500 µF	5,5 mm height Dia. ≤ 6,3 mm	EEExxAxxxxAx	30A8B1
			4 to 100 V	0,1 to 1.500 µF		EEExxAxxxxNx EEExxAxxxxSx EEExxSxxxxSx	1B405E
Type V - Series HA High temp, reflow	-40 to +105 °C	1.000 h	6,3 to 50 V	0,1 to 1.500 µF	5,5 mm height	EEEHxxxxxxxAx	6944F7
Type V - Series HA			6,3 to 100 V			EEEHxxxxxxP EEEHxxxxxxR	5E8943
Type V - Series HB High temp, reflow	-40 to +105 °C	2.000 h	6,3 to 50 V	0,1 to 470 µF	6,1 mm height Dia. ≤ 6,3 mm	EEEHBxxxxxAx	569FF4
Type V - Series HB			4 to 50 V			EEEHBxxxxxP EEEHBxxxxxR EEEHBxxxxxSx	21D54D
Type V - Series HC		3.000 h	6,3 to 50 V	0,1 to 1.000 µF	Dia. 8-10: 5.000 h	EEEHxxxxxxx	26E72F
Type V - Series HD High temp, reflow		5.000 h	6,3 to 100 V	0,47 to 1.000 µF		Long life	EEEHDxxxxxx EEEHDxxxxxAx
Type V - Series HD High temp, reflow Medium-size			6,3 to 35 V	680 to 7.500 µF	EEEHDxxxxxAM EEEHDxxxxxAQ		98E351
Type V - Series FC High temp, reflow		-40 to +105 °C	1.000 h		1 to 1.500 µF	Low impedance (50% less than HA series)	EEEFxxxxxAx
Type V - Series FC	6,3 to 50 V			EEEFxxxxxP EEEFxxxxxR			CEF20E
Type V - Series FK High temp, reflow	-55 to +105 °C	2.000 h	6,3 to 35 V	4,7 to 1.500 µF	Low impedance	EEEFKxxxxxAP EEEFKxxxxxAR	B73CE6
Type V - Series FK High temp, reflow Medium-size		5.000 h	6,3 to 100 V	47 to 6.800 µF	105 °C 5.000 h	EEEFKxxxxxAM EEEFKxxxxxAQ	B5D2D3
Type V - Series FK		2.000 to 5.000 h					
Type V - Series FP High temp, reflow		2.000 h	6,3 to 50 V	10 to 1.800 µF	Low ESR (30% to 50% less than FK series)	EEEFxxxxxxx	F5CC93
Type V - Series TG	-40 to +125 °C	1.000 h 2.000 h	10 to 100 V	10 to 4.700 µF	40% smaller than TA series	EEETGxxxxxx EEETGxxxxxx	8F3EFC
Type V - Series TK High temp, reflow Medium-size		2.000 h		47 to 4.700 µF	125 °C 2000 h	EEETKxxxxxAx	70D12A
Type V - Series TK		3.000 h	10 to 35 V	47 to 470 µF	Low ESR at -40 °C (50% lower than TG series)	EEETKxxxxxP EEETKxxxxxUP	791DAF
Type V - Series TP High temp, reflow		3.000 h (D8: 2.000 h)				Low ESR	EEETPxxxxxAx
Type V - Series EB	-25 to +105 °C	3.000 to 5.000 h	160 to 450	2,2 to 100 µF	Dia, 10 to 18mm	EEVEBxxxxxx	D831BE

Vibration-proof product is available upon request (≥ ø 8).

Aluminum Electrolytic Capacitors – Radial Lead Type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
 Type A - Series FC	-55 to +105 °C	1.000 to 5.000 h	6,3 to 100 V	1 to 15.000 µF	Low impedance	EEAFCxxxxxxx EEUFCxxxxxxx	B93350
		3.000 to 5.000 h	6,3 to 35 V	180 to 12.000 µF	Low impedance (10 to 30% less than FC series)	EEUFKxxxxxxx	60AB79
Type A - Series FM	-40 to +105 °C	2.000 to 7.000 h	6,3 to 50 V	22 to 6.800 µF	Low Impedance	EEUFMxxxxxxx	0EA261
Type A - Series FR		6.000 to 10.000 h		100 to 8.200 µF	Low ESR	EEUFRxxxxxxx	A73149
Type A - Series ED	-25 to +105 °C	8.000 to 10.000 h	160 to 450 V	10 to 330 µF	High ripple current(at high frequency)	EEUEDxxxxxxx	B69A78
Type A - Series EB	-40 (-25) to +105 °C	5.000 to 10.000 h	10 to 450 V	0,47 to 3.300 µF	Long life Low profile	EEUEBxxxxxxx	E21B7C
Type A - Series EE	-25 to +105 °C	8.000 to 10.000 h	160 to 450 V	10 to 330 µF	High ripple	EEUEExxxxxxx	48AF28
Type A - Series TA	-40 to +125 °C	2.000 h	10 to 63 V	1 to 4700 µF	1000 Heat cycle Polyester sleeve	EEUTAxxxxxxx	FB53CB
Type A - Series NHG	-55 (-25) to +105 °C	1.000 2.000 h	6,3 to 450 V	0,1 to 22.000 µF	+105 Cel 1000h;2000h	ECAxxHGxxxxx	6038F4
Type A - Series GA	-55 to +105 °C	1.000 h	10 to 50 V	0,1 to 220 µF	7mm height	EEAGAxxxxxxx	8116EC
Type A - Series GA Bi-polar	-40 to +105 °C	1.000 2.000 h	6,3 to 50 V	0,47 to 330 µF	Bi-polar	ECAxxENxxxxx	3B8F67
Type A - Series M	-40 to +85 °C	2.000 h	6,3 to 450 V	0,1 to 22.000 µF	Smaller than SU series	ECAxxMxxxxx	B4B7D8
Type A - Series SU Bi-polar			6,3 to 50 V	0,47 to 6.800 µF	Bi-polar	ECEAxNxxxxx	EA9ED8
Type A - Series KA		1.000 h	4 to 50 V	0,1 to 470 µF	7 mm height	ECEAxKAxxxxx	1CF82F
Type A - Series KA Bi-polar				0,1 to 100 µF		ECEAxKNxxxxx	DFF220
Type A - Series KS				0,1 to 330 µF	5 mm height	ECEAxKSxxxxx	139D98
Type A - Series KS Bi-polar			6,3 to 50 V	0,1 to 47 µF		ECEAxSNxxxxx	D97191

Aluminum Electrolytic Capacitors – Snap-in terminal type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
 Type TS - Series EE	-40 to +105 °C	3.000 h	200 to 450 V	75 to 1.800 µF	High ripple current	EETEExxxxxxx	DD3210
	-25 to +105 °C			56 to 2.200 µF		EETEDxxxxxxx	6CCD26
Type TS - Series HC	-40 to +105 °C	2.000 h	10 to 450 V	39 to 100.000 µF	30% smaller than HB series	EETHCxxxxxxx	892C1F
Type TS - Series HD	-40 to +105 °C	3.000 h	400 to 450 V	120 to 680 µF	30% smaller than HC series	EETHDxxxxxxx	57293A
Type TS - Series XB	-40 to +105 °C	7.000 h	160 to 450 V	39 to 2.200 µF	+105 °C 7000 h	EETXBxxxxxxx	D90BE2
Type TS - Series MD		2.000 h	200 to 400 V	56 to 1.500 µF	Miniaturized	EETLDxxxxxxx	10A489
Type TS - Series UQ	-40 to +85 °C		16 to 450 V	82 to 100.000 µF		EETUQxxxxxxx	6F30D6

Electric Double Layer Capacitors – Surface Mount Type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
	Series EN	-10 to +60 °C	500 h	3,3 V	Re-flow soldering methode available	EEENxxxxxxx	B1079A
	Series EP			2,6 V (3,3 V)		EEEPxxxxxxx	92B22B
	Series ER	-25 to +60 °C		2,6 V		EEER0E153	909A26

Electric Double Layer Capacitors – Radial Lead Type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
	Series HZ	-25 to +60 °C	1.000 h	2,5 V	Miniaturized	EECHZxxxxxx	5AA846
	Series HW	-25 to +60 (+70) °C		2,1 V 2,3 V	Large Cap.	EECHWxxxxxx	F721ED

Electric Double Layer Capacitors – Stacked Coin Type

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
	Series SD	-25 to +70 °C	1.000 h	0,022 to 0,33 F	Tabbed lead terminals	EECS0HDxxxxx	E4BC82
	Series SG					EECS5R5xxxx	354C47
	Series SE			0,022 to 0,22 F	5mm pitch lead taping	EECE0Hxxxxx	4CCDF9
	Series NF			0,1 to 1,5 F	Flat type	EECF5R5Uxxxx	E38F8B
	Series F	-25 to +85 °C	2.000 h	0,033 to 1 F	85 °C Flat type	EECF5R5Hxxxx	B88CAB
	Series RG			3,6 V	2.000h at 85 °C	EECRGxxxxxx	753BE9
	Series RF			5,5 V		EECRFxxxxxx	9EDA5C

Ceramic Capacitors – Surface Mount Type

Series / Type	Temperature	Tolerance	Rated W.V.	Capacity	Features	Part No.	print2web
	High Voltage	SL/GP B/Y5P	1 to 5 kVDC	5 to 470 pF	High-frequency circuit • Backlight inverter • Snubber circuit	ECCT3DxxxxG ECCT3FxxxxG ECCT3FxxxxG2 ECCT3GxxxxG ECCT3GxxxxG2 ECCT3HxxxxGM ECCT3HxxxxGY ECT3AxxxxB ECKT3DxxxxB	09FD2D
	Safety Regulations	SL/GP B/Y5P E/Y5U F/Y5V				ECCTBCxxxxx ECCTFCxxxxx ECKTBCxxxxx ECKTFCxxxxx	B1BFC7

Polymer Aluminum Capacitors

Series / Type	Temperature	Endurance	Rated W.V.	Capacity	Features	Part No.	print2web
	-40 to +105 °C	1.000	2 to 12,5 V	15 to 68 µF	1,2mm height	EEFFDxxxxxxx	B2F8C6
			2 to 16 V	2,2 to 220 µF	1,9mm height	EEFCDxxxxxxx	A18ECF
			2 to 6,3 V	100 to 470 µF	2,1mm height	EEFCXxxxxxxx	CA2473
			2 to 8 V	68 to 470 µF	3,0mm height	EEFUDxxxxxxx	7F9519
				100 to 560 µF	4,3mm height Low ESR	EEFUExxxxxxx	753C52
			2 to 6,3 V	56 to 220 µF	Super Low-ESR	EEFSLxxxxxxx	34E1DB
				82 to 560 µF	Super Low-ESR	EEFSXxxxxxxx	1389BE
				47 to 120 µF	Miniaturized	EEFMCxxxxxxx	74D012
			2 V	330 to 470 µF	Super Low-ESR	EEFGXxxxxxxx	CD07A4
				330 to 560 µF	Super Low-ESR Low ESL	EEFLXxxxxxxx	DE4C05

