

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











TOKIN NEW PRODUCTS

English





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
 Please request for a specification sheet for detailed product data prior to the purchase.
 Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

Contents

Capacitors	Polymer Tantalum Chip Capacitor NeoCapacitor™ ·····	З
	125°C Rated Polymer Tantalum Chip Capacitor NeoCapacitor™ PS/H Series······	··· 4
	Face Down Package Polymar Chip Capacitor NeoCapacitor F/PS Series ······	···· 5
	Axial Lead Type Aluminum Electrolytic Capacitor	6
	SuperCapacitor	7
	SuperCapacitor FMQ Series ·····	8
	Micro Enegy Harvesting	9
Power Inductors	Metal Composite Inductors for Automotive application ······	10
Reactors	Metal Composite Reactors ·····	11
Flex Suppressor®	UL94 V-O Flame Retardant type Flex Suppressor® ······	12
	High Magnetic Permeability type Flex Suppressor®	13
	GHz Band High Performance type Flex Suppressor® ·····	14
EMI Cores	Nanocrystal EMI Core ESD-R-H-NC Series ·····	15
Choke Coils	Three-phase SCF Series ·····	17
	SSHB10HS Series ·····	18
	SSHB21HS Series ·····	19
	SSHB series Shapes and Dimensions	20
	SSRH24NV Series ·····	21
	SSRH24NVS Series ·····	22
	SSRH30NH Series ·····	23
	SSRH7H-M Series ·····	24
	SSRH7HS-M Series ·····	25
Sensor Actuator	Current Sensor(Clamp CT : C/CT-1216)	26
	Thermal Sensor(TRS®Series&OHD™ Series)······	27
	Pyroelectric Infrared Sensor (PL Series)	28
	Vibration Sensor ·····	29
	Piezo Receiver / Speaker	30
	Multilayer Piezoelectric Actuators ·····	31
	Piezoelectric Ceramics ·····	32



All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
 Please request for a specification sheet for detailed product data prior to the purchase.
 Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.



Polymer Tantalum Chip Capacitor NeoCapacitor



Features

- Low ESR / High permissible ripple current
- Industry leading lineup using cutting-edge powder technology
- No reduction in capacitance due to DC bias
- High level of safety

Applications

- Notebook PC
- HDD / SSD
- Tablet PC
- Digital Camera
- Smart Phone
- Server
- TV
- Base Station
- Security Camera

Product Lineup

Voltage Capacitance	2.5V	4V	6.3V	10V	16V	20V	25V	35V
3.3µF				A	Α			
4.7μF				Α	B2			
6.8µF			Α	A, B2	B2		B3, B2	В3★
10μF		Α	P2, A	P2, A, B2	B2		B15	
15μF			A, B2	A, B2	B2		B3 ★ , B2	
22µF		B2	A, B3, B2	P2, A3, A, B3, B2		B2	B2 ★	
33µF		Α	A, B3, B2	A3, A, B3, B2	B3 ★ , B2	B2	V, D	
47μF		A, B3	P2, A3, A, B3, B2	A3, A, B3, B2	V, D	V15		
68µF		Α	B3, B2	V, D	V, D			
100μF	A, B3	A3, A, B3, B2	A3, A, B3, B2	B2	V			
150μF		B2	B3★, B15, B2	V, D	D			
220µF	A, B3★, B2	B2	B2	V, D				
330µF	B2	V, D	V, D					
470μF	V	D	V, D					
680µF	D	D						
1000μF	D							

★:New

シリーズ名	ケース コード	寸法 [mm]
G/PS	P2	$2.0\pm 0.1 \times 1.25 \pm 0.1 \times 0.9 \pm 0.1$
F/PS	A3	3.2±0.2×1.6±0.2×0.9±0.1
PS/L	Α	3.2±0.2×1.6±0.2×1.6±0.2
PS/L, F/PS	В3	3.5±0.2×2.8±0.2×1.1±0.1
PS/L	B15	3.5±0.2×2.8±0.2×1.4±0.1
PS/L	B2	$3.5\pm0.2\times2.8\pm0.2\times1.9\pm0.1$
PS/K	V15	$7.3\pm0.3\times4.3\pm0.3\times1.4\pm0.1$
PS/K	V	$7.3\pm0.3\times4.3\pm0.3\times1.9\pm0.1$
PS/K	D	$7.3\pm0.3\times4.3\pm0.3\times2.8\pm0.3$





[•] All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

Please request for a specification sheet for detailed product data prior to the purchase.

Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







Highly reliable products optimized for industrial and communication devices which require reliability in high-temperature environments.

