

# 2022 - 2023A

## Product Selection Guide

深圳顺络电子股份有限公司  
Shenzhen Sunlord Electronics Co., Ltd.

**Sunlord**  
expert in e components

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## CHIP BEAD

for Low Speed Signal Line	<b>GZ Series</b>							
		Z@100MHz (Ω)	GZ0603 5-1000	GZ1005 0-1800	GZ1608 0-2500	GZ2012 0-2500	GZ3216 0-1200	
for High Speed Signal Line	<b>SZ Series</b>							
		Z@100MHz (Ω)	SZ0603 5-120	SZ1005 0-1800	SZ1608 0-2700	SZ2012 0-2700		
for Power Line	<b>PZ Series</b>							
		Z@100MHz (Ω) Rated Current (A)	PZ0603 5-1000 0.2-1	PZ1005 0-600 0.45-1.8	PZ1608 0-600 0.5-3.0	PZ2012 30-600 0.8-4.0	PZ3216 0-1000 0.5-6.0	PZ4516 60-1000 1.5-6.0
for High Frequency Noise Suppression	<b>UPZ Series</b>							
		Z@100MHz (Ω) Rated Current (A)	UPZ0603 22-80 1.0-1.8	UPZ1005 0-220 0.9-2.2	UPZ1608 22-600 1.0-6.0	UPZ2012 22-1000 1.5-6.0		
for High Frequency Noise Suppression	<b>EPZ Series</b>							
		Z@100MHz (Ω) Rated Current (A)					EPZ1005-4030 10-220 1.2-10.0	
for High Frequency Noise Suppression	<b>HZ Series</b>							
		Z@100MHz (Ω)	HZ0603 120-600	HZ1005 120-1800	HZ1608 180-1000			
for High Frequency Noise Suppression	<b>HPZ Series</b>							
		Z@100MHz (Ω) Rated Current (A)	HPZ0603 25-50 0.4-0.6	HPZ1005 120-220 0.5-1.1	HPZ1608 100-1500 0.15-2.0			
for Audio line	<b>MZAS Series</b>							
		Z@100MHz (Ω) Rated Current (A)	MZAS1005 70-1000 0.23-0.90	MZAS1608 60-700 0.8-1.3	MZAS2016 400 2	MZAS3225 20-680 4-10		
for Audio line	<b>MZAH Series</b>							
		Z@100MHz (Ω) Rated Current (A)	MZAH1005 100-4600 0.27-1.1	MZAH1608 470 1.6				
Wire Wound Ferrite Bead	<b>WHZ Series</b>							
		Inductance(nH) Rated Current (A)	WHZ1005 20-560 0.2-1.6	WHZ1608 47-22000 0.13-1.4				

## COMMON MODE FILTER

for USB, LVDS, MIPI	<b>SDMM-H Series</b>									
		Common Mode Z@100MHz (Ω)	90	30 for MIPI C-PHY						
for HDMI	<b>SDCW Series</b>									
		Common Mode Z@100MHz (Ω)	20-360	25-220	67-180	30-1000	300-1000	90-2200	80-1000	330-1400
for HDMI	<b>SDCW-H Series</b>									
		Common Mode Z@100MHz (Ω)	35-90	67-120	67-120					
for USB, HDMI, LVDS, MIPI	<b>SDCW-U Series</b>									
		Common Mode Z@100MHz (Ω)	14-90	90						
for USB, HDMI, LVDS, MIPI	<b>SDMM-U Series</b>									
		Common Mode Z@100MHz (Ω)	12-25	12-90						

## MULTILAYER VARISTOR

for ESD Protection

### SDV Series



MAX.Continuous DC Working Voltage (V)  
C@ 0.5Vrms, 1MHz (pF)



SDV1005  
5.5-26  
0.5-80



SDV1608  
5.5-48  
0.5-360



SDV2012  
5.5-30  
18-1200

for Over-voltage Protection

### SDVL-HS Series **NEW**



MAX.Continuous DC Working Voltage (V)  
Peak Current 8/20us (A)