Film Capacitors – Surface Mount Type

Series / Type		Temperture	Rated W.V.	Capacity	Features	Dielectric material	Part No.	print2web
	Series ECHU(X)	-55 to +125 °C	16 VDC 50 VDC	0,00010 to 0,22 µF	Tight capacitance tolerance	PPS	ECHUxxxxxxX5 ECHUxxxxxxX9	8DC36E
	Series ECHU(C)	-55 to +105 °C	100 VDC	0,010 to 0,22 µF			ECHUxxxxxxC9	28F798
	Series ECWU(X)			0,0010 to 0,010 µF	PEN	ECWUxxxxxxX5	AD98BC	
	Series ECWU(C)	-55 to +125 °C	100 VDC 250 VDC	0,0010 to 1,0 µF		Wide rated voltage range	ECWUxxxxxxCx	2BD8CF
	Series ECWU(V16)	-55 to +85 °C	250 VDC	0,001 to 0,12 µF		For xDSL DC-blocking	ECWU2xxxV16	A6AC7F
	Series ECPU(A)	-40 to +85 °C	16 VDC	0,10 to 1,0 µF		High volumet- ric efficiency	Plastic resin	ECPUxxxxxxMA5

Film Capacitors – Radial Lead Type

Series / Type		Temperature	Rated W.V.	Capacity	Features	Dielectric material	Part No.	print2web
 	Series ECQV(L)/(M)	-40 to +105 °C	50 VDC 63 VDC 100 VDC	0,010 to 2,2 µF	High volumetric efficiency	PET Coating	ECQVxxxxxJL ECQVxxxxxJM ECQVxxxxxJM	B5BBB4
	Series ECQE(F)	-40 to +105 °C 100 to 1250 VDC -40 to +85 °C 125, 250 VAC	100 to 1.250 VDC 125, 250 VAC	0,0010 to 10 µF	Wide rated voltage range	PET	ECQExxxxxxF ECQExxxxxxF	336F26
	Series ECQE(B)	-40 to +105 °C 250 VDC -40 to +85 °C 125 VAC	250 VDC 125 VAC	0,010 to 4,7 µF	Small type		ECQExxxxxxB ECQExxxxxxB	B2330D
	Series ECQE(H)	-40 to +105 °C	450 VDC	0,1 to 2,2 µF	Excellent electrical charac- teristics		ECQExxxxxxH	F1E350
	Series ECQE(T)	-40 to +105 °C 250 to 630 VDC -40 to +85 °C 125, 250 VAC	250 to 630 VDC 125 VAC 250 VAC	0,010 µF to 10 µF	Wide rated voltage range		ECQExxxxxxT ECQExxxxxxT	2567CD
	Series ECWF(L)	-40 to +105 °C	400 VDC 450 VDC 630 VDC	0,010 to 2,4 µF	High frequency		PP	ECWFxxxxxL
	Series ECWF(A)	-40 to +105 °C	250 VDC 450 VDC	0,10 µF to 6,8 µF	Miniaturization of ECWF(L)	ECWFxxxxxxA		3A4E21
	Series ECWH(A)	-40 to +105 °C	800 VDC	0,010 to 0,047 µF	High voltage and high frequency	ECWHxxxxHA		4A5EF9
	Series ECQUL	-40 to +100 °C	275 VAC (250 VAC)	0,0010 to 2,2 µF	Safety standard Class Y2 / X2	PET	ECQUxxxxxxL	E0EE2D
	Series ECQUG		300 VAC (250 VAC)	0,010 to 1,0 µF	Safety standard Class X1		ECQUxxxxxxG	CBC0D5
	Series ECQUN	-40 to +85 °C	250 VAC	0,0010 to 0,22 µF	Safety standard Class X2	PET+PP	ECQUxxxxxxN	8EA5FF
	Series ECQUY	-40 to +100 °C		0,0010 to 0,047 µF	Safety standard Class Y3 / X2	PET	ECQUxxxxxxY	D2CA38

Resistors

Thick Film Resistors – Surface Mount Type

Series / Type	Power Rating	Resistance	Tolerance	Features	Size	Part No.	print2web
 Thick Film	0,031 to 1 W	1 to 10M Ω	$\pm 5\%$ Jumper	Size: 01005 to 2512	01005	ERJXGNJxxxY	F9F223
					0201	ERJ1GNJxxxC	
					0402	ERJ2GEJxxxX	
					0603	ERJ3GEYJxxxV	
					0805	ERJ6GEYJxxxV	
					1206	ERJ8GEYJxxxV	
					1210	ERJ14YJxxxU	
					1812	ERJ12YJxxxU	
					2010	ERJ12ZYJxxxU	
					2512	ERJ1TYJxxxU	
Precision Thick Film	0,05 to 1W	10 to 2,2M Ω	$\pm 0,5\%$ $\pm 1\%$	Precision type	01005	ERJXGNFxxxxY	CFB300
					0201	ERJ1GNFxxxxC	
					0201	ERJ1RxDxxxxC	
					0402	ERJ2RxxxxxxX	
					0603	ERJ3EKFxxxxV	
					0603	ERJ3RxDxxxxV	
					0805	ERJ6ENFxxxxV	
					0805	ERJ6RxDxxxxV	
					1206	ERJ8ENFxxxxV	
					1210	ERJ14NFxxxxU	
					1812	ERJ12NFxxxxU	
					2010	ERJ12SFxxxxU	
					2512	ERJ1TNFxxxxU	

Thin Film Resistors – Surface Mount Type

Series / Type	Power Rating	Resistance	Tolerance	T.C.R	Size	Part No.	print2web
 Metal Film High Reliability	0,063 to 0,25 W	1 to 1M Ω	$\pm 0,05\%$ $\pm 0,1\%$ $\pm 0,5\%$	± 10 ppm ± 15 ppm ± 25 ppm ± 50 ppm ± 100 ppm	0402	ERA2AxxxxxX	F70FEE
					0603	ERA3AxxxxxV	
					0805	ERA6AxxxxxV	
					1206	ERA8AxxxxxV	

Shunt Resistors – Surface Mount Type

Series / Type	Power Rating	Resistance	Tolerance	Features	Size	Part No.	print2web
 Thick Film Low Resistance	0,1 to 1 W	0,1 to 9,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Low Resistance Type	0603	ERJ3RxxxxxV	EA64E0
					0805	ERJ6RxxxxxV	
					1206	ERJ8RxxxxxV	
					1210	ERJ14RxxxxxU	
					1812	ERJ12RxxxxxU	
					2512	ERJ1TRxxxxxU	
	0,125 to 0,5 W	0,1 to 9,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Low Resistance Type High power type	0402	ERJ2BxxxxxX	89E839
					0603	ERJ3BxxxxxV	
					0805	ERJ6BxxxxxV	
					1206	ERJ8BxxxxxV	
					1210	ERJ14BxxxxxU	
	0,125 to 0,5 W	0,01 to 0,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Low Resistance Type High power type Double-sided resistive ele- ments structure	0402	ERJ2BWxxxxxX	26DED2
					0603	ERJ3BWxxxxxV	
					0805	ERJ6BWxxxxxV	
					1206	ERJ8BWxxxxxV	
	0,1 to 1 W	0,1 to 9,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Standard	0603	ERJ3RxxxxxV	EA64E0
					0805	ERJ6RxxxxxV	
					1206	ERJ8RxxxxxV	
					1210	ERJ14RxxxxxU	
					1812	ERJ12RxxxxxU	
					2512	ERJ1TRxxxxxU	
	0,125 to 0,5 W	0,1 to 9,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	High power type	0402	ERJ2BxxxxxX	89E839
					0603	ERJ3BxxxxxV	
					0805	ERJ6BxxxxxV	
					1206	ERJ8BxxxxxV	
					1210	ERJ14BxxxxxU	
	0,125 to 0,5 W	0,01 to 0,1 Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	High power type Double-sided resistive ele- ments structure	0402	ERJ2BWxxxxxX	26DED2
					0603	ERJ3BWxxxxxV	
					0805	ERJ6BWxxxxxV	
					1206	ERJ8BWxxxxxV	
	0,1 to 1 W	0,02 to 0,1 Ω	$\pm 1\%$ $\pm 5\%$	Low TCR type	0603	ERJL03xxxxxV	300AC1
					0805	ERJL06xxxxxV	
					1206	ERJL08xxxxxV	
					1210	ERJL14xxxxxU	
					1812	ERJL12xxxxxU	
					2010	ERJL1DxxxxxU	
					2512	ERJL1WxxxxxU	
 Metal Plate	0,25W 1W	1m; 1,5m; 2m; 3m; 4m; 5m; 6m; 10m; 15m; 20m Ω	$\pm 1\%$ $\pm 5\%$	Low resistance values and high precision	0603	ERJM03NxxxxV	21C925
					2512	ERJM1WSxxxxU	
					2512	ERJM1WTxxxxU	
 High Power Wide Terminal Type	0,5 to 2 W	5 m to 1M Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Superior solder-joint reliability by wide terminal structure	0805	ERJB3xxxxxV	92ADF0
					1206	ERJB2xxxxxV	
					2010	ERJB1xxxxxU	
					2512	ERJA1xxxxxU	

High Power & Pulse Proof Resistors – Surface Mount Type

Series / Type	Power Pating	Resistance	Tolerance	Features	Size	Part No.	print2web
 High Power Wide Terminal Type	0,33 to 1,33 W	5 m to 1M Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$	Superior solder-joint reliability by wide terminal structure	0805	ERJB3xxxxxV	92ADF0
					1206	ERJB2xxxxxV	
					2010	ERJB1xxxxxU	
					2512	ERJA1xxxxxU	
 Anti-Surge Type	0,2 to 0,5 W	1 to 3,3M Ω	$\pm 0,5\%$ $\pm 1\%$ $\pm 5\%$	Anti-Surge & High voltage Characteristic	0603	ERJP03xxxxxV	3A1939
					0805	ERJP06xxxxxV	
					1206	ERJP08xxxxxV	
					1210	ERJP14xxxxxU	
 Anti-Pulse Type	0,25 to 0,5 W	1 to 1M Ω	$\pm 5\%$	Anti-Pulse Characteristic	0805	ERJT06xxxxxV	DE15C6
					1206	ERJT08xxxxxV	
					1210	ERJT14xxxxxU	