Features

- Operation temperature range : −55°C ~+125°C
- Achieve low ESR/high ripple current tolerance using conductive polymers

Applications

- Server
- Base Station
- Communication Equipment
- LED Lighting
- Industrial Robot



Product Lineup	h
----------------	---

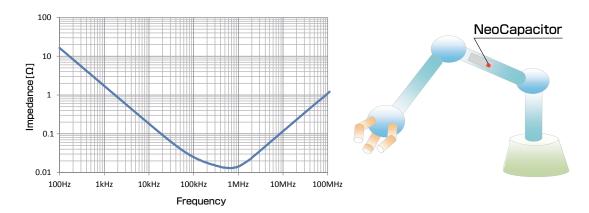
Voltage	2.5V	6.3V	10V	16V	25V	35V
Capacitance						
3.3µF						(B2)
4.7μF					(B2)	
22µF				(B2)		
33µF				(B2)		
47μF			B2			
100μF		B2				
150μF		(B2)				
220µF	(B2)	(B2)				
330µF	(B2)					

(): Under development

Series	Case code	Dimension [mm]
PS/H	B2	3.5±0.2×2.8±0.2×1.9±0.1

Frequency Characteristics

PSHB20J107M070 (B2/6.3V/100µF)

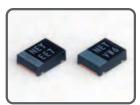




- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







A high reliablity product suitable for lower profile and smaller motherboard footprint of notebook PCs pursing high mobility.

Features

- Industry leading low profile and high capacity
- No reduction in capacitance due to DC bias
- No acoustic noise
- High level of safety

Applications

- Notebook PC
- Tablet PC
- HDD/SSD
- loT Equipment

Product Lineup

Voltage Capacitance	2.5V	6.3V	10V	16V	25V	35V
6.8µF						В3
10μF					(A2)	
15μF					ВЗ	
22μF			АЗ			
33µF			АЗ	(A3)		
47μF		АЗ	АЗ	(B3,A2)		
68µF			(B3)			
100μF		АЗ				
150μF		(A2)				
220µF		(B3)				
330µF	(B3)					

(): Under developmer	U.
----------------------	----

Series	Case code	Dimension [mm]
F/PS	АЗ	$3.2\pm0.2\times1.6\pm0.2\times0.9\pm0.1$
F/PS	A2	$3.2\pm0.2\times1.6\pm0.2\times1.1\pm0.1$
F/PS	вз	3.5±0.2×2.8±0.2×1.1±0.1

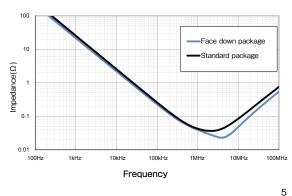
Construction





Frequency Characteristics

: PSLB31E685M (B3/25V/6.8μF) Standard package Face down package : FPSB31V685M (B3/35V/6.8µF)





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.



Axial Lead Type Aluminium Electrolytic Capacitor



Features

Optimal for applications which require high-reliability, long lifetime.

- High temperature(150°C, Rated voltage, 2,000hours, PEG226 Series)
- High vibration resistance(20G)
- High permissible ripple current(Max.28Arms)
- AEC Q200 Compliant, produced in a ISO/TS 16949 certified factory

Series development

Series	PEG225	PEG226	
Diameter Length	16-20mm 26.5-42.5mm	16-20mm 26.5-42.5mm	
Features	+150°C Reduce voltage 2,000hours High CV High permissible ripple current (Max. 28Arms) High vibration resistance	+150°C Reduce voltage 2,000hours High permissible ripple current (Max. 28Arms) High vibration resistance	
Capacitance range	470-6300μF	250-4700μF	
Rated voltage	25-63VDC	25-63VDC	
operating temperature	$-40\sim+125^{\circ}$ C (+125 $\sim+150^{\circ}$ C: Reduce voltage)	-40~+150℃	

Applications

Automotive

- Cooling fan
- Water cooling pump
- Power steering
- Electric motorcycle/Electric scooter/EV
- Alternator
- Braking system

- Injection
- Valve control
- Idling stop
- Supercharger
- Active suspension



[•]All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

Please request for a specification sheet for detailed product data prior to the purchase.

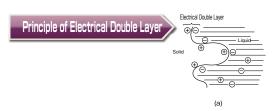
Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

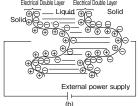


SuperCapacitor

The SuperCapacitor is a capacitor that employs the electric double layer principle to achieve an extremely large capacitance.

It is ideal for backups requiring long life and high reliability.





