

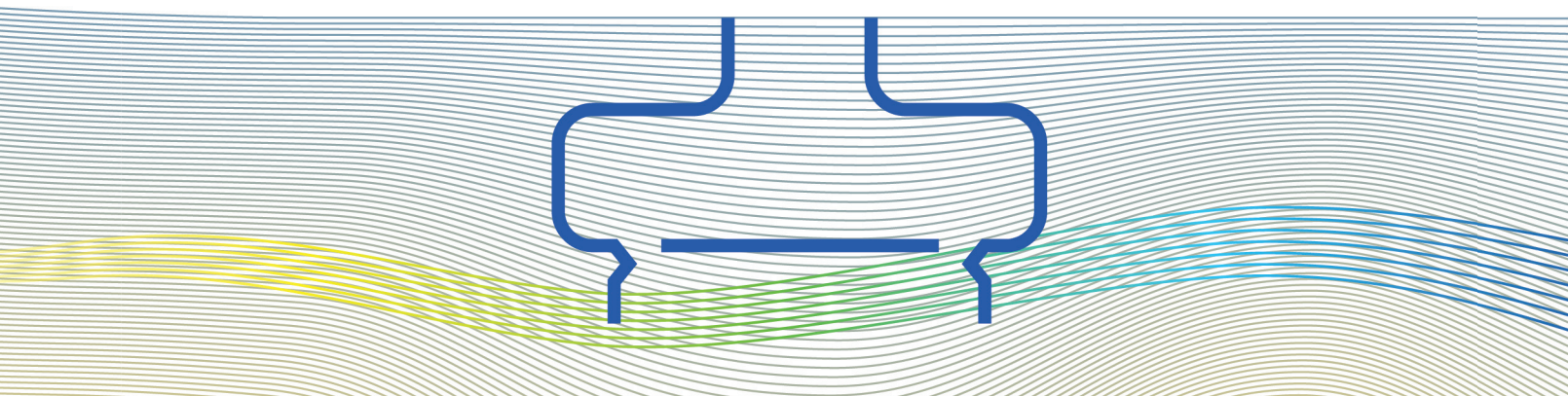
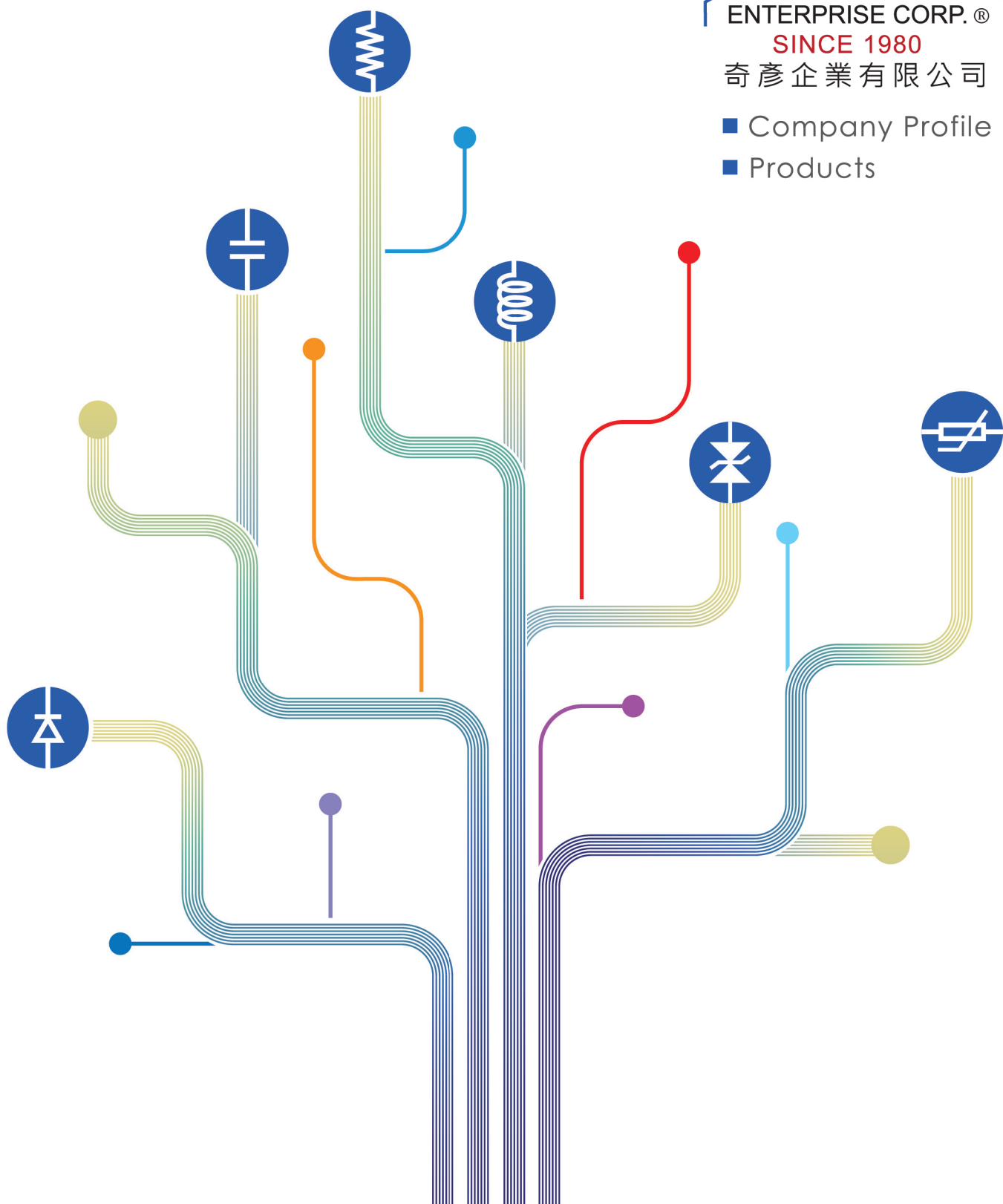
# HITANO