Anti-Sulfurated Resistors – Surface Mount Type

Series / Type	Power Pating	Resistance	Tolerance	Features	Size	Part No.	print2web
 Thick Film Anti-Sulfurated	0,063 to 1 W	1 to 1M Ω	$\pm 1\%$ $\pm 5\%$	Special construction to avoid open failure due to the presence of sulfur	0402	ERJS02xxxxxX	E27E03
					0603	ERJS03xxxxxV	
					0805	ERJS06xxxxxV	
					1206	ERJS08xxxxxV	
					1812	ERJS12xxxxxU	
					1210	ERJS14xxxxxU	
					2010	ERJS1DxxxxxU	
					2512	ERJS1TxxxxxU	

Metal (Oxide) Film Resistors – Radial Lead Type

Series / Type	Power Pating	Resistance	Tolerance	Features	Size (mm)	Part No.	print2web		
 Small size	0,5 to 5 W	0,1 to 9,1 Ω	±2% ±5%	Non flammable coating Small size	6,35 x 2,3	ERX12Sxxxxxx	C271BF		
					9 x 2,8	ERX1Sxxxxxx			
					12 x 4	ERX2Sxxxxxx			
					15 x 5,5	ERX3Sxxxxxx			
					24 x 8	ERX5Sxxxxxx			
		10 to 100k Ω			6,35 x 2,3	ERG12Sxxxxxx			
		10 to 100k Ω			9 x 2,8	ERG1Sxxxxxx			
		10 to 100k Ω			12 x 4	ERG2Sxxxxxx			
		10 to 100k Ω			15 x 5,5	ERG3Sxxxxxx			
		10 to 100k Ω			24 x 8	ERG5Sxxxxxx			
Small size Anti-heat conducting type	0,5 to 5 W	0,1 to 9,1 Ω	±2% ±5%	Non flammable coating Small size	9 x 2,8	ERX1Fxxxxxx	99CF44		
					12 x 4	ERX2Fxxxxxx			
					15 x 5,5	ERX3Fxxxxxx			
					24 x 8	ERX5Fxxxxxx			
		10 to 100k Ω			9 x 2,8	ERG1Fxxxxxx			
		10 to 100k Ω			12 x 4	ERG2Fxxxxxx			
		10 to 100k Ω			15 x 5,5	ERG3Fxxxxxx			
		10 to 100k Ω			24 x 8	ERG5Fxxxxxx			

Network & Array Resistors - Surface Mount Type

Series / Type	Power Rating	Resistance	Tolerance	Features	Size	Part No.	print2web
 Resistor Array	0,031 to 0,1 W per element	10 to 1M Ω	$\pm 5\%$	Placement efficiency of chip resistor array is 2 / 4 / 8 times of the flat type chip resistor	0201 x 2R	EXB14VxxxJX	2151B7
					0201 x 4R	EXB18VxxxJX	
					0402 x 2R	EXB24VxxxJX	
					0402 x 4R	EXB28VxxxJX	
					0402 x 8R	EXB2HVxxxJV	
					0603 x 2R	EXB34VxxxJV	
					0603 x 4R	EXB38VxxxJV	
					0402 x 4R	EXBN8VxxxJX	
					0805 x 4R	EXBS8VxxxJ	
					0603 x 2R	EXBV4VxxxJV	
					0603 x 4R	EXBV8VxxxJV	
 Resistor Networks	0,025 to 0,063 per element	47 to 1M Ω	$\pm 5\%$	High density placing for digital signal circuits	2512	EXBAxxxxxxxxxx	7DF287
					1206	EXBDxxxxxxxxxx	
					1608	EXBExxxxxxxxxx	
					1506	EXBQxxxxxxxxxx	

Trimmer Potentiometers - Surface Mount Type

Series / Type	Power Pating	Resistance	Tolerance	Features	Part No.	print2web	
	Cermet 2 mm Square Open	0,15 W	100 to 1M Ω	±25%	Low-profile 0,7 mm (EVM2T) 0,81 mm (EVM2N) 1,05 mm (EVM2W)	EVM2NSX80Bxx	7201FB
						EVM2TSX80Bxx	
						EVM2WSX80Bxx	
	Cermet 3 mm Square Open				Auto,Adjust (EVM3Y) Both Sides Adjust (EVM3S) Back Sides Adjust (EVM3R)	EVM3RSX50Bxx	A91BE7
						EVM3SSX50Bxx	
						EVM3YSX50Bxx	
	Cermet 3 mm Square Open				Low-profile 0,95 mm	EVM3WSX80Bxx	2B76F2
	Cermet 3 mm Square Open				Rotation stopper Automatic adjustment type	EVM3VSX50Bxx	A672FE
	Cermet 4 mm Square Open				0,2 W	4 mm square series for reflow soldering	EVM1DSX30Bxx
		EVM1ESX30Bxx					
		EVM1USX30Bxx					

Inductors

Chip Inductors – Surface Mount Type

Series / Type		Inductance	DC current	Size	Part No.	print2web
	High Frequency Non magnetic	47 to 8.200 nH	450 to 60 mA	1210 (3225)	ELJNAxxxxF	8D5992
		10 to 820 nH	280 to 100 mA	1008 (2520)	ELJNCxxxxF	BFC803
		10 to 1.000 nH	540 to 120 mA	0805 (2012)	ELJNDxxxxF	9EB50A
		1 to 220 nH	500 to 70 mA	0603 (1608)	ELJRExxxxFA	F3A50F
		1 to 100 nH	400 to 90 mA	0402 (1005)	ELJRFxxxxFB	OCA988
	High Frequency High-Q Non Magnetic core	1 to 39 nH	400 to 150 mA		ELJQFxxxxF	F80331
	General use	0,22 to 220 µH	360 to 45 mA	1210 (3225)	ELJFAxxxxFx	5CEF25
		0,22 to 1.000 µH	700 to 40 mA	1812 (4532)	ELJFBxxxxFx	B5D94B
		0,22 to 100 µH	190 to 60 mA	1008 (2520)	ELJFCxxxxFx	C2F98E
	High Power Type	1 to 330 µH	600 to 50 mA	1210 (3225)	ELJPAxxxxF	F0E1B4
		2,2 to 220 µH	800 to 85 mA		ELJPAxxxxF2	E6E125
		10 to 220 µH	360 to 90 mA	1812 (4532)	ELJPBxxxxF	F2F7C1
		1 to 33 µH	475 to 120 mA	1008 (2520)	ELJPCxxxxF	B864F4
		2,2 to 22 µH	2.100 to 700 mA	0603 (1608)	ELJPExxxxFx	6FF765
		2,2 to 10 nH	1.900 to 750 mA	0402 (1005)	ELJPFxxxxFx	8F278A
	Shielded Type	10 to 270 µH	18 to 5 mA	1210 (3225)	ELJSAxxxxFx	D792F3
		27 to 100 µH	18 to 10 mA	1008 (2520)	ELJSCxxxxFx	4E1EB9
	Low DC Resistance	1 to 330 µH	500 to 30 mA	1210 (3225)	ELJEAxxxxF	9DB7E3
	Signal Processing Low distortion type	39 to 100 µH	110 to 70 mA		ELJDAxxxJF	D37E32
			105 to 70 mA		ELJFAxxxJFD	B4B02C

Choke Coils

Series / Type		Inductance	Allowable Idc	Size (D x H)	Part No.	print2web
	General type	2,2 to 3.900 µH	7,2 to 0,14 mA	10 x 13 mm	ELC08DxxxxE	00F81F
		2,2 to 10.000 µH	3,5 to 0,08 mA	9,5 x 8,9 mm	ELC09DxxxxF	5F4A24
		2,2 to 10.000 µH	5,3 to 0,16 mA	11,5 x 13,9 mm	ELC11DxxxxF	6424ED
		100 to 10.000 µH	1,9 to 0,27 mA	12,5 x 16,5 mm	ELC12DxxxE	77AC23
		3,3 to 10.000 µH	8,5 to 0,26 mA	16 x 23 mm	ELC16BxxxL	A2B2E5
		3,3 to 10.000 µH	8,5 to 0,36 mA	20 x 27 mm	ELC18BxxxL	DBEB63
	Magnetic shield type	3,9 to 8.200 µH	2,9 to 0,10 mA	10 x 13 mm	ELC10ExxxL	4DC3B0
		4,7 to 10.000 µH	4,4 to 0,13 mA	13 x 18,5 mm	ELC12ExxxL	E3F2D0
		5,6 to 10.000 µH	6,8 to 0,3 mA	16 x 22 mm	ELC15ExxxL	9A4B5F
		5,6 to 10.000 µH	6,7 to 0,33 mA	19 x 25,1 mm	ELC18ExxxL	D72D36

Voltage Step-up Coils – Surface Mount Type

Type / Series	Inductance	Saturation Rated Current	Magnetic Composition	Size (D x H)	Part No.	print2web
	3KN	0,33 to 7,5 mH	60 to 10 mA	Brass ring	ELT3KNxxxx	E0BD4A
		10 to 50 mH	10 to 1,5 mA	Permalloy ring		
		1,1 mH	25 mA	Ring less		

Power Choke Coils – Magnetic shielded – Surface Mount Type

Type	Series	Inductance	Saturation Rated Current	Size (D x H)	Part No.	print2web
 	EG	1 to 68 μ H	1.900 to 180 mA	3 x 1 mm	ELLVEGxxxx	18C994
	FG-C	1 to 33 μ H	1.500 to 280 mA	3 x 1,2 mm	ELLVFGxxxxC	76CBBE
	GG	1 to 47 μ H	2.200 to 350 mA	3 x 1,5 mm	ELLVGGxxxx	54962E
	PFG	1 to 68 μ H	1.700 to 240 mA	3,6 x 1,2 mm	ELLPFGxxxx	EEDB4A
	4FG-A	1 to 150 μ H	1.950 to 290 mA	3,8 x 1,2 mm	ELL4FGxxxxA	8EF82A
	4GG	1,2 to 100 μ H	2.400 to 250 mA	3,8 x 1,4 mm	ELL4GGxxxx	9D312B
	4LG-A	1 to 150 μ H	1.900 to 220 mA	3,8 x 1,8 mm	ELL4LGxxxxA	93FBA8
	SFG-A	1 to 470 μ H	1.800 to 100 mA	4 x 1,2 mm	ELLSFGxxxxA	5C9E94
	6GG	1 to 100 μ H	2.500 to 350 mA	6 x 1,6 mm	ELL6GGxxxx	17FE10
	6PG	0,8 to 100 μ H	2.800 to 400 mA	6 x 2 mm	ELL6PGxxxx	B8CC88
	6RH	1 to 180 μ H	3.000 to 230 mA	6 x 2,8 mm	ELL6RHxxxx	C4A4BD
	6SH		3.400 to 300 mA	6 x 3,3 mm	ELL6SHxxxx	8617CA
	6UH	10 to 1.000 H	1.800 to 180 mA	6 x 5 mm	ELL6UHxxxx	D19977
	5PS	1,2 to 100 μ H	2.500 to 300 mA	5 x 2 mm	ELL5PSxxxx	10AEE3
	3FU	1 to 10 μ H	2.300 to 650 mA	3 x 1,5 mm	ELL3FUxxxx	9A528E
	ATV	1,5 to 1.000 μ H	6.700 to 320 mA	10 x 4,5 mm	ELLATVxxxx	16DF38
	CTV	1,2 to 1.000 μ H	6.500 to 410 mA	12 x 4,5 mm	ELLCTVxxxx	727B26