$C = \int_{\mathcal{E}} (4n\delta)^{-1} dS$

- ε : Dielectric constant of electrolyte
- δ : Distance from the electrode surface to the center of iron, which corresponds to a thickness of the electric double layer
- s : Surface area of the electrode interface

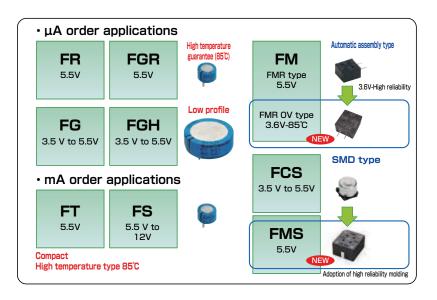
Features

- There is no limit for charge/discharge cycles.
 In principle, it has an unlimited cycle life.
- Since no chemical charge is involved, unlike a battery, quick charging and discharging is possible.
 Full charge is possible within a few seconds.
- General failure mode of SuperCapacitor is open circuit.
- Lineup matching various mounting form is available.
 Surface mounting and automatic mounting (self-alone mold type) can be applied.
- We guarantee a wide operating temperature range.
 High reliability type: -40 to 85°C
- RoHS Compliant

Applications and Markets

Since the TOKIN SuperCapacitor displays high structural reliability in humid environments and failure mode occurs in open circuits, they are widely used for data and clock backup, and other applications requiring high reliability, such as in infrastructure, traffic, automobiles, etc.

Lineup





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

 Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.





SuperCapacitor FMQ Series (Resin molded, Low ESR Type)

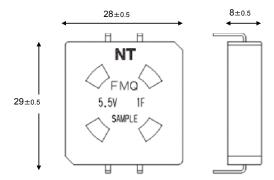
Features

☆Low ESR

- Most suitable for peak assisting, and backup for clock
 ☆ High reliability
- Reliability is maintained even in high temperature and high humidity environment
 - : 85°C-85%RH-5.5V, 500h guaranteed
- World's first capacitor usable at high temperature environment of +105℃
 - : 105°C-5.5V, 500h (actual value)



Dimensions



Specifications

Rated voltage [Vdc]	ESR [Ω]	Nominal capacitance (Discharge system) [F]	Current at 30min. 【mA】
5.5	1.0	1.0+80/-20%	1.5

%Category temperature:-40 \sim +105°C



[•] All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

[●]Please request for a specification sheet for detailed product data prior to the purchase.

Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

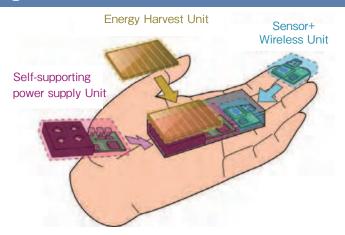


Micro Energy Harvesting - MEH

Merit of MEH: Maintenance free/self-supporting power supply

Merit 1 · Compact and High Convenience

- Module is compact, palm-sized.
- Each unit is replaceable to cartridge type.



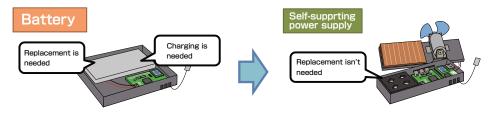
Merit 2 · Possible Expansion of the Storage Capacity

MEH module with built-in SuperCapacitor can be easily consolidated, it is possible to expand the capacity of the storage according to the application.



Merit 3 · Unnecessary Battery Replacement

Build maintenance free power supply by using several energy harvesting sources and SuperCapacitor that is without deterioration in charge/discharge cycle.



ç



[•] All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

• Please request for a specification sheet for detailed product data prior to the purchase.

Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.



Metal Composite Inductors for Automotive application



Features

- Operating temperature range: -40°C to +150°C
 (Include self temperature rise)
- AEC-Q200
- High reliability products (Automotive Market)
- Shielded construction, Large current, Low DCR
- Pb-free, RoHS Compliant

Applications

Inductor for ECU (Automotive)
 (EPS, LED Head Light, SRS)

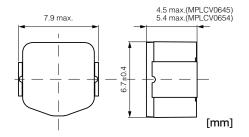
Product line up

Series	Inductance(μ H) At 100kHz, 1mA	Irms *1 (A)	lsat *2 (A)
MPLCV0645L100	10±20%	4.0	6.5
MPLCV0654L4R7	4.7±20%	6.3	10.5
MPLCV0654L330	33±20%	2.6	4.0
MPLCV0654L470	47±20%	2.1	3.0
MPLCV1054L100	10±20%	7.1	12.0
MPLCV1054L220	22±20%	5.5	7.0

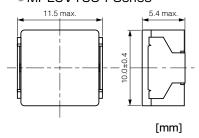
^{*1 40°}C rise at rated current. *2 Inductance drop 30%.

Dimensions

- MPLCV0645 Series
- MPLCV0654 Series



MPLCV1054 Series



 \triangle

ullet Operating temperature range : -40° C to $+150^{\circ}$ C(Include self temperature rise), AEC-Q200

[•]All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

Please request for a specification sheet for detailed product data prior to the purchase.

Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.