ENTERPRISE CORP.®

SINCE 1980

奇彦企業有限公司

- Company Profile
- Products



# HITANO

## Preface

Hitano Enterprise Corp. was founded in 1980. We specialize in the expert production of Electrolytic Capacitors, Ceramic Capacitors, Metal oxide varistors and marketing of all kind of components. All our products were manufactured under internationally approved standard and strict quality control. And we keep sufficient stock inventory with complete specifications for speedy delivery to customers.

Company operation and management are now fully computerized. And in these years, we are employing the latest automated manufacturing equipments and facilities to up-grade our products.

Having supplied the needs of Electronics companies here and abroad for 30 years we have a good reputation in the field.

Our products and management system passed the ISO-9002 international certification in June, 1997. An achievement that had provided our domestic and foreign clients further service assurance.

Excellent professional products, as well as dedicated service were the policy that the company has continued to maintain. Henceforth, under the same spirit, we shall further enhance the service we offer.

## 公司簡介

奇彥企業有限公司成立於1980年，是一家專業製造及經銷各式被動元件的績優進出口商，產品包括各式鋁質電解電容器，基層電容器，晶片電容器，陶瓷電容器，坦質電容，晶片電感，可覆式保險絲，發光二極體等產品。各式產品規格齊全，庫存充足，供應國內外電子廠商及批發商，信譽良好。

本公司以自創的品牌 HITANO 行銷海內外，30 年來已建立了良好的口碑，業務蒸蒸日上市場擴及全球五大洲，數十個國家。公司經營管理已全面電腦化，生產採用最新的自動化生產設備，成品均按國際標準規格製造，品質嚴謹，產品優良。並且於1997年6月通過ISO-9002的國際品質認證，對國內外客戶提供更具保障的服務。

提供國內外廠商專業優良及多樣化的產品，以充足的庫存，迅速的交貨給予客戶最熱忱的服務，和具有市場競爭優勢的價格是本公司秉持的一貫信念，日後將朝著擴充產品線，增加產品內容，邁向電子商務的目標繼續努力，來滿足客戶全方位的需求。



## Quality policy

Establish the "quality first" mentality, maintain stable product quality, upgrade customer service quality, achieve the goal of customer satisfaction

## QRS Spirit

### Quality( 品質 )

Over 30 years, the priority consideration of Hitano is "Quality first." To achieve the goal of customer satisfaction, Hitano implements lots of projects to "increase the product quality," "maintain the stable supply chain" and "upgrade the customer service quality." All of these are also the major targets for all Hitano people to make every effort together.