SDVL1608-HS  
9-100  
20-100



SDVL2016-HS  
9-150  
100-400



SDVL3216-HS  
9-100  
150-500



SDVL3225-HS  
9-100  
200-1200

### SVMH Series



MAX.Continuous AC Working Voltage (V)  
Peak Current 8/20us (A)



SVMH2016KA  
150-320  
50-180



SVMH3216KA  
150-320  
60-300



SVMH3225KA  
150-320  
150-400



SVMH4532KA  
175-320  
250-800

## CAPACITOR

Tantalum Capacitor

### TC2 Series MnO<sub>2</sub> Tantalum Capacitor



TC211A/B/C/D/E  
(for Industry)



TC212A/B/C/D/E  
(Low ESR)

Rated Voltage (V)  
Capacitance (uF)  
ESR (Ω)

2.5-50  
0.15-680  
0.4-18

2.5-50  
0.15-680  
0.12-15

### TC3 Series Polymer Tantalum Capacitor



TC311B/C/D/E/W/G2



TC312B/C/D/E/W/G2  
(High Rated Voltage)

Rated Voltage (V)  
Capacitance (uF)  
ESR (Ω)

2.5-16  
10-1000  
0.07-0.35

20-100  
3.3-330  
0.07-0.5

## Thermistor

### MULTILAYER NTC THERMISTOR

Temperature Sensing NTC

### SDNT Series

Resistance @25 C (kΩ)  
25 C /50 C B Constant (K)



SDNT0603  
10-100  
3380-4250



SDNT1005  
6.8-220  
3380-4250



SDNT1608  
2.2-220  
3380-4300



SDNT2012  
4.7-220  
3450-4300

## FOR HIGH FREQUENCY

Multilayer	<b>SDCL Series</b> Ceramic							
		SDCL0402	SDCL0603Q	SDCL1005	SDCL1608			
		Inductance (nH)	0.2-33	0.6-120	0.6-360	1.0-680		
		Rated Current (mA)	90-320	80-850	50-800	100-500		
Multilayer	<b>SDHL Series</b> Ceramic High Frequency							
		SDHL1005	SDHL1608					
		Inductance (nH)	1.0-100	10-180				
		Rated Current (mA)	100-500	150-500				
Multilayer	<b>HQ Series</b> Ceramic High Q							
		HQ0201Q	HQ0402Q	HQ0402H	HQ0603Q	HQ0603H	UHQ0402H	
		Inductance (nH)	0.3-10	0.2-56	0.2-33	0.6-150	0.6-47	0.2-20
		Rated Current (mA)	130-650	100-1000	120-990	80-1100	130-1000	140-990
Wire Wound	<b>MWSD-C Series</b> Ceramic High Q							
		MWSD0603C	MWSD0804C	MWSD1005C	MWSD1005CP	MWSD1005CH	MWSD1608C	
		Inductance (nH)	1.0-15	0.8-56	0.8-270	1.0-51	56-220	3.3-560
		Rated Current (mA)	230-900	130-1800	100-1000	360-2300	160-360	70-850
Wire Wound	<b>SDWL-C Series</b> Ceramic High Q							
		SDWL2012C	SDWL2520C	SDWL3216C	SDWL3225C	SDWL4532C		
		Inductance (nH)	2.2-4700	3.6-22000	3.3-1200	3.9-22000	24-33000	
		Rated Current (mA)	30-600	70-1000	300-1000	100-1000	145-1000	
Wire Wound	<b>SDWL-CP Series</b> Ceramic High Q and Large Current							
		SDWL2012CP						
		Inductance (nH)	2.6-820					
		Rated Current (mA)	180-2000					