Power Choke Coils – Non-shielded – Surface Mount Type

Type	Series	Inductance	Saturation Rated Current	Size (D x H)	Part No.	print2web
	VEN	1 to 22 μ H	1.750 to 400 mA	3 x 1,0 mm	ELCVENxxxx	8A817F
	VFN		1.500 to 330 mA	3 x 1,2 mm	ELCVFNxxxx	53F092
	6GN	1,2 to 68 μ H	2.700 to 450 mA	6 x 1,6 mm	ELC6GNxxxx	9B1F66

Power Choke Coil – Surface Mount Type

Type / Series		Inductance	Rated Current	Size (L x W x H)	Part No.	print2web
	PCC-M0754M	4,7 to 48 µH	2,8 to 1 A	7,5 x 7 x 5,4 mm	ETQP5MxxxYFM	A8FFDC
	PCC-M0854M	2,45 to 48 H	4,5 to 1,1 A	8,5 x 8 x 5,4 mm	ETQP5MxxxYFK	14A057
	PCC-M1054M	2,5 to 4,7 µH	6 to 4,4 A	10,7 x 10 x 5,4 mm	ETQP5MxxxYFC	6885F5
	PCC-M1050M	97 µH	1 A	10,7 x 10 x 5 mm	ETQP5MxxxYGC	1665AA
	PCC-M0630L	0,33 µH	17 A	7,5 x 6,5 x 3 mm	ETQP3LxxxXFN	3A2AF9
	PCC-M0630M	0,68 to 1,5 µH	7,4 to 5,6 A	6,5 x 6 x 3 mm	ETQP3MxxxYFN	D26D29
	PCC-M0630W	1 to 4,7 µH	8,1 to 3,8 A	7 x 6,6 x 3 mm	ETQP3WxxxWFN	F9F5FB
	PCC-M104L	0,2 to 0,45 µH	28 to 25 A	11,5 x 10 x 4 mm	ETQP4LxxxxFC	DCF677
	PCC-M125L	0,5; 0,6 µH	30 to 27 A	14,5 x 12,5 x 5 mm	ETQP5LxxxXFA	2ACA64

Power Choke Coil – Low DCR Type – Surface Mount Type

Type / Series	Inductance	Rated Current	Size (L x W x H)	Part No.	print2web	
	PCC-M104L	0,36; 0,68 µH	30 to 21 A	11,7 x 10 x 4 mm	ETQP4LxxxxFC	91D0C9
	PCC-M074L	0,24; 0,42 µH	24 to 17 mA	8,7 x 7 x 4 mm	ETQP4LxxxxAFM	679A70

EMC Components

Ferrite Bead Core

Series / Type		Components	Impedance	Rated Current	DC Resistance	Part No.	print2web
	Noise Filters (0302 small size)	1 lines	65 Ω ±20% 90 Ω ±20%	130 mA	2,5 Ω	EXC14CE650U EXC14CE900U	C70AF3
	Noise Filters (for Gbps)		50 Ω ±25% 90 Ω ±20%	160 mA 130 mA	1,5 Ω 2,5 Ω	EXC24CH500U EXC24CH900U	FDB4BC
	Noise Filters (for Gbps)		24 Ω ±25% 90 Ω ±25%	160 mA 100 mA	1,5 Ω 3,0 Ω	EXC24CG240U EXC24CG900U	74093F
	Noise Filters (for Mbps)		36 Ω ±25% 90 Ω ±25% 120 Ω ±25% 200 Ω ±25% 90 Ω ±25%	200 mA 160 mA 140 mA 130 mA 130 mA	1,00 Ω 1,75 Ω 2,20 Ω 2,70 Ω 2,50 Ω	EXC24CE121U EXC24CE201U EXC24CE360UP EXC24CE900U EXC24CF900U	F82DB5
	Noise Filter Array (0603 small size)	2 lines	65 Ω ±20% 90 Ω ±20% 200 Ω ±20%	100 mA 140 mA 130 mA	3,5 Ω 1,8 Ω 2,0 Ω	EXC18CE201U EXC18CE650U EXC18CE900U	63C255
	Noise Filter Array (for Gbps)		50 Ω ±25% 90 Ω ±20%	160 mA 130 mA	1,5 Ω 2,5 Ω	EXC28CH500U EXC28CH900U	55B565
	Noise Filter Array (for Gbps)		24 Ω ±25% 90 Ω ±25%	160 mA 100 mA	1,5 Ω 3,0 Ω	EXC28CG240U EXC28CG900U	10D616
	Noise Filter Array (for Mbps)		90 Ω ±25% 120 Ω ±25% 200 Ω ±25%	160 mA 140 mA 130 mA	1,5 Ω 2,0 Ω 2,5 Ω	EXC28CE900U EXC28CE121U EXC28CE201U	88988B
	2 mode Noise Filters	1 lines	120 Ω ±25% 220 Ω ±25% 220 Ω ±25% 1.000 Ω ±25% 600 Ω ±25%	500 mA 350 mA 100 mA 50 mA 200 mA	0,3 Ω 0,4 Ω 0,7 Ω 1,5 Ω 0,9 Ω	EXC24CP121U EXC24CP221U EXC24CB221U EXC24CB102U EXC24CN601X	BC8039
	Chip Bead Cores		115 Ω ±25% 45 Ω ±25% 25 Ω ±25% 91 Ω ±25% 68 Ω ±25% 39 Ω ±25% 27 Ω ±25% 60 Ω ±25% 120 Ω ±25% 220 Ω ±25% 600 Ω ±25% 1000 Ω ±25%	2.000 mA 2.000 mA 2.000 mA 3.000 mA 3.000 mA 4.000 mA 4.000 mA 1.000 mA 500 mA 200 mA 100 mA 50 mA	0,1 Ω 0,05 Ω 0,05 Ω 0,016 Ω 0,012 Ω 0,008 Ω 0,006 Ω 0,07 Ω 0,1 Ω 0,3 Ω 0,8 Ω 1 Ω	EXCCL4532U1 EXCCL3225U1 EXCCL3216U1 EXCML45A910H EXCML32A680U EXCML20A390U EXCML16A270U EXC3BP600H EXC3BP121H EXC3BB221H EXC3BB601H EXC3BB102H	21FEF8
	Chip Bead Array	4 lines	120 Ω ±25% 220 Ω ±25% 120 Ω ±25% 220 Ω ±25%	100 mA	0,5 Ω 0,7 Ω 0,5 Ω 0,7 Ω	EXC28BA121U EXC28BA221U EXC28BB121U EXC28BB221U	DB2253

EMI Filters

Series / Type	Capacitance	Rated Voltage	Rated Current	DC Resistance	25 dB Attenuate Frequency (MHz)	Part No.	print2web
 Chip Type	22 pF	50 VDC	2 A.DC	50 mΩ max.	800 to 1000	EXCCET220U	FAFB9E
	47 pF				450 to 550	EXCCET470U	
	100 pF				300 to 450	EXCCET101U	
	270 pF				200 to 300	EXCCET271U	
	470 pF				100 to 220	EXCCET471U	
	1.000 pF				65 to 200	EXCCET102U	
	2.200 pF				35 to 180	EXCCET222U	
	10.000 pF				15 to 120	EXCCET103U	
 Coil type	10 - 33.000 pF	12 - 50 V	2 - 6 A.DC	—	—	ELKExxxFA ELKEAxxxFA ELKEVxxxFx	7B26F7

RC Networks

Series / Type	Power Pating	Resistance	Capacitance	Tolerance	Size	Part No.	print2web
 Chip RC Networks	0,063 W	10 to 100k Ω	10 to 1000 pF	±5%	0805	EZACTxxxxxxx	17FAD8
					1206	EZADTxxxxxxx	
					1608	EZASSxxxxxxx	
					1608	EZASTxxxxxxx	
					2512	EZANTxxxxxxx	
Chip RC Networks for USB Interface	0,063 W	10 to 100k Ω	10 pF to 100 pF	±5%	1206	EZADLUxxxxxxx	90B0B5

ESD Suppressor

Series / Type	Rated voltage	Capacitance	Peak voltage	Clamping Volt.	Size	Part No.	print2web
 ESD Suppressor	30 V	0,04 pF	500 V max. (350 V typ.)	100 V max.	0201	EZAEG1A50AC	7FEDDF
		0,05 pF			0402	EZAEG2A50AX	
		0,10 pF			0603	EZAEG3A50AV	
 ESD Suppressor Array	15 V	0,25 pF			0805	EZAEGCA50AV	F02E20