30 多年來，任何可以提供產品品質的方案，確保供貨品質的穩定，達成客戶的需求，永遠是奇彥公司最優先的考量，也是我們全體同仁共同努力的目標

### Reputation ( 信譽 )

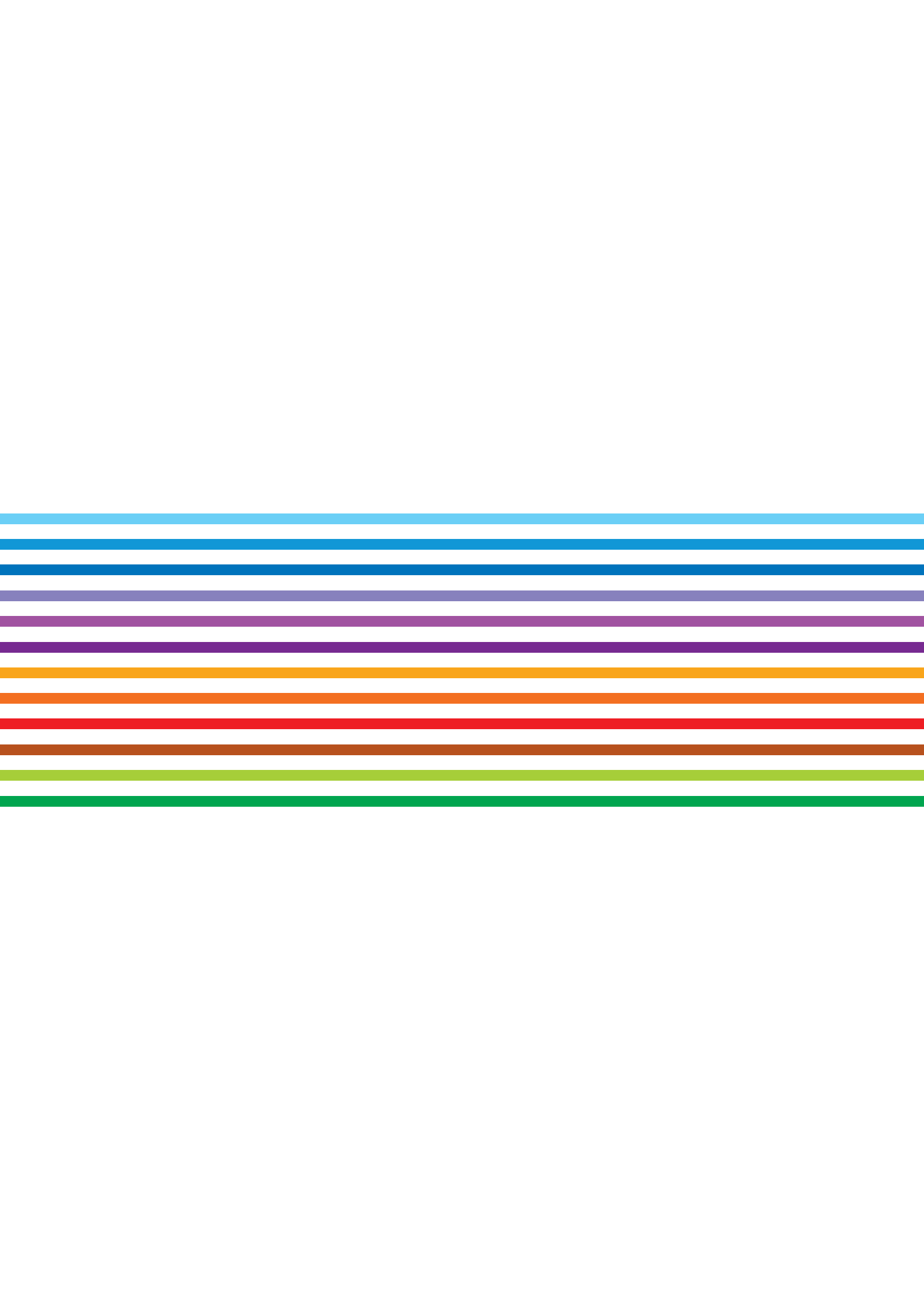
With good reputation, Hitano has been a professional electronic components supplier in the field for over 30 years. We have many excellent agents and outstanding distributors worldwide offer best quality products at most competitive prices and services with passion and profession. We continually maintain this good reputation, under customer cooperation and trust, we expect to explore more related products and to make Hitano stronger and better!

奇彥公司在業界已經有超過 30 年的經驗，建立了良好的信譽，所以全世界各地都有我們優秀的代理商，提供客戶最專業，最好的產品服務，我們持續維護良好的信譽，並期許在和客戶的合作和信賴下，努力拓展各項相關產品，使公司持續成長，茁壯

### Service( 服務 )

Best service to all customers is the main core value of Hitano. We provide our customer with speedy reply to the inquiries, orders and shipments as well as technical supports, best service is always the first policy and major purpose that Hitano continue to pursue. Therefore, under QRS spirit, we promise our service will be better to win customer recognition, satisfaction and will never have the end to offer!

提供客戶最好的服務是奇彥公司最核心的價值，我們對於所有客人的詢價，訂單，出貨和技術性支援都要求即時性的回覆，提供更好，更迅速的服務永遠都是奇彥的政策和目標，因此，在 QRS 精神下，我們允諾不斷提升我們的服務，以贏得客戶群的支持和滿意！





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# Aluminum Electrolytic Capacitor