## FOR SIGNAL LINE

Multilayer	<b>SDFL Series</b> Ferrite							
		SDFL1005	SDFL1608	SDFL2012	SDFL3216			
		Inductance (μH)	0.047-3.3	0.047-33	0.047-47	0.047-47		
		Rated Current (mA)	10-25	1-50	4-300	5-300		
Multilayer for NFC	<b>MCL-N Series</b> Ferrite							
		MCL1005N	MCL1608N					
		Inductance (μH)	0.077-0.56	0.077-0.82				
		Rated Current (mA)	250-550	300-1100				
Wire Wound	<b>MWSD-F Series</b> Ferrite							
		MWSD0603F	MWSD0703F	MWSD1005F	MWSD1608F	MWSD1608FE	MWSD2012FE	
		Inductance (μH)	0.033-0.2	0.027-0.56	0.018-2.2	0.0049-47	1.0-47	2.2-100
		Rated Current (mA)	110-340	90-480	170-2200	50-2600	100-700	180-1040
Wire Wound	<b>SDWL-FW Series</b> Ferrite							
		SDWL2012FW	SDWL2520FW	SDWL3216FW	SDWL3225FW			
		Inductance (μH)	0.27-68	0.33-10	1.5-18	0.12-12		
		Rated Current (mA)	40-350	300-700	130-320	140-450		
Wire Wound (Resin Molded)	<b>SDWL-F Series</b> Ferrite							
		SDWL2520F	SDWL3225F	SDWL4532F				
		Inductance (μH)	0.01-100	0.01-470	0.1-1000			
		Rated Current (mA)	60-530	25-450	30-800			

## FOR POWER LINE

Multilayer

**MCL Series**  
Magnetic Shielded



	MCL1608	MCL2012
Inductance (μH)	0.1-10	0.1-10
Rated Current (mA)	50-700	60-1000

Multilayer

**MCL-A Series**  
Magnetic Shielded



	MCL2012A	MCL2016A	MCL2520A
Inductance (μH)	1.0-10	1.0-4.7	1.0-4.7
Rated Current (mA)	150-450	100-900	250-750

Multilayer

**MPH Series**  
Magnetic Shielded



NEW



	MPH1608	MPH2012	MPH2016	MPH2520	MPHM1608
Height (mm)	0.55/0.65/0.95	0.55/0.6/0.9/1.0/1.4	1.0/1.2	1.0/1.2	0.9
Inductance (μH)	0.22-10	0.22-10	0.47-10	0.47-10	0.47-4.7
Rated Current (mA)	60-1350	110-1200	170-1350	210-1750	70-1000

Wire Wound  
(Resin Molded)

**SDWL-FD Series**  
Ferrite



	SDWL2520FD	SDWL3225FD	SDWL4532FD
Inductance (μH)	1.0-33	1.0-330	1.0-330
Rated Current (mA)	120-475	70-1000	90-1050

Wire Wound

**SWPA Series**  
Magnetic Shielded  
(Single Structure Type)



	SWPA2520	SWPA30	SWPA40	SWPA50	SWPA60	SWPA80
Height (mm)	1.0/1.2	1.0/1.2/1.5	1.0/1.2/1.8/2.0/3.0	1.2/2.0/4.0/4.5	1.2/2.0/2.8/4.5	4.0/6.0/6.5
Inductance (μH)	0.47-22	0.22-150	0.24-680	0.22-680	0.47-680	0.68-680
Rated Current (mA)	380-2350	190-3000	140-4560	250-6600	330-6500	460-7500

Wire Wound

**SPH Series**  
Magnetic Shielded  
(Low DCR)



	SPH2016H/U	SPH2520	SPH30	SPH40
Height (mm)	1.0	1.0/1.2	1.0/1.2/1.5	1.2/1.8
Inductance (μH)	0.05-10	0.16-82	0.22-47	0.1-330
Rated Current (mA)	450-3650	300-4050	450-3050	200-4200

Wire Wound

**SWCB Series**  
No Magnetic Shielded



	SWCB1305~1807
Height (mm)	5.5~12.0
Inductance (μH)	1.0-1000
Saturation Current (mA)	500-7100

**SWCC Series**  
No Magnetic Shielded



	SWCC0603
Height (mm)	3.0
Inductance (μH)	1.0-68
Saturation Current (mA)	400-2900

Wire Wound

**SWRB Series**  
Magnetic Shielded  
(Sleeve Type)



	SWRB0703-1207A	SWRB1204S/05S/07S
Height (mm)	3.5-7.8	5.0/6.0/8.0
Inductance (μH)	1.2-680	1.0-1000
Rated Current (mA)	200-8200	480-10000