Switches

Light Touch Switches – Top Push – Short Travel – Surface Mount Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 3,0 x 2,6 mm Super Small Type	3,0 x 2,6 x 0,65	1,6 N	100.000	0,15 mm	EVPAFFB65	2647F2
 4 mm Square Thin Type	4,1 x 4,1 x 0,58	1,6 N	1.000.000	0,2 mm	EVQP6LB55	8D8D1B
	4,1 x 4,1 x 0,58	2,4 N	500.000	0,2 mm	EVQP6YB55	
	4,1 x 4,1 x 0,58	3,5 N	200.000	0,2 mm	EVQP6WB55	
 4,9 mm Square Thin Type	4,9 x 4,9 x 1,5	1,0 N	500.000	0,25 mm	EVQPLDA15	C3C55E
	4,9 x 4,9 x 1,5	1,6 N	500.000	0,25 mm	EVQPLHA15	
	4,9 x 4,9 x 1,5	2,6 N	200.000	0,25 mm	EVQPLMA15	
 3,5 x 2,9 mm Ground Terminal	3,5 x 2,9 x 1,7	1,0 N	1.000.000	0,15 mm	EVPA102K	3335B6
	3,5 x 2,9 x 1,7	1,6 N	200.000	0,15 mm	EVPA302K	
	3,5 x 2,9 x 1,7	2,4 N	200.000	0,15 mm	EVPA502W	
	3,5 x 2,9 x 1,7	3,5 N	200.000	0,15 mm	EVPA702W	
	3,5 x 2,9 x 1,7	5,0 N	100.000	0,15 mm	EVPA902Q	
 4,7 x 3,5 mm Ground Terminal	3,5 x 4,7 x 2,1	1,0 N	1.000.000	0,25 mm	EVQP2P02M	66FDF4
	3,5 x 4,7 x 2,5	1,0 N	1.000.000	0,25 mm	EVQP2P02W	
	3,5 x 4,7 x 2,1	1,6 N	1.000.000	0,25 mm	EVQP2R02M	
	3,5 x 4,7 x 2,5	1,6 N	1.000.000	0,25 mm	EVQP2R02W	
	3,5 x 4,7 x 2,1	2,4 N	500.000	0,25 mm	EVQP2T02M	
	3,5 x 4,7 x 2,5	2,4 N	500.000	0,25 mm	EVQP2T02W	
	3,5 x 4,7 x 2,1	3,5 N	500.000	0,25 mm	EVQP2V02M	
	3,5 x 4,7 x 2,5	3,5 N	500.000	0,25 mm	EVQP2V02W	

Light Touch Switches – Top Push – Short Travel – Surface Mount Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 6 mm Square Ground Terminal	6,5 x 6,0 x 2,0	0,5 N	2.000.000	0,25 mm	EVQQ2D01W	5BE57B
	6,5 x 6,0 x 2,0	0,6 N	2.000.000	0,35 mm	EVQP0N02B	
	6,5 x 6,0 x 2,5	0,5 N	2.000.000	0,25 mm	EVQQ2D02W	
	6,5 x 6,0 x 3,1	0,5 N	2.000.000	0,25 mm	EVQQ2D03W	
	6,5 x 6,0 x 2,0	1,0 N	1.000.000	0,25 mm	EVQQ2H01W	
	6,5 x 6,0 x 2,0	1,0 N	1.000.000	0,35 mm	EVQP0Q02Q	
	6,5 x 6,0 x 2,5	1,0 N	1.000.000	0,25 mm	EVQQ2H02W	
	6,5 x 6,0 x 3,1	1,0 N	1.000.000	0,25 mm	EVQQ2H03W	
	6,5 x 6,0 x 2,0	1,3 N	1.000.000	0,25 mm	EVQQ2M01W	
	6,5 x 6,0 x 2,5	1,3 N	1.000.000	0,25 mm	EVQQ2M02W	
	6,5 x 6,0 x 3,1	1,3 N	1.000.000	0,25 mm	EVQQ2M03W	
	6,5 x 6,0 x 2,0	1,6 N	1.000.000	0,25 mm	EVQQ2S01W	
	6,5 x 6,0 x 2,5	1,6 N	1.000.000	0,25 mm	EVQQ2S02W	
	6,5 x 6,0 x 3,1	1,6 N	1.000.000	0,25 mm	EVQQ2S03W	
	6,5 x 6,0 x 2,0	2,6 N	200.000	0,25 mm	EVQQ2W01W	
	6,5 x 6,0 x 2,5	2,6 N	200.000	0,25 mm	EVQQ2W02W	
	6,5 x 6,0 x 3,1	2,6 N	200.000	0,25 mm	EVQQ2W03W	
	6,5 x 6,0 x 2,0	3,5 N	100.000	0,25 mm	EVQQ2201W	
	6,5 x 6,0 x 2,5	3,5 N	100.000	0,25 mm	EVQQ2202W	
	6,5 x 6,0 x 3,1	3,5 N	100.000	0,25 mm	EVQQ2203W	

Light Touch Switches – Top Push – Long Travel – Surface Mount Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 6 mm Square	6,0 x 6,1 x 5,0	2,2 N	100.000	1,0 mm	EVQP1K05M	8065AE
	6,0 x 6,1 x 5,0	2,5 N	100.000	1,0 mm	EVQP1Y05M	
	6,0 x 6,1 x 5,0	1,6 N	100.000	1,3 mm	EVQP1905M	
	6,0 x 6,1 x 5,0	2,0 N	100.000	1,3 mm	EVQP1F05M	
	6,0 x 6,1 x 5,0	2,5 N	100.000	1,3 mm	EVQP1D05M	
	6,0 x 6,1 x 5,0	3,5 N	30.000	1,3 mm	EVQ9P105M	
 8 mm Square	8,5 x 8,5 x 6,5	4,0 N	100.000	1,0 mm	EVQQ1D06M	B19610
	8,5 x 8,5 x 6,5	5,0 N	100.000	1,0 mm	EVQQ1E06K	
 10 mm Square Center Space	9,8 x 9,8 x 4,6	4,0 N	100.000	1,0 mm	EVPADK04K	95CEE6

Light Touch Switches – Top Push – Short Travel – Radial Lead Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 5N Type Round Terminal	6,0 x 6,0 x 4,3	1,0 N	100.000	0,25 mm	EVQ11A04M	7E0AB5
	6,0 x 6,0 x 5,0	1,0 N	100.000	0,25 mm	EVQ11A05R	
	6,0 x 6,0 x 7,0	1,0 N	100.000	0,25 mm	EVQ11A07K	
	6,0 x 6,0 x 9,5	1,0 N	100.000	0,25 mm	EVQ11A09K	
	6,0 x 6,0 x 4,3	1,0 N	1.000.000	0,25 mm	EVQ11D04K	
	6,0 x 6,0 x 5,0	1,0 N	1.000.000	0,25 mm	EVQ11D05B	
	6,0 x 6,0 x 7,0	1,0 N	1.000.000	0,25 mm	EVQ11D07K	
	6,0 x 6,0 x 9,5	1,0 N	1.000.000	0,25 mm	EVQ11D09K	
	6,0 x 6,0 x 4,3	1,3 N	100.000	0,25 mm	EVQ11G04M	
	6,0 x 6,0 x 5,0	1,3 N	100.000	0,25 mm	EVQ11G05R	
	6,0 x 6,0 x 7,0	1,3 N	100.000	0,25 mm	EVQ11G07K	
	6,0 x 6,0 x 9,5	1,3 N	100.000	0,25 mm	EVQ11G09K	
	6,0 x 6,0 x 4,3	1,3 N	1.000.000	0,25 mm	EVQ11K04K	
	6,0 x 6,0 x 5,0	1,3 N	1.000.000	0,25 mm	EVQ11K05B	
	6,0 x 6,0 x 7,0	1,3 N	1.000.000	0,25 mm	EVQ11K07K	
	6,0 x 6,0 x 9,5	1,3 N	1.000.000	0,25 mm	EVQ11K09K	
	6,0 x 6,0 x 4,3	1,6 N	100.000	0,25 mm	EVQ11L04M	
	6,0 x 6,0 x 5,0	1,6 N	100.000	0,25 mm	EVQ11L05R	
	6,0 x 6,0 x 7,0	1,6 N	100.000	0,25 mm	EVQ11L07K	
	6,0 x 6,0 x 9,5	1,6 N	100.000	0,25 mm	EVQ11L09K	
	6,0 x 6,0 x 4,3	1,6 N	1.000.000	0,25 mm	EVQ11Y04K	
	6,0 x 6,0 x 5,0	1,6 N	1.000.000	0,25 mm	EVQ11Y05B	
	6,0 x 6,0 x 7,0	1,6 N	1.000.000	0,25 mm	EVQ11Y07K	
	6,0 x 6,0 x 9,5	1,6 N	1.000.000	0,25 mm	EVQ11Y09K	
	6,0 x 6,0 x 4,3	2,6 N	50.000	0,25 mm	EVQ11U04M	
	6,0 x 6,0 x 5,0	2,6 N	50.000	0,25 mm	EVQ11U05R	
	6,0 x 6,0 x 7,0	2,6 N	50.000	0,25 mm	EVQ11U07K	
	6,0 x 6,0 x 9,5	2,6 N	50.000	0,25 mm	EVQ11U09K	
	6,0 x 6,0 x 4,3	2,6 N	100.000	0,25 mm	EVQ11V04K	
	6,0 x 6,0 x 5,0	2,6 N	100.000	0,25 mm	EVQ11V05B	
	6,0 x 6,0 x 7,0	2,6 N	100.000	0,25 mm	EVQ11V07K	
	6,0 x 6,0 x 9,5	2,6 N	100.000	0,25 mm	EVQ11V09K	

Light Touch Switches – Top Push – Short Travel – Radial Lead Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 5N Type (bulk packing)	6,0 x 6,0 x 4,3	1,0 N	100.000	0,25 mm	EVQPAC04M	F3E781
	6,0 x 6,0 x 5,0	1,0 N	100.000	0,25 mm	EVQPAC05R	
	6,0 x 6,0 x 7,0	1,0 N	100.000	0,25 mm	EVQPAC07K	
	6,0 x 6,0 x 9,5	1,0 N	100.000	0,25 mm	EVQPAC09K	
	6,0 x 6,0 x 4,3	1,3 N	100.000	0,25 mm	EVQPAD04M	
	6,0 x 6,0 x 5,0	1,3 N	100.000	0,25 mm	EVQPAD05R	
	6,0 x 6,0 x 7,0	1,3 N	100.000	0,25 mm	EVQPAD07K	
	6,0 x 6,0 x 9,5	1,3 N	100.000	0,25 mm	EVQPAD09K	
	6,0 x 6,0 x 4,3	1,6 N	100.000	0,25 mm	EVQPAE04M	
	6,0 x 6,0 x 5,0	1,6 N	100.000	0,25 mm	EVQPAE05R	
	6,0 x 6,0 x 7,0	1,6 N	100.000	0,25 mm	EVQPAE07K	
	6,0 x 6,0 x 9,5	1,6 N	100.000	0,25 mm	EVQPAE09K	
	6,0 x 6,0 x 4,3	2,6 N	50.000	0,25 mm	EVQPAG04M	
	6,0 x 6,0 x 5,0	2,6 N	50.000	0,25 mm	EVQPAG05R	
	6,0 x 6,0 x 7,0	2,6 N	50.000	0,25 mm	EVQPAG07K	
	6,0 x 6,0 x 9,5	2,6 N	50.000	0,25 mm	EVQPAG09K	
 5N Type Ground Terminal (bulk packing)	6,0 x 6,0 x 4,3	1,0 N	100.000	0,25 mm	EVQPBC04M	90503E
	6,0 x 6,0 x 5,0	1,0 N	100.000	0,25 mm	EVQPBC05R	
	6,0 x 6,0 x 7,0	1,0 N	100.000	0,25 mm	EVQPBC07K	
	6,0 x 6,0 x 9,5	1,0 N	100.000	0,25 mm	EVQPBC09K	
	6,0 x 6,0 x 4,3	1,3 N	100.000	0,25 mm	EVQPBD04M	
	6,0 x 6,0 x 5,0	1,3 N	100.000	0,25 mm	EVQPBD05R	
	6,0 x 6,0 x 7,0	1,3 N	100.000	0,25 mm	EVQPBD07K	
	6,0 x 6,0 x 9,5	1,3 N	100.000	0,25 mm	EVQPBD09K	
	6,0 x 6,0 x 4,3	1,6 N	100.000	0,25 mm	EVQPBE04M	
	6,0 x 6,0 x 5,0	1,6 N	100.000	0,25 mm	EVQPBE05R	
	6,0 x 6,0 x 7,0	1,6 N	100.000	0,25 mm	EVQPBE07K	
	6,0 x 6,0 x 9,5	1,6 N	100.000	0,25 mm	EVQPBE09K	
	6,0 x 6,0 x 4,3	2,6 N	50.000	0,25 mm	EVQPBG04M	
	6,0 x 6,0 x 5,0	2,6 N	50.000	0,25 mm	EVQPBG05R	
	6,0 x 6,0 x 7,0	2,6 N	50.000	0,25 mm	EVQPBG07K	
	6,0 x 6,0 x 9,5	2,6 N	50.000	0,25 mm	EVQPBG09K	