## EVS Series.



Conductive Polymer  
SMD type

## ERS Series.



Conductive Polymer  
Radial type

## ELV Series.



General Purpose  
SMD type

## EHV Series.



Wide Temperature range  
SMD type

## ENV Series.



Non-polarized  
SMD type

Capacitance Range	6.8uF to 1500uF
Rated Working Voltage	2.5Vdc to 35Vdc
Load Life	2000Hrs @105°C
Packaging	Tape / Reel
Operating Temp. Range	-55°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	6.8uF to 1500uF
Rated Working Voltage	2.5Vdc to 50Vdc
Load Life	2000Hrs @105°C
Packaging	Bulk, Tape/Box, Tape/Reel
Operating Temp. Range	-55°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	1.0uF to 6800uF
Rated Working Voltage	6.3Vdc to 450Vdc
Load Life	2000Hrs @85°C
Packaging	Tape / Reel
Operating Temp. Range	-40°C to +85°C
Capacitance Tolerance	±20%

Capacitance Range	1.0uF to 6800uF
Rated Working Voltage	6.3Vdc to 450Vdc
Load Life	2000Hrs @105°C
Packaging	Tape / Reel
Operating Temp. Range	V ≤ 100V_-55°C to +105°C , V ≥ 160V_-40°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	0.1uF to 470uF
Rated Working Voltage	6.3Vdc to 50Vdc
Load Life	2000Hrs @85°C
Packaging	Tape / Reel
Operating Temp. Range	-40°C to +85°C
Capacitance Tolerance	±20%

### EKV Series.



Low Leakage current  
SMD type

### EZV Series.



Low Impedance  
V-Chip SMD type

### EMV Series.



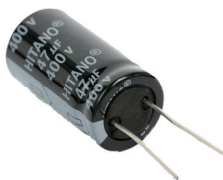
Long Life 5000 hrs  
V-chip SMD type

### ECR Series.



General Purpose  
Radial type

### EHR Series.



Wide Temperature  
Radial type

Capacitance Range	0.1uF to 330uF
Rated Working Voltage	6.3Vdc to 50Vdc
Load Life	2000 Hrs @85°C
Packaging	Tape / Reel
Operating Temp. Range	-40°C to +85°C
Capacitance Tolerance	±20%

Capacitance Range	1uF to 6800uF
Rated Working Voltage	6.3Vdc to 100Vdc
Load Life	2000 to 5000 Hrs @105°C
Packaging	Tape / Reel
Operating Temp. Range	-55°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	1uF to 1000uF
Rated Working Voltage	6.3Vdc to 100Vdc
Load Life	5000 Hrs @105°C
Packaging	Tape/Reel
Operating Temp. Range	-55°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	0.47uF to 10000uF
Rated Working Voltage	6.3Vdc to 450Vdc
Load Life	2000Hrs @85°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +85°C
Capacitance Tolerance	±20%

Capacitance Range	0.47uF to 10000uF
Rated Working Voltage	6.3Vdc to 450Vdc
Load Life	2000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	V ≤ 100V_ -40°C to +85°C , V ≥ 160V_ -25°C to +85°C
Capacitance Tolerance	±20%

# Aluminum Electrolytic Capacitor

## ENR Series.



Non-polarized  
Radial type

## E5R Series.



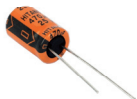
Ultra Miniature  
Radial type

## EMR Series.



Miniature  
Radial type

## EMRL Series.



Miniature Low Leakage current  
Radial type

## ELR Series.



Low Leakage current  
Radial type

Capacitance Range	0.47uF to 3300uF
Rated Working Voltage	10Vdc to 100Vdc
Load Life	1000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	± 20%

Capacitance Range	0.1uF to 220uF
Rated Working Voltage	4Vdc to 50Vdc
Load Life	1000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	± 20%

Capacitance Range	0.47uF to 330uF
Rated Working Voltage	4Vdc to 63Vdc
Load Life	1000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	± 20%

Capacitance Range	0.47uF to 100uF
Rated Working Voltage	6.3Vdc to 63Vdc
Load Life	1000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	± 20%

Capacitance Range	0.47uF to 1000uF
Rated Working Voltage	6.3Vdc to 63Vdc
Load Life	1000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	± 20%

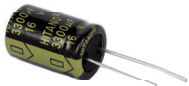


### EXR Series.



Low Impedance  
Radial type

### ESX Series.



Low Profile  
Radial type

### ESG Series.



Long Life 5000 hrs  
Radial type

### EKH Series.



Long Life 5000-10000 hrs  
Radial type

### EFK Series.



Long Life 6000-8000 hrs  
Radial type

Capacitance Range	1.0uF to 15000uF
Rated Working Voltage	6.3Vdc to 450Vdc
Load Life	2000 to 5000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	V ≤ 100V_-40°C to +105°C , V ≥ 160V_-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	1.0uF to 10000uF
Rated Working Voltage	6.3Vdc to 100Vdc
Load Life	2000 to 5000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	V ≤ 63V_-55°C to +105°C , V = 100V_-40°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	4.7uF to 330uF
Rated Working Voltage	160Vdc to 500Vdc
Load Life	5000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	6.8uF to 3300uF
Rated Working Voltage	10Vdc to 450Vdc
Load Life	5000 to 10000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	V ≤ 50V_-40°C to +105°C , V ≥ 160V_-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	1.0uF to 330uF
Rated Working Voltage	160Vdc to 450Vdc
Load Life	6000 to 8000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