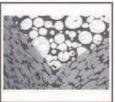
- Integrally molded reactor by inject molding of our original technology
- Superior design flexibility by inject molding method
- Leakage flux is small due to have a distributed gap
- Excellent heat dissipation efficiency by integral molding
- Able to support a high-frequency (50kHz or less)

Applications

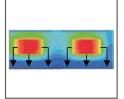
- Inverter for HEV/PHEV
- Power conditioner



[Injection process]



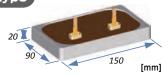
[Cross-section of core]



[Thermal analysis] Example; heat radiation to the bottom

Specification example

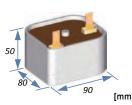
Low height type

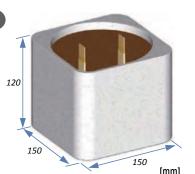


Standard type

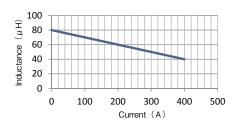


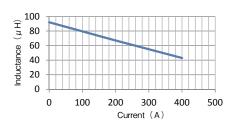
Large size

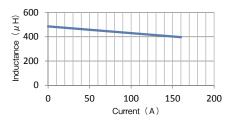




Characteristics (typ









- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- ●Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Lowered impact to the environment, Halogen free
- UL94 V-0
- EFA : μ 60 permeability, Roll acceptable, Red phosphorus free
- FF1 : μ 100 permeability, Supports Roll up to 0.3mm, AEC-Q200
- EFF4: μ140 permeability, AEC-Q200

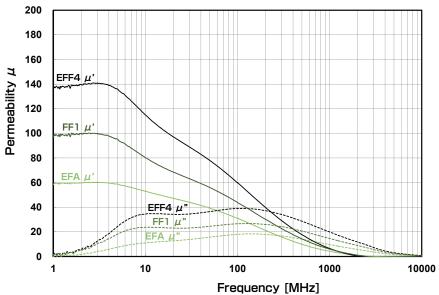
Applications

- Noise radiation suppression, Internal interference suppression
- Anti-ESD measure for electric devices.

Specifications >

		NEW	NEW		
		INEW	NEW		
Features	Red phosphorus free type	Roll type	High μ type		
Type	EFA	FF1	EFF4		
Effective frequency		Up to 10GHz			
Operating temperature (°C)		-40 to +105			
Thickness (mm)	0.05/0.1/0.2/0.3 0.1/0.2/0.3/0.				
Standard dimensions (mm)	240×240 / Roll acceptable		240×240		
Specific gravity	3.1((typ.) 3.7(typ.)			
Approved standard	UL94	V-0 (UL File No.E176	3124)		
Environment	RoHS compliant	ant, Halogen free / PVC free / Lead free			
Environment	Red phosphorus free	_			
Relative magnetic permeability(at 3MHz)	60(typ.)	100(typ.)	140(typ.)		

Permeability characteristics



^{*}Above data are not guaranteed values.



- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Lowered impact to the environment, Halogen free
- Red phosphorus free
- UL94 HB
- FX5 : μ 150 permeability, Roll acceptable
- EFX6: μ160 permeability

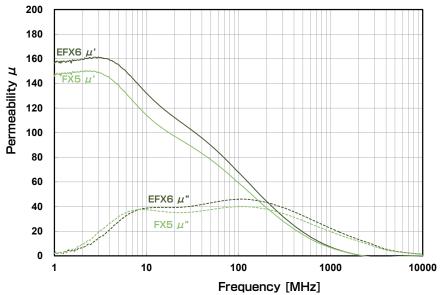
Applications

- Noise radiation suppression, Internal interference suppression
- Anti-ESD measure for electric devices.

Specifications)

	NEW	NEW			
Features	Ultra thin, Roll type	High μ type			
Type	FX5	EFX6			
Effective frequency	Up to	1 OGHz			
Operating temperature (°C)	-40 to +105				
Thickness (mm)	0.025/0.05/0.075	0.1/0.2/0.3			
Standard dimensions (mm)	240×240 / Roll acceptable	240×240			
Specific gravity	3.3(typ.)	3.8(typ.)			
Approved standard	UL94 HB (UL F	le No.E176124)			
Environment	RoHS compliant, Halogen f	ree / PVC free / Lead free			
Environment	Red phosphorus free				
Relative magnetic permeability(at 3MHz)	150(typ.)	160(typ.)			

Permeability characteristics



*Above data are not guaranteed values.





- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







Features)

- Lowered impact to the environment, Halogen free
- Red phosphorus free
- UL94 HB
- FG1 : Roll acceptable
- EFG2: Excellent suppression of high frequency noise

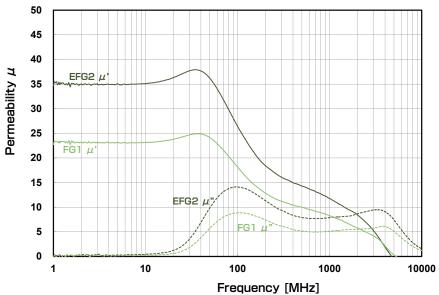
Applications

 Measures for the desense LTE. Wi-Fi. GPS. etc.

Specifications

	NEW	NEW			
Features	Ultra thin, Roll type	High performance type			
Type	FG1	EFG2			
Effective frequency	1GHz to 10GHz				
Operating temperature (°C)	-40 to +105				
Thickness (mm)	0.025/0.05/0.075	0.1/0.2/0.3			
Standard dimensions (mm)	240×240 / Roll acceptable	240×240			
Specific gravity	3.1 (typ.)	3.9(typ.)			
Approved standard	UL94 HB (UL F	le No.E176124)			
Environment	RoHS compliant, Halogen f	ree / PVC free / Lead free			
LITTI OTTITOTTE	Red phosphorus free				
Relative magnetic permeability(at 3MHz)	25(typ.)	35(typ.)			

Permeability characteristics



^{*}Above data are not guaranteed values.





- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Suppresses radiation and conduction noise in wide frequency range
- Ring type: Correspondence from small diameter to large diameter
- Operating temperature range: −40°C~+120°C
- Frame retardant: UL94 V-0

Dimensions

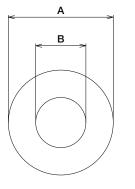
*Custom design available

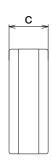
Model	Dimensions (mm)			
Model	Α	В	С	
ESD-R-291216H-NC23	29.0	12.7	16.0	
ESD-R-341616H-NC23	34.0	16.5	16.0	
ESD-R-421617H-NC23	42.0	16.7	17.0	
ESD-R-512936H-NC23	51.0	29.5	36.0	
ESD-R-512419H-NC23	51.0	24.4	19.0	
ESD-R-613325H-NC23	61.0	33.2	25.0	
ESD-R-854626H-NC23	85.0	46.0	26.0	
ESD-R-1105826H-NC23	110.0	58.5	26.0	
ESD-R-1469637H-NC23	146.0	96.0	37.0	
ESD-R-20515636H-NC23	205.0	156.0	36.0	

^{*}This series still in the development stage. Changes may be make at the start of mass production.
*The series with a base is also under development. Please contact TOKIN for details.

Applications

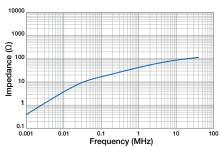
- General purpose inverters
- Air conditioners
- Multifunction printers for business use
- Industrial equipments



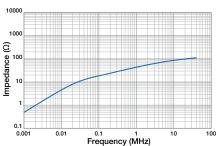


Impedance Characteristics (Typ. value)

ESD-R-291216H-NC23



ESD-R-341616H-NC23



*This product is under development and design might be changed.

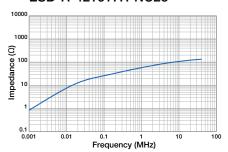


•All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

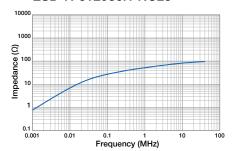
- •Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.



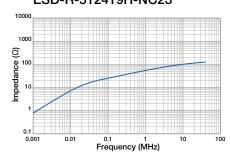
ESD-R-421617H-NC23



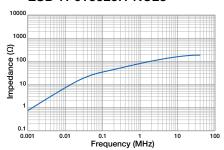
ESD-R-512936H-NC23



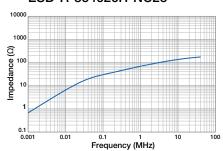
ESD-R-512419H-NC23



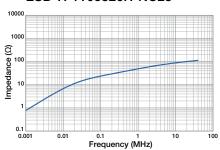
ESD-R-613325H-NC23



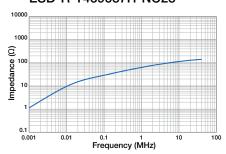
ESD-R-854626H-NC23



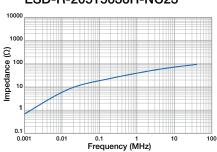
ESD-R-1105826H-NC23



ESD-R-1469637H-NC23



ESD-R-20515636H-NC23



*This product is under development and design might be changed.

•All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
•Please request for a specification sheet for detailed product data prior to the purchase.

- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.