Light Touch Switches – Top Push – Long Travel – Radial Lead Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 6 mm Square 2R	6,0 x 6,1 x 5,0	2,2 N	100.000	1,00 mm	EVQPPVA05K	E4C70C
	6,0 x 6,1 x 5,0	1,6 N	100.000	1,30 mm	EVQPPV205K	
	6,0 x 6,1 x 5,0	2,0 N	100.000	1,30 mm	EVQPPVG05K	
	6,0 x 6,1 x 5,0	2,5 N	100.000	1,30 mm	EVQPPVF05K	
	6,0 x 6,1 x 5,0	3,5 N	30.000	1,30 mm	EVQPPVW05K	
 8 mm Square 2R	8,0 x 8,0 x 5,0	0,8 N	1.000.000	1,00 mm	EVQQJJ05Q	5D9FC5
	8,0 x 8,0 x 5,0	1,3 N	100.000	1,00 mm	EVQQJE05D	
	8,0 x 8,0 x 5,5	2,5 N	100.000	1,20 mm	EVQQJD05B	
	8,0 x 8,0 x 5,1	3,0 N	100.000	1,75 mm	EVQQJF06Q	

Light Touch Switches – Side Push – Short Travel – Radial Lead Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Insert Machine	Part No.	print2web
 5N Type 4R	7,5 x 7,1 x 9,25	1,0 N	100.000	0,25 mm	Panasert	EVQPC005K	E772BF
	7,5 x 7,1 x 9,25	1,3 N	100.000	0,25 mm	Panasert	EVQPC105K	
	7,5 x 7,1 x 9,25	1,6 N	100.000	0,25 mm	Panasert	EVQPC205K	
	7,5 x 7,1 x 9,25	2,6 N	50.000	0,25 mm	Panasert	EVQPC305K	
	7,5 x 7,1 x 9,25	1,0 N	100.000	0,25 mm	Avisert	EVQPC405K	
	7,5 x 7,1 x 9,25	1,3 N	100.000	0,25 mm	Avisert	EVQPCP05K	
	7,5 x 7,1 x 9,25	1,6 N	100.000	0,25 mm	Avisert	EVQPC605K	
	7,5 x 7,1 x 9,25	2,6 N	50.000	0,25 mm	Avisert	EVQPC705K	

Light Touch Switches – Side Push – Short Travel – Surface Mount Type

Series / Type	Dimensions L x W x H (mm)	Operating Force	Operating Cycles	Travel	Part No.	print2web
 3,5 x 2,9 mm without boss J-bent terminals	3,5 x 2,9 x 1,35	2,2 N	100.000	0,2 mm	EVQP7B01K	B7A4D4
	3,5 x 2,9 x 1,35	1,6 N	100.000	0,2 mm	EVQP7K01K	
 3,5 x 2,9 mm with boss J-bent terminals	3,5 x 2,9 x 1,35	2,2 N	100.000	0,2 mm	EVQP7D01K	C3AA43
	3,5 x 2,9 x 1,35	1,6 N	100.000	0,2 mm	EVQP7M01K	
 3,5 x 2,9 mm L-shape terminals with boss	3,5 x 2,9 x 1,35	2,2 N	100.000	0,2 mm	EVQP3401K	0D1895
	3,5 x 2,9 x 1,35	1,6 N	100.000	0,2 mm	EVQP9P701K	
 6,2 x 2,5 mm Edge Mount	6,2 x 2,55 x 3,5	1,0 N	1.000.000	0,25 mm	EVQP4003M	FB2E27
	6,2 x 2,55 x 3,5	1,6 N	1.000.000	0,25 mm	EVQP4203M	
	6,2 x 2,55 x 3,5	2,4 N	500.000	0,25 mm	EVQP4403M	
	6,2 x 2,55 x 3,5	3,5 N	200.000	0,25 mm	EVQP4603M	

Encoders & Potentiometers

Rotary Potentiometers – Vertical Type – Surface Mount Type

Series / Type	Pulse	Detents	Rotation Torque	Height of body	Endurance (Cycles)	Part No.	print2web
 10mm GS	333,3°	—	3 mNm	2,0 mm	100.000	EVWAE4001B14	BA58A5

Encoders – Vertical Type – Surface Mount Type

Series / Type	Pulse	Detents	Rotation Torque	Height of body	Endurance (Cycles)	Part No.	print2web
 10mm GS	3	—	2 mNm	2,0 mm	70.000	EVQVVD00203B	BC10A7

Encoders – Horizontal Type – Radial Lead Type

Series / Type	Pulse	Detents	Rotation Torque	Height from PCB to shaft	Endurance (Cycles)	Part No.	print2web
 10mm GS	12	24	5 mNm	7,0 mm	100.000	EVQVXM00112B	FEBF7E
				9,0 mm		EVQVXD00112B	
				11,0 mm		EVQVXC00112B	

Encoders – Surface Mount Type

Series / Type	Bushing	Pulse	Detents	Rotation Torque	Switch Push Force / Stroke	Height (mm)	Endurance (Cycles)	Part No.	print2web	
 11 mm Square GS serration-shaft Komuso Junior (shaft wobble reduced), with Switch Push Funct.	—	8	16	8 mNm	6 N / 0,4 mm	17,5	30.000	EVEUPAAH508B	F014D2	
		12	24	8 mNm				EVEUPAAH512B		
		16	32	8 mNm				EVEUPAAH516B		
		8	16	14 mNm				EVEUPCAH508B		
		12	24	14 mNm				EVEUPCAH512B		
		16	32	14 mNm				EVEUPCAH516B		
		8	16	8 mNm	4 N / 1,5 mm			EVEUBAAH508B		
		12	24	8 mNm				EVEUBAAH512B		
		16	32	8 mNm				EVEUBAAH516B		
		8	16	14 mNm				EVEUBCAH508B		
		12	24	14 mNm				EVEUBCAH512B		
		16	32	14 mNm				EVEUBCAH516B		
 11 mm Square GS D-shaft Komuso Junior (shaft wobble reduced), with Switch Push Funct.	—	8	16	8 mNm	6 N / 0,4 mm	20,0		EVEUPACL008B		
		12	24	8 mNm				EVEUPACL012B		
		16	32	8 mNm				EVEUPACL016B		
		8	16	14 mNm				EVEUPCCL008B		
		12	24	14 mNm				EVEUPCCL012B		
		16	32	14 mNm				EVEUPCCL016B		
		8	16	8 mNm	4 N / 1,5 mm			Need shaft tooling		
		12	24	8 mNm						
		16	32	8 mNm						
		8	16	14 mNm						
		12	24	14 mNm						
		16	32	14 mNm						

Encoders – Radial Lead Type

Series / Type	Bushing	Pulse	Detents	Rotation Torque	Switch Push Force / Stroke	Height (mm)	Endurance (Cycles)	Part No.	print2web					
 11 mm Square GS serration-shaft Komuso Junior (shaft wobble reduced), with Switch Push Funct.	—	8	16	8 mNm	6 N / 0,4 mm	18,0	30.000	EVEYPAAJ008B	29E3D7					
		12	24	8 mNm				EVEYPAAJ012B						
		16	32	8 mNm				EVEYPAAJ016B						
		8	16	14 mNm				EVEYPCAJ008B						
		12	24	14 mNm				EVEYPCAJ012B						
		16	32	14 mNm				EVEYPCAJ016B						
		8	16	8 mNm	4 N / 1,5 mm			EVEYBAAJ008B						
		12	24	8 mNm				EVEYBAAJ012B						
		16	32	8 mNm				EVEYBAAJ016B						
		8	16	14 mNm				EVEYBCAJ008B						
		12	24	14 mNm				EVEYBCAJ012B						
		16	32	14 mNm				EVEYBCAJ016B						
		 11 mm Square GS D-shaft Komuso Junior (shaft wobble reduced), with Switch Push Funct.		8	16			8 mNm		6 N / 0,4 mm	20,5		EVEYPACL508B	
				12	24			8 mNm					EVEYPACL512B	
				16	32			8 mNm					EVEYPACL516B	
				8	16			14 mNm					EVEYPCCL508B	
12	24			14 mNm	EVEYPCCL512B									
16	32			14 mNm	EVEYPCCL516B									
8	16			8 mNm	4 N / 1,5 mm	Need shaft tooling								
12	24			8 mNm										
16	32			8 mNm										
8	16			14 mNm										
12	24			14 mNm										
16	32			14 mNm										
 12 mm Square GS no Switch Push D-shaft	Barling (5.0 mm)			12	12	3~20 mNm	—	20	30.000	EVEGA1F2012M			6E473C	
				12	12	3~20 mNm		30		EVEGA1F3012M				
				24	24	3~20 mNm		17,5		EVEGA1F1724M				
				24	24	3~20 mNm		20		EVEGA1F2024M				
		24	24	3~20 mNm	22,5	EVEGA1F2224M								
		24	24	3~20 mNm	25	EVEGA1F2524M								
	Plastic (7.0 mm)	12	12	3~20 mNm	—	20	EVEGE1F2012M							
		12	12	3~20 mNm		25	EVEGE1F2512M							
		12	12	3~20 mNm		30	EVEGE1F3012M							
		24	24	3~20 mNm		22,5	EVEGC1F2224M							
		24	24	3~20 mNm		25	EVEGC1F2524M							
	Die-cast (7.0 mm)	12	12	3~20 mNm	—	20	EVEGC1F2012M							
		12	12	3~20 mNm		25	EVEGC1F2512M							
		24	24	3~20 mNm		20	EVEGC1F2024M							
		24	24	3~20 mNm		22,5	EVEGC1F2224M							
		24	24	3~20 mNm		25	EVEGC1F2524M							