# Aluminum Electrolytic Capacitor

## EFL Series.



Long Life 8000-10000 hrs  
Radial type

## EFH Series.



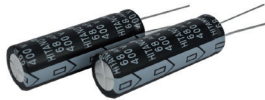
Long Life 4000-10000 hrs  
Radial type

## ELY Series.



Slim Type 105°C 5000 hrs  
Radial type

## ESL Series.



Slim Type 105°C 10000 hrs  
Radial type

## ELP Series.



General Purpose  
Snap-In type

Capacitance Range	1.0uF to 330uF
Rated Working Voltage	160Vdc to 450Vdc
Load Life	8000 to 10000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	22uF to 4700uF
Rated Working Voltage	6.3Vdc to 100Vdc
Load Life	4000 to 10000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-40°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	12uF to 150uF
Rated Working Voltage	250Vdc to 450Vdc
Load Life	5000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	12uF to 120uF
Rated Working Voltage	250Vdc to 450Vdc
Load Life	10000Hrs @105°C
Packaging	Bulk,Tape/Box,Tape/Reel
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	47uF to 68000uF
Rated Working Voltage	10Vdc to 450Vdc
Load Life	2000Hrs @85°C
Packaging	Bulk
Operating Temp. Range	V ≤ 100V_-40°C to +85°C , V ≥ 160V_-25°C to +85°C
Capacitance Tolerance	±20%

### EHP Series.



Wide Temperature  
Snap-In type

### EHU Series.



Wide Temperature 3000 hrs  
Snap-In type

### ELU Series.



General Purpose 3000 hrs  
Snap-In type

### EHL Series.



Low Impedance 5000 hrs  
Snap-In type

### EHS Series.



Miniature Size 2000 hrs  
Snap-In type

Capacitance Range	47uF to 68000uF
Rated Working Voltage	10Vdc to 450Vdc
Load Life	2000Hrs @105°C
Packaging	Bulk
Operating Temp. Range	V ≤ 100V_-40°C to +105°C , V ≥ 160V_-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	47uF to 68000uF
Rated Working Voltage	16Vdc to 450Vdc
Load Life	3000Hrs @105°C
Packaging	Bulk
Operating Temp. Range	V ≤ 100V_-40°C to +105°C , V ≥ 160V_-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	47uF to 82000uF
Rated Working Voltage	16Vdc to 450Vdc
Load Life	3000Hrs @85°C
Packaging	Bulk
Operating Temp. Range	V ≤ 100V_-40°C to +85°C , V ≥ 160V_-25°C to +85°C
Capacitance Tolerance	±20%

Capacitance Range	47uF to 47000uF
Rated Working Voltage	10Vdc to 500Vdc
Load Life	5000Hrs @105°C
Packaging	Bulk
Operating Temp. Range	V ≤ 100V_-40°C to +105°C , V ≥ 160V_-25°C to +105°C
Capacitance Tolerance	±20%

Capacitance Range	33uF to 2200uF
Rated Working Voltage	160Vdc to 450Vdc
Load Life	2000Hrs @105°C
Packaging	Bulk
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	±20%

# Disc Ceramic Capacitor

## X1/Y1 Series.



Safety Standard Recognized  
AH application

Capacitance Range	100pF to 4700pF
Rated Working Voltage	400Vac
Temperature Coefficient	Y5P, Y5U
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	± 10%, ± 20%
Dissipation Factor (D.F.)	± 2.5%
Packaging	Bulk,Tape/Box,Tape/Reel

## X1/Y1 Series.



Safety Standard Recognized  
AS application

Capacitance Range	100pF to 4700pF
Rated Working Voltage	X1=760Vac / Y1=500Vac
Temperature Coefficient	Y5P, Y5U
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	± 10%, ± 20%
Dissipation Factor (D.F.)	± 2.5%
Packaging	Bulk,Tape/Box,Tape/Reel

## X1/Y2 Series.



Safety Standard Recognized  
AC application

Capacitance Range	100pF to 10nF
Rated Working Voltage	250Vac/400Vac
Temperature Coefficient	Y5P, Y5U, Y5V
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	± 10%, ± 20%, +80-20%
Dissipation Factor (D.F.)	± 2.5%, ± 5%
Packaging	Bulk,Tape/Box,Tape/Reel

## LOW DF Type Y Series.

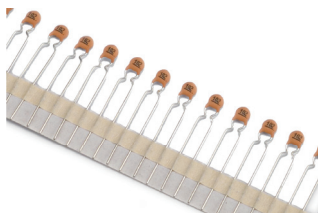


Low Dissipation  
Epoxy Resin coated

Capacitance Range	100pF to 4.7nF
Rated Working Voltage	1KVdc to 3KVdc
Temperature Coefficient	Y5P, Y5R
Operating Temp. Range	-25°C to +105°C
Capacitance Tolerance	± 10%
Dissipation Factor (D.F.)	± 0.2%, ± 0.5%
Packaging	Bulk, Tape/Box, Tape/Reel



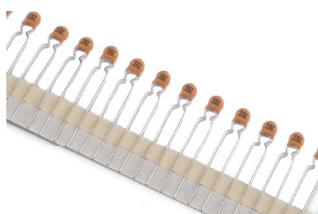
### Class I Type T Series.