Wire Wound

**SWRH Series**  
Magnetic Shielded  
(Sleeve Type)







	SWRH-DR	SWRH-DS	SWRH-DC	SWRH-B	SWRH-C
Height (mm)	1.3/1.6/1.8/2.1	1.8-4.0	3.0/4.0/4.5	3.0-10	3.0/4.0/5.0
Inductance (μH)	1.2-47	1.0-1000	1.5-100	1.0-1000	1.0-820
Rated Current (mA)	140-1850	140-5200	750-6000	190-13000	230-6500

## FOR POWER LINE

Wire Wound

**WPN Series**  
Magnetic Shielded  
(Low DCR)

				
Height (mm)	1.0/1.2	1.0/1.2	1.0/1.2	1.0/1.2/2.0
Inductance (μH)	0.12-10	0.16-10	0.33-15	0.22-10
Rated Current (mA)	650-5600	800-5000	1000-4200	900-8200







Wire Wound

**WPG Series**  
Magnetic Shielded  
(Low DCR)

			
Height (mm)	1.0	1.0	1.0
Inductance (μH)	0.11-1.0	0.24-2.2	0.24-4.7
Rated Current (mA)	2200-5500	2150-4900	1600-5150





Wire Wound  
(Molded)

**WT Series** NEW  
Magnetic Shielded  
(Large Current and Low Loss)

						
L×W×H (mm)	2.5×2.0×1.2	3.2×2.5×1.2	4.0×4.0×1.5	4.0×4.0×2.1	4.0×4.0×2	4.0×4.0×3.1
Inductance (μH)	0.22-4.7	0.1-1	0.33-1.0	0.33-3.3	0.47-1.2	0.33-6.8
Saturation Current (A)	2-10	6.4-13	6-13	4.7-15.7	5.4-8.5	4.1-18.8






Wire Wound  
(Mini Molded)

**MWTC Series**  
Magnetic Shielded  
(Small Size and Ultra Thin)






				
L×W×H (mm)	1.4×1.2×0.65/0.8	2.0×1.2×0.8/1.0	2.0×1.6×0.8/1.0	2.5×2.0×0.8/1.0
Inductance (μH)	0.24-0.47	0.11-2.2	0.24-4.7	0.47-4.7
Saturation Current (A)	2.9-3.5	1.1-5.6	1.3-5.0	1.6-4.7

Wire Wound







**WPZ Series**  
Magnetic Shielded  
(Ultra Large Isat)

					
L×W×H (mm)	4.1×4.0×4.0	5.2×5.2×6.5	7.3×6.8×3.8/4.2 7.0×7.0×5.0	9.6×6.4×8.1	9.6×(6.4,6.6)×10.1
Inductance (nH)	22-100	55-150	60-150	100-300	70-280
Saturation Current (A)	17-40	25-70	20-70	32.5-94	30-145

					
L×W×H (mm)	9.5×7.5×4.0/9.0	10.0×6.0/ 6.15×12.0	10.2/10.7×7.0×5.0 10.25×7.0×5.2	10.0×7.0×10.0	10.3×8.0×7.0 10.4×8.0×7.5
Inductance (nH)	70-300	70-330	70-300	70-330	100-330
Saturation Current (A)	26-80	30-175	19-130	37-165	28-108

				<span style="color: red;">NEW</span> 	<span style="color: red;">NEW</span> 	<span style="color: red;">NEW</span> 
L×W×H (mm)	10.4×8.0×8.2	11.0×7.4×7.7	13.7×12.8×8.1	10.0×10.0×3.35	9.6×6.4× 10/11.4	12.0×6.0× 11.1/12.0
Inductance (nH)	80-330	70-510	110-500	100-300	70-170	70-200
Saturation Current (A)	33-130	18-150	28-140	26-79	60-149	55-157