Encoders – Radial Lead Type

Series / Type		Bushing	Pulse	Detents	Rotation Torque	Switch Push Force / Stroke	Height (mm)	Endurance (Cycles)	Part No.	print2web
	12 mm Square GS with Switch Push D-shaft	Die-cast (7 & 9 mm)	20	20	3~20 mNm	3N / 0,4 mm	20	30.000	EVEJBBF2020B	379CE8
			20	20			25		EVEJBBF2520B	
	16 mm Square GS Komuso Senior High torque with switch push func.	—	16	32	25 mNm	6 N / 0,5 mm	21,5		EVEQDBRG516B	6F0F5F
			8	16	25 mNm				EVEPDBRG508B	

Center Space Encoders – Radial Lead Type

Series / Type	Pulse	Detents	Rotation Torque	Endurance	Part No.	print2web
 20/12 mm	9	18	6 mNm	30.000	EVQV6B00909B	23628F
	9	18	7 mNm		EVQV6A00609B	
	9	18	9 mNm		EVQV5A00109B	
 27/18 mm	9	18	9 mNm		EVQV5N00409B	E474DA
	9	18	13,5 mNm		EVQV5D00309B	
	9	18	18 mNm		EVQV5G00209B	
	15	30	9 mNm		EVQV5L00415B	
	15	30	13,5 mNm		EVQV5C00315B	
	15	30	18 mNm		EVQV5B00215B	
	15	30	25 mNm		EVQV5K00715B	

Thermal Cutoffs – Radial Lead Type

Series / Type	Rated Temp.	Functioning Temp.	Electrical Rating			Maximum Operating Temp.	Holding Temp.	Maximum Temp. Limit : Tm	Part No.	print2web
			AC/DC	Volt	Amp.					
 Series N	86 °C	82 °C	AC	250	2	60 °C	60 °C	200 °C	EYP2BN082	35BD15
			AC	125	3	52 °C	56 °C			
			DC	50	4	45 °C	50 °C			
	102 °C	98 °C	AC	250	2	65 °C	75 °C	200 °C	EYP2BN099	
			AC	125	3	60 °C	70 °C			
			DC	50	4	55 °C	65 °C			
	114 °C	110 °C	AC	250	2	80 °C	90 °C	200 °C	EYP2BN109	
			AC	125	3	76 °C	86 °C			
			DC	50	5	65 °C	74 °C			
	115 °C	110 °C	AC	250	2	80 °C	90 °C	200 °C	EYP2BN110	
			AC	125	3	76 °C	86 °C			
			DC	50	5	65 °C	74 °C			
	134 °C	129 °C	AC	250	2	90 °C	100 °C	200 °C	EYP2BN127	
			AC	125	3	75 °C	90 °C			
			DC	50	4	65 °C	80 °C			
	139 °C	135 °C	AC	250	2	100 °C	110 °C	200 °C	EYP2BN134	
			AC	125	3	85 °C	100 °C			
			DC	50	6	60 °C	70 °C			
	145 °C	141 °C	AC	250	2	110 °C	120 °C	200 °C	EYP2BN143	
			AC	125	3	105 °C	115 °C			
			DC	50	6	80 °C	90 °C			
 Series F	102 °C	98 °C	AC	250	1	65 °C	75 °C	200 °C	EYP1BF101	E2FEA2
			AC	125	2	60 °C	70 °C			
			DC	50	3.5	55 °C	65 °C			
	115 °C	110 °C	AC	250	1	80 °C	90 °C	200 °C	EYP1BF115	
			AC	125	2	76 °C	90 °C			
			DC	50	4	70 °C	80 °C			
	134 °C	129 °C	AC	250	1	90 °C	105 °C	200 °C	EYP1BF134	
			AC	125	2	85 °C	100 °C			
			DC	50	4	65 °C	80 °C			
	139 °C	135 °C	AC	250	1	100 °C	110 °C	200 °C	EYP1BF138	
			AC	125	2	90 °C	105 °C			
			DC	50	5	65 °C	70 °C			
	145 °C	141 °C	AC	250	1	110 °C	125 °C	200 °C	EYP1BF145	
			AC	125	2	110 °C	125 °C			
			DC	50	5	80 °C	95 °C			

Thermal Cutoffs – Radial Lead Type

Series / Type	Rated Temp.	Functioning Temp.	Electrical Rating			Maximum Operating Temp.	Holding Temp.	Maximum Temp. Limit : Tm	Part No.	print2web
			AC/DC	Volt	Amp.					
 Series E	102 °C	98 °C	AC	250	0.5	65 °C	75 °C	200 °C	EYP05BE101	F78435
			AC	125	1.5	60 °C	70 °C			
			DC	50	3	55 °C	65 °C			
	115 °C	110 °C	AC	250	0.5	80 °C	95 °C	200 °C	EYP05BE115	
			AC	125	1.5	76 °C	93 °C			
			DC	50	3	70 °C	84 °C			
	134 °C	129 °C	AC	250	0.5	90 °C	105 °C	200 °C	EYP05BE134	
			AC	125	1.5	85 °C	100 °C			
			DC	50	3	70 °C	85 °C			
	139 °C	135 °C	AC	250	0.5	100 °C	115 °C	200 °C	EYP05BE138	
			AC	125	1.5	95 °C	110 °C			
			DC	50	4	65 °C	80 °C			
	145 °C	141 °C	AC	250	0.5	110 °C	125 °C	200 °C	EYP05BE145	
			AC	125	1.5	105 °C	125 °C			
			DC	50	5	80 °C	95 °C			
 Series H	102 °C	98 °C	AC	250	2	65 °C	75 °C	200 °C	EYP2BH101	8B1B94
			AC	125	3	60 °C	70 °C			
			DC	50	3.5	55 °C	65 °C			
	115 °C	110 °C	AC	250	2	80 °C	90 °C	200 °C	EYP2BH115	
			AC	125	3	76 °C	86 °C			
			DC	50	3.5	74 °C	84 °C			
	134 °C	129 °C	AC	250	2	90 °C	95 °C	200 °C	EYP2BH134	
			AC	125	3	70 °C	85 °C			
			DC	50	3.5	65 °C	80 °C			
	139 °C	135 °C	AC	250	2	100 °C	105 °C	200 °C	EYP2BH138	
			AC	125	3	80 °C	95 °C			
			DC	50	3.5	75 °C	90 °C			
	145 °C	141 °C	AC	250	2	110 °C	125 °C	200 °C	EYP2BH145	
			AC	125	3	100 °C	115 °C			
			DC	50	4.5	85 °C	100 °C			
 Series MP	92 °C	88 °C	DC	32	2	55 °C	60 °C	135 °C	EYP2MP092AFT	771BE8
	98 °C	94 °C	DC	32	2	60 °C	65 °C	135 °C	EYP2MP098AFT	
Series MU	92 °C	89 °C	DC	32	4	55 °C	55 °C	135 °C	EYP4MU092GFD	40581E

Wireless Modules

Bluetooth

Series / Type		BT Standard Profiles	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN1315 PAN1325 (with Antenna)		2.1 EDR HCI	9,0 x 6,5 x 1,7 mm	CC2560	-93 dBm @ BER 10 ⁻³	+10,5 dBm	1,8 to 4,8 V
 PAN1310			11,6 x 8,7 x 1,8 mm	PMB8763			
 PAN1320			15,6 x 8,7 x 2,8 mm				
 PAN1311		2.0 EDR SPP	11,6 x 8,7 x 1,8 mm	PMB8753/2			
 PAN1321			15,6 x 8,7 x 2,8 mm				
 PAN1455		2.1 EDR SPP, HID, HDP,...	18,8 x 13,5 x 2,5 mm	BC6 / STM32F103			
 PAN1555			22,8 x 13,5 x 2,5 mm				

Bluetooth Low Energy

Series / Type	BT Standard Profiles	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN1720	Low Energy HCI	15,6 x 8,7 x 2,8 mm	CC2540	-88 dBm @ 1MBit/s	+5 dBm	2,0 to 3,6 V

Bluetooth Dual Mode

Series / Type	BT Standard Profiles	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN1316 PAN1326 (with Antenna)	Dual Mode HCI	9,0 x 6,5 x 1,7 mm	CC2564	-93 dBm @ BER 10 ⁻³	+10,5 dBm	1,8 to 4,8 V

Bluetooth & ANT

Series / Type	BT Standard Profiles	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN1317 PAN1327 (with Antenna)	ANT HCI	9,0 x 6,5 x 1,7 mm	CC2567	-93 dBm @ BER 10 ⁻³	+10,5 dBm	1,8 to 4,8 V

	Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web	
	135 µA (sleep) 40 mA (Tx,EDR)	2,4 GHz	2	• GPIO • PCM • UART	3 MBit/s (gross)	Mass Production	PAN1315 PAN1325 (with Antenna)	553B8D	
	80 µA (sleep) 40 mA (Tx,EDR)		> 15	• GPIO • PCM • UART • JTAG	3 MBit/s (gross) 2.170 kBit/s (net)		PAN1310	E68C4A	
							PAN1320	23A245	
					• GPIO • UART • JTAG		3 MBit/s (gross) 190 kBit/s (net)	PAN1311	CA6B94
					• GPIO • UART • JTAG			PAN1321	B2E369
	<100 µA (sleep) 47 mA (ACL; DH1)		18	• GPIO • UART • I²C • SPI • ADC	3 MBit/s (gross) ~500 kBit/s (net)		PAN1455	A52FE4	
						PAN1555	D5DA9F		

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
Tx: 23mA@-6dBm Rx: 18mA Sleep Mode: <1 μ A	2,4 GHz	TBD	• GPIO • UART	1.000 kBit/s	Engineering Samples Q4/2010	PAN1720	3A1081

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
135 μ A (sleep) 40 mA (Tx,EDR)	2,4 GHz	2	• GPIO • PCM • UART	3 MBit/s (gross)	Engineering Samples	PAN1316 PAN1326 (with Antenna)	2D10CA

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
135 μ A (sleep) 40 mA (Tx,EDR)	2,4 GHz	2	• GPIO • PCM • UART	3 MBit/s (gross)	Engineering Samples	PAN1317 PAN1327 (with Antenna)	255A0F