Temperature Compensation  
Low loss & High Stability

Capacitance Range	1.0pF to 680pF
Rated Working Voltage	50Vdc to 1000Vdc
Temperature Coefficient	NPO, SL
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	$\pm 0.25\text{pF}$ , $\pm 0.5\text{pF}$ , $\pm 5\%$ , $\pm 10\%$
Q Value	$C \leq 30\text{pF}$ , $Q \geq 400+20^\circ\text{C}$ , $C > 30\text{pF}$ , $Q > 1000$
Packaging	Bulk, Tape/Box, Tape/Reel

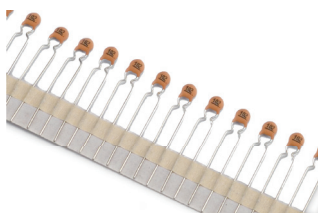
### Class II Type H Series.



Hi K Value  
Large Capacitance in Small Size

Capacitance Range	100pF to 10nF
Rated Working Voltage	50Vdc to 1000Vdc
Temperature Coefficient	Y5P, Z5U, Z5V
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	$\pm 10\%$ , $\pm 20\%$ , +80-20%
Dissipation Factor (D.F.)	$\pm 2.5\%$ , $\pm 5\%$
Packaging	Bulk, Tape/Box, Tape/Reel

### Class III Type S Series.



Semiconductive  
Ultra Large Capacitance in Small Size

Capacitance Range	4.7nF to 470nF
Rated Working Voltage	16Vdc to 63Vdc
Temperature Coefficient	Y5P, Y5T, Y5U, Y5V
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	$\pm 10\%$ , $\pm 20\%$ , +80-20%
Dissipation Factor (D.F.)	$\pm 2.5\%$ , $\pm 5\%$
Packaging	Bulk, Tape/Box, Tape/Reel

### High Voltage Type K Series.



Hi K Value  
Epoxy Resin coated

Capacitance Range	0.5pF to 22nF
Rated Working Voltage	2KVdc to 15KVdc
Temperature Coefficient	NPO, SL, B, E, F
Operating Temp. Range	-25°C to +85°C
Capacitance Tolerance	$\pm 0.25\text{pF}$ , $\pm 0.5\text{pF}$ , $\pm 5\%$ , $\pm 10\%$ , $\pm 20\%$ , +80-20%
Q Value	$C \leq 30\text{pF}$ , $Q \geq 400+20^\circ\text{C}$ , $C > 30\text{pF}$ , $Q > 1000$
Dissipation Factor (D.F.)	$\pm 2.5\%$ , $\pm 5\%$
Packaging	Bulk, Tape/Box, Tape/Reel

# Film Capacitor

## PEI Series.



Inductive Mylar Type  
Polyester

## MER Series.



Dipped Type  
Metallized Polyester

## MPR Series.



Dipped Type  
Metallized Polypropylene

## MPPS Series.



Small Size Series Wound Type for  
Ballast  
Metallized Polypropylene

## PPN Series.



Dipped Type Non-Inductive  
Polypropylene

Capacitance Range	1.0nF to 0.47uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-40°C to +85°C
Packaging	Bulk, Tape / Box
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1nF to 10uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk, Tape/Box
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	10nF to 3.3uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1nF to 68nF
Rated Working Voltage	1000Vdc to 2000Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk, Tape/Box
Capacitance Tolerance	± 5%, ± 10%

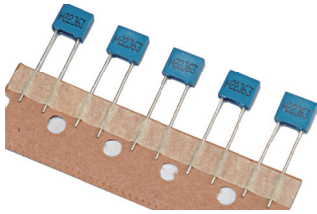
Capacitance Range	1nF to 680nF
Rated Working Voltage	100Vdc to 1600Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk, Tape / Box
Capacitance Tolerance	± 5%, ± 10%