- High current series (up to 60A)
- Rated voltage 500V correspondence
- Operating temperature ~120℃, UL94 V-0
- Metal-based magnetic materials are employed

Applications

- Air conditioner
- Power conditioner
- Industrial equipment with inverter

Specification

Part number	Core size	Rated current (A)	Inductance (mH) Min.	DC resistance (mΩ/line) Max.	Input and output terminal
SCF38B - 250 - S2R3A004J/JH	FR38	25	0.4	1.8	on-board mount
SCF47B - 300 - S1R7C010J/JH	FR47	30	1.0	2.5	on-board mount
SCF56B - 400 - S2R3A035J/JH	FR56	40	3.5	4.5	on-board mount
3 Phase 4 line SCF Series	FR38~68	15/20/30/60	0.4~4.0	0.3~6.0	on-board mount terminal connecting board assembly type

Dimensions

3 Phase SCF (vertical)



3 Phase SCF (horizontal)



3 Phase 4 line SCF (on-board mount)



3 Phase 4 line SCF (terminal connecting)





•All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Hybrid coil capable of simultaneously suppressing common and normal noises with one coil
- Unique core molding technology and materials development realizes quiet operation and excellent superimposition characteristics at high temperature
- Class B(130°C)support

Applications

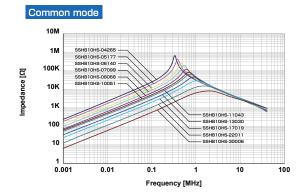
- LED lighting
- AV equipment
- OA equipment
- Power supply

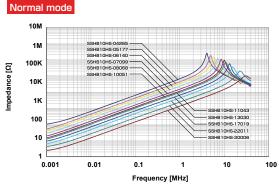
Spescfication

***Custom design available**

Part number	Rated current (A)	Inductance [common] (mH)Min.	Inductance [normal] (uH)Typ.	Wire size (mmφ)	DC resistance(Ω/line) Typ.
SSHB10HS-04265	0.4	26.5	949	0.20	2.269
SSHB10HS-05177	0.5	17.7	635	0.23	1.436
SSHB10HS-06140	0.6	14.0	502	0.25	1.087
SSHB10HS-07099	0.7	9.9	353	0.28	1.736
SSHB10HS-08068	0.8	6.8	243	0.30	0.519
SSHB10HS-10051	1.0	5.1	185	0.32	0.404
SSHB10HS-11043	1.1	4.3	154	0.35	0.313
SSHB10HS-13030	1.3	3.0	108	0.37	0.232
SSHB10HS-17019	1.7	1.9	71	0.40	0.157
SSHB10HS-22011	2.2	1.1	41	0.45	0.094
SSHB10HS-30006	3.0	0.6	23	0.50	0.059

Impedance Characteristics





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- ●Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Hybrid coil capable of simultaneously suppressing common and normal noises with one coil
- Unique core molding technology and materials development realizes quiet operation and excellent superimposition characteristics at high temperature
- Class B(130℃)support

Applications

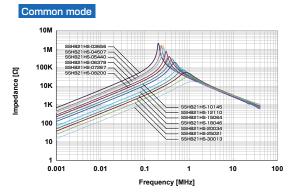
- LED lighting
- AV equipment
- OA equipment
- Power supply

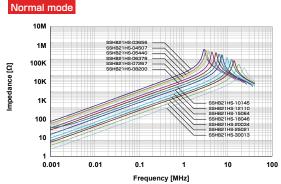
Spescfication

*Custom design available

Part number	Rated current (A)	Inductance [common] (mH)Min.	Inductance [normal] (uH)Typ.	Wire size (mm¢)	DC resistance(Ω/line) Typ.
SSHB21HS-03656	0.3	65.6	1819	0.20	2.609
SSHB21HS-04507	0.4	50.7	1407	0.23	1.820
SSHB21HS-05440	0.5	44.0	1221	0.23	1.695
SSHB21HS-06378	0.6	37.8	1048	0.25	1.328
SSHB21HS-07267	0.7	26.7	742	0.28	0.902
SSHB21HS-08200	0.8	20.0	559	0.30	0.672
SSHB21HS-10145	1.0	14.5	402	0.32	0.501
SSHB21HS-12110	1.2	11.0	305	0.35	0.364
SSHB21HS-15064	1.5	6.4	178	0.37	0.241
SSHB21HS-18046	1.8	4.6	128	0.40	0.178
SSHB21HS-20034	2.0	3.4	95	0.45	0.130
SSHB21HS-25021	2.5	2.1	59	0.50	0.079
SSHB21HS-30013	3.0	1.3	38	0.55	0.051

Impedance Characteristics







• All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

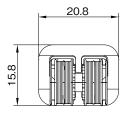
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

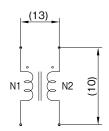


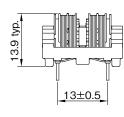
SSHB Series Shapes and Dimensions

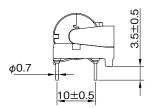
SSHB10HS







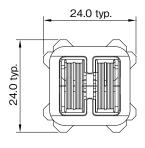


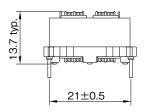


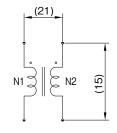
[mm]

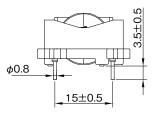
SSHB21HS











[mm]

 \triangle

• All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.