ISM (Market for Industrial-Scientific-Medical Solutions)

Series / Type	Description	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN7550	Wireless M-Bus AT Command Set	32,0 x 13,7 x 2,9 mm	MSP430/CC1101	-109 dBm @ 1,2kBit/s	+10 dBm	1,8 to 3,6 V
 PAN2460	<1 GHz Modem High Power	TBD	AX5042/HC9S08	-118 dBm @ 1,2kBit/s	+30 dBm	3,0 to 3,6 V
 PAN235x	<1 GHz Transceiver Module	8,0 x 8,2 x 1,9 mm	CC1101	-104 dBm @ 2,4kBit/s	+10 dBm	1,8 to 3,6 V
 PAN2365	2.4 GHz Transceiver Module	8,0 x 8,2 x 1,9 mm	CC2500	-104 dBm @ 2,4kBit/s	0 dBm	
 PAN2465	2.4 GHz Modem	20,0 x 14,4 x 2,3 mm	nRF24L01+/SL931	-94 dBm @ 250kBit/s		

nanoLOC

Series / Type	Description	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN5375	20dB Transceiver Localization Engine	29,0 x 15,0 x 3,8 mm	NA5TR1/μPG22x	-87 dBm @ 80MHz/1μs	+20 dBm	2,3 to 2,7 V

IEEE 802.15.4 (Mesh Networking)

Series / Type	Description	Size	Used ICs	Rx Sensitivity	Tx Power (max.)	Power Supply
 PAN3565	WiHART Stack	39,0 x 24,5 x 9,0 mm	MC13224/CC2590	-104 dBm	+10 dBm	2,0 to 3,6 V
 PAN4555	AT Command Set & Mesh Software	16,4 x 12,2 x 2,2 mm	MC1321x	-92 dBm	0 dBm	2,0 to 3,4 V
 PAN4560 / 4561	AT Command Set & Mesh Software	35,0 x 15,0 x 3,8 mm	MC1321x/CC2591	-92 / -102 dBm	0 / +20 dBm	2,0 to 3,4 V

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
Tx: 30mA@+10dBm Rx: 17mA Sleep Mode: <1µA	863 - 928 MHz	27	• GPIO • UART • SPI • JTAG • Spi-By Wire	500 kBit/s	Mass Production	PAN7550	F5F697
ca 20µA (stand by) 800mA @ 1W @ 3V 1A @ 2W @ 3V	<1 GHz (EU,US,..)	12	• GPIO • 2x UART • I²C • PWM • ADC	600 kBit/s	Under Developm.	PAN2460	F2BB6F
<1µA (sleep) 17mA (Tx, 0dBm)	300 to 1000 MHz	2 Output	• GPO • SPI	500 kBit/s	Mass Production	PAN235x	DDFA01
<1µA (sleep) 21mA (Tx, 0dBm)	2,4 GHz	2 Output	• GPO • SPI		Engin. Samples	PAN2365	9B2303
Tx: 13,2mA @ 0dBm Rx: 14,3mA Sleep Mode: <1µA	2,4 GHz	9	• GPIO • UART • SPI	2.000 kBit/s		PAN2465	DF0892

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
3,5µA (power down) 210mA (Tx,+20dBm)	2,4 GHz	4	• GPIO • SPI	2.000 kBit/s	Engin. Samples	PAN5375	463A03

Current Consumption	Frequency Range	Number of GPIO's	Interfaces	Data Rate (max. air)	Status	Part No.	print2web
ca. 2µA (off mode) 27 / 140 mA (Tx, 0 / +20 dBm)	2,4 GHz	TBD	• GPIO • UART • SPI • I²C	250 kBit/s	Under Developm.	PAN3565	03ADF3
<1µA (off mode) 30 mA (Tx, -4dBm)	2,4 GHz	19	• GPIO • UART • SPI	250 kBit/s	Mass Production	PAN4555	51871E
<1 / 2 µA (off mode) 30 / 210 mA (Tx, -4 / +20 dBm)	2,4 GHz	33	• GPIO • UART • I²C • BDM	250 kBit/s	Engin. Samples	PAN4560 / 4561	C99EBE

"PGS" Graphite Sheets – 0.025 mm Type

Series / Type		Thickness	Thermal conductivity	Whith-stand temp.	Size (L x W) [mm]	Part No.	print2web
	PGS only	0,025 mm	1.500 to 1.700 W/(m·K)	400 °C	115 x 180	EYGS121803	81142D
	Insulating film type	0,055 mm	650 to 800 W/(m·K)	100 °C	115 x 180	EYGA121803P	
	This insulating film type	0,035 mm	1.100 to 1.250 W/(m·K)	100 °C	115 x 180	EYGA121803S	
	Strong adhesion type	0,055 mm	650 to 800 W/(m·K)	100 °C	115 x 180	EYGA121803A	
	Thin adhesion type	0,035 mm	110 to 1.250 W/(m·K)	100 °C	115 x 180	EYGA121803M	
	High heat-resistance insulation film type	0,055 mm	650 to 800 W/(m·K)	180 °C	115 x 180	EYGA121803K	
	High heat-resistance adhesion type	0,055 mm	650 to 800 W/(m·K)	150 °C	115 x 180	EYGA121803T	

"PGS" Graphite Sheets – 0.07 mm Type

Series / Type		Thickness	Thermal conductivity	Whith-stand temp.	Size (L x W) [mm]	Part No.	print2web
	PGS only	0,07 mm	750 to 950 W/(m·K)	400 °C	180 x 230	EYGS182307	6AD875
	Insulating film type	0,10 mm	550 to 700 W/(m·K)	100 °C	115 x 180	EYGA121807P	
	This insulating film type	0,08 mm	650 to 800 W/(m·K)	100 °C	115 x 180	EYGA121807S	
	Strong adhesion type	0,10 mm	550 to 700 W/(m·K)	100 °C	115 x 180	EYGA121807A	
	Thin adhesion type	0,08 mm	650 to 800 W/(m·K)	100 °C	115 x 180	EYGA121807M	
	High heat-resistance insulation film type	0,10 mm	550 to 700 W/(m·K)	180 °C	115 x 180	EYGA121807K	

"PGS" Graphite Sheets – 0.1 mm Type

Series / Type		Thickness	Thermal conductivity	Whith-stand temperature	Size (L x W) [mm]	Part No.	print2web
	PGS only	0,10 mm	600 to 800 W/(m·K)	400 °C	180 x 230	EYGS182310	D330B3
	Insulating film type	0,13 mm	500 to 600 W/(m·K)	100 °C	115 x 180	EYGA121810P	
	Thin insulating film type	0,11 mm	550 to 650 W/(m·K)	100 °C	115 x 180	EYGA121810S	
	Strong adhesion type	0,13 mm	500 to 600 W/(m·K)	100 °C	115 x 180	EYGA121810A	
	Thin adhesion type	0,11 mm	550 to 650 W/(m·K)	100 °C	115 x 180	EYGA121810M	
	High heat-resistance insulation type	0,13 mm	500 to 600 W/(m·K)	180 °C	115 x 180	EYGA121810K	
	High heat-resistance adhesion type	0,13 mm	500 to 600 W/(m·K)	150 °C	115 x 180	EYGA121810T	
	Low thermal resistance type	0,11 mm	550 to 650 W/(m·K)	85 °C	115 x 180	EYGA121810C	
	Multilayered type (One-side)	0,20 mm	250 to 350 W/(m·K)	180 °C	115 x 180	EYGM121810SS	
	Multilayered type (Double-side)	0,30 mm	200 to 300 W/(m·K)	180 °C	115 x 180	EYGM121810SW	

ZNR Transient/Surge Absorbers

Series / Type		Varistor Voltage	Maximum Peak Current	Part No.	print2web
	Series D - Radial Lead Type	18 to 1.800 V	125 to 7.000 A	ERZVxxxxxxxx	DFBF84
	Series VF - Surface Mount Type	22 to 470 V	125 to 600 A	ERZVFxMxxxx	7DF6AE
	Series SC - Radial Lead Type	200 to 950 V	—	ERZVS34Cxxxx	7BCBDD
	Series CK - Radial Lead Type	200 to 950 V	20k A to 25k A	ERZCxxCKxxxW	5FBFF2

Finland

Panasonic Industrial Europe GmbH - Helsinki Sales Office

Address: Urho Kekkosen Katu 7B
00100 Helsinki
Finland
Tel: +358 9 6898 4150
Fax: +358 9 6898 4151

France

Panasonic France S.A.S

Address: 1-3 avenue Francois Mitterrand
93218 Saint Denis La Plaine Cedex
FRANCE
Tel: +33 1 55 93 66 00
Fax: +33 1 55 93 67 90

Germany

Panasonic Industrial Europe GmbH

Address: Winsbergring 15
22525 Hamburg
GERMANY
Tel: +49 40 85 386 370
Fax: +49 40 85 386 101
Website: <http://industrial.panasonic.com/eu/>

For General Inquiries
Tel: +49 40 85 386 370

For Electric/Electronic Components
Tel: +49 89 46 159 0

For Batteries and Accu's
Tel: +49 40 85 386 157

For Robots and Welding Systems
Tel: +49 2102 94 213 0

For Factory Solutions
Tel: +49 89 46 159 226

For Factory Solutions Spare Parts
Tel: +49 40 85 386 304

Panasonic Factory Solutions Europe A Division of Panasonic Industrial Europe GmbH

Address: Winsbergring 15
22525 Hamburg
GERMANY
Tel: +49 40 85 386 287
Fax: +49 40 85 386 241

Italy

Panasonic Italia S.p.A.

Address: C/O Panasonic Italia S.p.A.
Viale Dell'Innovazione 3
20125 Milano
ITALY
Tel: +39 02 6788 321
Fax: +39 02 6788 207

Spain

Panasonic Industrial Europe GmbH - Sucursal en Espana

Address: Parque Empresarial @ Sant Cugat
Via Augusta 15_25 Edificio B2 Planta 4 Oficina 17
08174 Sant Cugat del Vales
Barcelona
SPAIN
Tel: +34 93 504 3010
Fax: +34 93 675 5892

U.K.

Panasonic Industrial Europe GmbH - UK Branch

Address: Willoughby Road
Bracknell
Berkshire RG12 8FP
U.K.
Tel: +44 1344 862 444
Fax: +44 1344 476 575

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Please visit our Homepage
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For further details please contact:

Panasonic Industrial Europe GmbH
Address: Winsbergring 15
22525 Hamburg
GERMANY
Tel: +49 40 85 386 370
Fax: +49 40 85 386 101
Website: <http://industrial.panasonic.com/eu/>