### PPS Series.



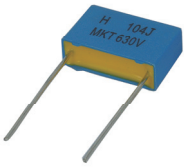
Series Wound Type  
Polypropylene

### MEB Series.



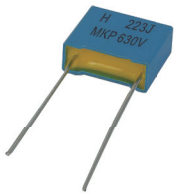
Mini Box Type  
Metallized Polyester

### MKT Series.



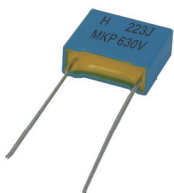
Box Type  
Metallized Polyester

### MKP Series.



Box Type  
Metallized Polypropylene

### MKPS Series.



Box Type  
Metallized Polypropylene High  
Voltage

Capacitance Range	1.0nF to 0.033uF
Rated Working Voltage	1000Vdc to 2000Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1.0nF to 2.2uF
Rated Working Voltage	63Vdc to 100Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Tape/Box
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	10nF to 1.0uF
Rated Working Voltage	250Vdc to 630Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	10nF to 2.2uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1.0nF to 22nF
Rated Working Voltage	1000Vdc to 2000Vdc
Operating Temp. Range	-40°C to +105°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

# Film Capacitor

## MET Series.



Axial Tubular Type  
Metallized Polyester

Capacitance Range	10nF to 100uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-55°C to +125°C
Packaging	Bulk,Tape/Box
Capacitance Tolerance	± 5%, ± 10%

## MEF Series.



Axial Flat Oval Type  
Metallized Polyester

Capacitance Range	10nF to 68uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-55°C to +125°C
Packaging	Bulk,Tape/Box
Capacitance Tolerance	± 5%, ± 10%

## MPT Series.



Axial Tubular Type  
Metallized Polypropylene

Capacitance Range	10nF to 82uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-55°C to +125°C
Packaging	Bulk,Tape/Box
Capacitance Tolerance	± 5%, ± 10%

## MPF Series.



Axial Flat Oval Type  
Metallized Polypropylene

Capacitance Range	100nF to 68uF
Rated Working Voltage	100Vdc to 630Vdc
Operating Temp. Range	-55°C to +125°C
Packaging	Bulk,Tape/Box
Capacitance Tolerance	± 5%, ± 10%

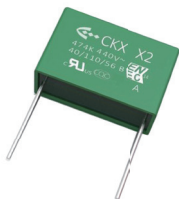


**CKX Series X1 type**



Class X1 Box Type  
Metallized Polypropylene

**CKX Series X2 type**



Class X2 Box Type  
Metallized Polypropylene

**CKX Series Y2 type**



Box Type  
Metallized Polypropylene

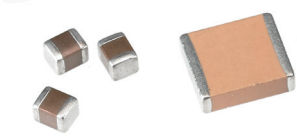
Capacitance Range	4.7nF to 10uF
Rated Working Voltage	310Vac to 480Vac
Operating Temp. Range	-40°C to +110°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1.0nF to 1.0uF
Rated Working Voltage	250Vac to 310Vac
Operating Temp. Range	-40°C to +100°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

Capacitance Range	1.0nF to 0.1uF
Rated Working Voltage	250Vac to 275Vac
Operating Temp. Range	-40°C to +100°C
Packaging	Bulk
Capacitance Tolerance	± 5%, ± 10%

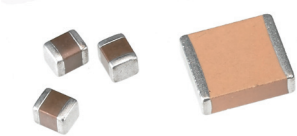
# Multilayer Ceramic Capacitors

## NPO Chip Ceramic Cap.



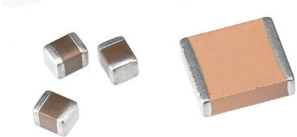
General Purpose  
Medium & High Voltage

## X5R Chip Ceramic Cap.



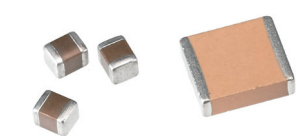
General Purpose  
High Capacitance

## X7R Chip Ceramic Cap.



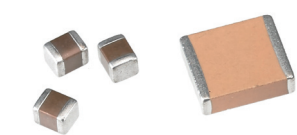
General Purpose  
Medium & High Voltage

## X6S Chip Ceramic Cap.



General Purpose  
High Capacitance

## X7S Chip Ceramic Cap.



General Purpose  
High Capacitance

Size	0201 to 2225
Rated Working Voltage	16Vdc to 4000Vdc
Capacitance Range	0.47pF to 220nF
Operating Temp. Range	-55°C to +125°C
Capacitance Tolerance	C < 10pF_±0.1pF,±0.25pF, ±0.5pF C ≥ 10pF_±1%, ±2%, ±5%
Packaging	Tape / Reel

Size	0201 to 2220
Rated Working Voltage	6.3Vdc to 50Vdc
Capacitance Range	100nF to 470uF
Operating Temp. Range	-55°C to +85°C
Capacitance Tolerance	±10%, ±20%
Packaging	Tape / Reel

Size	0201 to 2225
Rated Working Voltage	10Vdc to 4000Vdc
Capacitance Range	100pF to 22uF
Operating Temp. Range	-55°C to +125°C
Capacitance Tolerance	±10%, ±20%
Packaging	Tape / Reel