20

●Please request for a specification sheet for detailed product data prior to the purchase.

Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







Using high magnetic permeability material S18H optimized core and structure

- Downsized(30% less volume than SS28V Series)
- Expanded current range
 (SS28V Series: up to 2.5A → New product: up to 5A)
- Realized high performance, low Rdc(Compared to SS28V Series, Inductance: 2 times or more, Rdc: 3% or greater reduction)
- Non-split bobbin design for ultra-high impedance characteristics

Applications

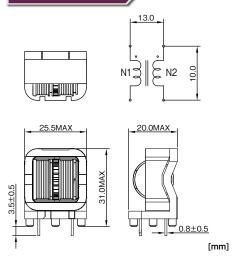
- AV equipment
- OA equipment
- Digital appliance
- Power supply

Spescification

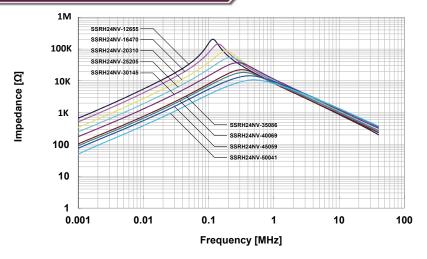
% Custom design available

Part number	Rated current (A)	Inductance (mH)Min.	DC resistance (Ω/line) Max.	Temperature rise (K) Max.
SSRH24NV-12655	1.2	65.5	0.475	65
SSRH24NV-16470	1.6	47	0.327	65
SSRH24NV-20310	2.0	31	0.214	65
SSRH24NV-25205	2.5	20.5	0.145	65
SSRH24NV-30145	3.0	14.5	0.102	65
SSRH24NV-35086	3.5	8.6	0.078	65
SSRH24NV-40069	4.0	6.9	0.057	65
SSRH24NV-45059	4.5	5.9	0.048	65
SSRH24NV-50041	5.0	4.1	0.035	65

Dimensions



Impedance Characteristics





- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- ●Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







Using high magnetic permeability material S18H optimized core and structure

- Downsized(30% less volume than SS28V Series)
- Expanded current range
 (SS28V Series: up to 2.5A → New product: up to 5A)
- Realized high performance, low Rdc(Compared to SS28V Series, Inductance: 1.6 times or more, Rdc: 20% or greater reduction)
- Split bobbin design for wideband impedance characteristics

Applications

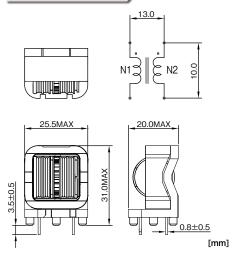
- AV equipment
- OA equipment
- Digital appliance
- Power supply

Spescification

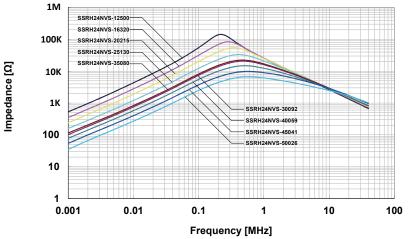
% Custom design available

Part number	Rated current (A)	Inductance (mH)Min.	DC resistance (Ω/line) Max.	Temperature rise (K) Max.
SSRH24NVS-12500	1.2	50	0.430	65
SSRH24NVS-16320	1.6	32	0.265	65
SSRH24NVS-20215	2.0	21.5	0.177	65
SSRH24NVS-25130	2.5	13	0.111	65
SSRH24NVS-30092	3.0	9.2	0.079	65
SSRH24NVS-35080	3.5	8	0.074	65
SSRH24NVS-40059	4.0	5.9	0.055	65
SSRH24NVS-45041	4.5	4.1	0.041	65
SSRH24NVS-50026	5.0	2.6	0.027	65

Dimensions



Impedance Characteristics





- •All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- ●Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Using high magnetic permeability material S18H optimized core and structure
 - High inductance characteristics as toroid core (equivalent to SC type)
- High current series (up to ϕ 1.3, up to 10A)

Applications

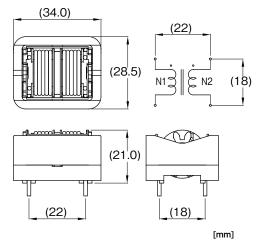
- AV equipment
- OA equipment
- Digital appliance
- Power supply