# Coils/Inductors

## TRANSFORMER

### PCB Planar Transformer

#### TPP Series

Customized

Dimensions LxWxH (mm)	TPPED14	TPPED18	TPPED21	TPPED22	TPPER25	TPPER25
Power (W), Ref.	15	18	45	25	65	45
Application	AC-DC, PD	AC-DC, PD	AC-DC, PD	AC-DC, PD	AC-DC, PD	AC-DC, PD

### Winding Transformer

#### TWS/TWP Series

Customized

Dimensions LxWxH (mm)	TWS/TWPEP07	TWS/TWPEP09	TWS/TWPEP12	TWS/TWPEP13	TWPEE16	TWPEE16
Power (W), Ref.	3	5	10	15	20	20
Application	xDSL, PoE	xDSL, PoE	xDSL, PoE	xDSL, PoE	AC-DC	AC-DC

### Other Types

#### RTSB/TW Series

Customized

Dimensions LxWxH (mm)	RTSB	TWSHI	TWPEP05
Power (W), Ref.	< 3	30	30
Application	DC-DC	RJ45	AD-DC

## WIRELESS CHARGING

### Sheet

#### MQF Series

Ferrite Sheet

Customized

Ferrite Sheet Thickness (mm)	0.08/0.10/0.12/0.14/0.24/0.34/0.44
Application Freq. (MHz)	0.1~6.78
Magnetic Permeability (u')	150±15%/650±20%
Magnetic Permeability (u'')	5/15 Max.

#### MQN Series

Crystalline Sheet

Customized

Nano Crystalline Thickness (mm)	0.02
Application Freq. (MHz)	0.1~0.2
Magnetic Permeability (u')	500±10%~1000±20%
Magnetic Permeability (u'')	40/50/70/100

## NFC PRODUCT

### Sheet

#### FS/DC Series

Ferrite Sheet

Customized

Thickness (mm)	0.04/0.06/0.08/0.10/0.12/0.14/0.19/0.30/0.40/0.50
Application Freq. (MHz)	13.56
Magnetic Permeability (u')	135/150/160
Magnetic Permeability (u'')	5

### Antenna

#### MNFA-WFB Series

Ferrite Flexible Antenna

Customized







Thickness (mm)	0.12~0.3
Application Freq. (MHz)	13.56

# RF Components





## RF PRODUCT (LTCC Technology)

### Multilayer Chip LC Filter



#### SLFB Series Band-pass

						
Center Freq. (MHz)	2450	1910-5890	2450	2450-5410	3600-4950	1920-4900

#### SLFL Series Low-pass





				
Cut-off Freq. (MHz)	915	787-7125	787-5500	902-5500

#### SLFH Series High-pass

		
Start Freq. (MHz)	5150	1358





### Multilayer Chip Balun

#### SLBL Series Balun

				
Frequency Range (MHz)	698-2700	758-2025	699-6000	2400-8000


### Multilayer Chip Diplexer

#### SLFD Series

				
Frequency Range (MHz)	2400-7125	698-5950	698-5950	698-5950

### Multilayer Chip Triplexer

#### SLFT Series Triplexer

	
Frequency Range (MHz)	1560-5950







### Multilayer Coupler

#### SLCP Series Coupler

				
Frequency Range (MHz)	2400-5950	2400-7125	700-8000	210-728

### Multilayer Chip Antenna



#### SLDA Series 2.45GHz

						
Center Freq. (GHz)	2.4~2.8	2.51~2.54	2.64	2.47	3.01	2.66
Band Width (MHz)	≥100	≥200	≥200	≥200	≥200	≥200
Peak Gain (dBi)	0.5~2.5	2.5	2.6	2.7	2.0	3.0

## RF PRODUCT (Wire Wound)

### Chip Balun Transformer

#### BW21S Series TV tuner

		
Freq. Range (MHz)	BW21S 45-2150	BW21C 13.56
Port Impedance (Ω)	50/50-75/75	25/25

#### BW43S Series

	
Inductance @50MHz (uH)	BW43S 1.00-1.25
Port Impedance (Ω)	50/50