Spescification

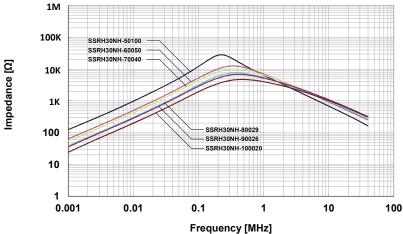
*Custom design available

Part number	Rated current (A)	Inductance (mH)Min.	DC resistance (Ω/line) Max.	Wire size (mmø)
SSRH30NH-50100	5	10	0.053	0.85
SSRH30NH-60050	6	5.0	0.028	0.95
SSRH30NH-70040	7	4.0	0.023	1.0
SSRH30NH-80029	8	2.9	0.0165	1.1
SSRH30NH-90026	9	2.6	0.0135	1.2
SSRH30NH-100020	10	2.0	0.010	1.3

Dimensions



Impedance Characteristics



*This product is under development and design might be changed.



- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Smallest-in-industry gear common choke for low current applications
- High performance and reduced size through use of high magnetic permeability material S18H and optimization of the core shape and product structure (Compared to SU10VFC Series, Inductance: 1.6 times or more, Volume: 35% less)
- Non-split bobbin design for ultra-high impedance characteristics

Applications

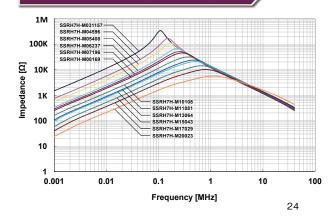
- AV equipment
- OA equipment
- Digital appliance
- Compact power supply

Spescification

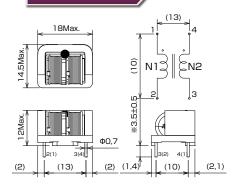
*Custom design available

Model	Rated current (A)	Inductance (mH) Min.	DC resistance (Ω/line) Max.	Wire size (mm¢)	Temperature rise Max.
SSRH7H-M031157	0.3	115.7	3.57	0.16	55
SSRH7H-M04596	0.4	59.6	2.02	0.18	55
SSRH7H-M05408	0.5	40.8	1.36	0.20	55
SSRH7H-M06237	0.6	23.7	0.78	0.23	55
SSRH7H-M07196	0.7	19.6	0.71	0.23	55
SSRH7H-M08169	0.8	16.9	0.56	0.25	55
SSRH7H-M10108	1.0	10.8	0.36	0.28	55
SSRH7H-M11081	1.1	8.1	0.27	0.30	55
SSRH7H-M13064	1.3	6.4	0.21	0.32	55
SSRH7H-M15043	1.5	4.3	0.14	0.35	55
SSRH7H-M17029	1.7	2.9	0.12	0.35	55
SSRH7H-M20016	2.0	1.6	0.09	0.35	55

Impedance Characteristics



Dimensions





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- ●Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.







- Smallest-in-industry gear common choke for low current applications
- High performance and reduced size through use of high magnetic permeability material S18H and optimization of the core shape and product structure (Compared to SU10VFC Series, Inductance:1.3 times or more, Volume: 35% less)
- Split bobbin design for wideband impedance characteristics

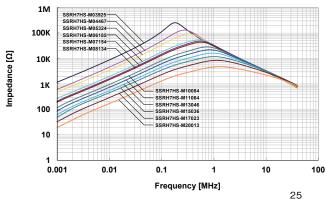
Applications

- AV equipment
- OA equipment
- Digital appliance
- Compact power supply

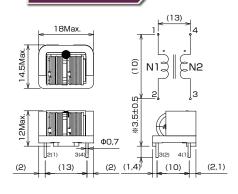
Spescification

Model	Rated current (A)	Inductance (mH) Min.	DC resistance (Ω/line) Max.	Wire size (mm¢)	Temperature rise Max.
SSRH7HS-M03925	0.3	92.5	3.18	0.16	50
SSRH7HS-M04467	0.4	46.7	1.79	0.18	50
SSRH7HS-M05324	0.5	32.4	1.21	0.20	50
SSRH7HS-M06185	0.6	18.5	0.69	0.23	50
SSRH7HS-M07154	0.7	15.4	0.63	0.23	50
SSRH7HS-M08134	0.8	13.4	0.50	0.25	50
SSRH7HS-M10084	1.0	8.4	0.32	0.28	50
SSRH7HS-M11064	1.1	6.4	0.24	0.30	50
SSRH7HS-M13046	1.3	4.6	0.18	0.32	50
SSRH7HS-M15036	1.5	3.6	0.13	0.35	50
SSRH7HS-M17023	1.7	2.3	0.1	0.35	50
SSRH7HS-M20013	2.0	1.3	0.08	0.35	50

Impedance Characteristics



Dimensions





- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact TOKIN for updated product data.
- ●Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.