Size	0201 to 1210
Rated Working Voltage	6.3Vdc to 50Vdc
Capacitance Range	100nF to 100uF
Operating Temp. Range	-55°C to +105°C
Capacitance Tolerance	±10%
Packaging	Tape / Reel

Size	0402 to 1210
Rated Working Voltage	6.3Vdc to 100Vdc
Capacitance Range	1uF to 100uF
Operating Temp. Range	-55°C to +125°C
Capacitance Tolerance	±10%
Packaging	Tape / Reel

### ST Series.



Soft Termination

### OP Series.



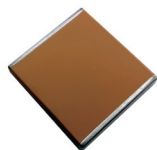
Open Mode  
Medium Voltage

### RF Series.



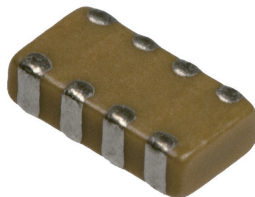
Ultra Hi-Q and LOW ESR

### XL Series.



Ultra Large Size

### CA Series.



Capacitor Array

Size	0603 to 2225
Rated Working Voltage	50Vdc to 4000Vdc
Capacitance Range	1.5pF to 10uF
Temperature Coefficient	NPO, X7R
Capacitance Tolerance	NPO: $C < 10\text{pF}$ , $\pm 0.1\text{pF}$ , $\pm 0.25\text{pF}$ , $\pm 0.5\text{pF}$ ; $C \geq 10\text{pF}$ , $\pm 1\%$ , $\pm 2\%$ , $\pm 5\%$ X7R: $\pm 10\%$ , $\pm 20\%$
Packaging	Tape / Reel

Size	0805 to 1812
Rated Working Voltage	100Vdc to 500Vdc
Capacitance Range	100pF to 1.0uF
Temperature Coefficient	X7R
Capacitance Tolerance	$\pm 10\%$ , $\pm 20\%$
Packaging	Tape / Reel

Size	0201 to 0805
Rated Working Voltage	25Vdc to 250Vdc
Capacitance Range	0.1pF to 100pF
Temperature Coefficient	NPO
Capacitance Tolerance	$C \leq 5\text{pF}$ , $\pm 0.05\text{pF}$ , $\pm 0.1\text{pF}$ , $\pm 0.25\text{pF}$ ; $5\text{pF} < C < 10\text{pF}$ , $\pm 0.1\text{pF}$ , $\pm 0.25\text{pF}$ , $\pm 0.5\text{pF}$ $C \geq 10\text{pF}$ , $\pm 1\%$ , $\pm 2\%$ , $\pm 5\%$
Packaging	Tape / Reel

Size	2020 to 13060
Rated Working Voltage	50Vdc to 10KVdc
Capacitance Range	100pF to 47uF
Temperature Coefficient	NPO, X7R
Capacitance Tolerance	$\pm 5\%$ , $\pm 10\%$ , $\pm 20\%$
Packaging	Tape / Reel

Size	0508 & 0612
Rated Working Voltage	16Vdc to 50Vdc
Capacitance Range	10pF to 100nF
Temperature Coefficient	NPO, X7R, Y5V
Capacitance Tolerance	NPO: $\pm 5\%$ X7R: $\pm 10\%$ , $\pm 20\%$ ; Y5V: $\pm 20\%$ +80-20%
Packaging	Tape / Reel

# Multilayer Ceramic Capacitors

## FK Series.



X1/Y2

Size	1808 to 2220
Rated Working Voltage	250VAC
Capacitance Range	COG:3PF~720PF(5KV)/4PF~100PF(6KV) X7R:100PF~4700PF(5KV)
Packaging	Tape / Reel

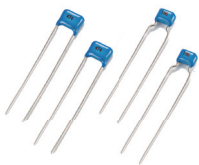
## FH Series.



X2

Size	1206 to 2220
Rated Working Voltage	250VAC, 2.5KVdc
Capacitance Range	COG:3PF~1000PF(KV) X7R:150PF~22NF / 100PF~4700PF(1206)
Packaging	Tape / Reel

## Type R Series.



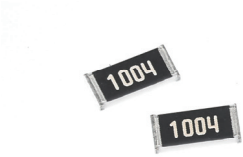
Radial Lead type  
Epoxy Resin coated

Size	R15, R20, R25
Rated Working Voltage	16Vdc to 3KVdc
Temperature Coefficient	NPO, X7R, Z5U, Y5V, X5R
Operating Temp. Range	NPO, X7R: -55°C to+155°C , Z5U: +10°C to+85°C ,Y5V: -30°C to+85°C
Capacitance Tolerance	±0.25pF, ±0.5pF, ±5%, ±10%, ±20%, +80-20%
Dissipation Factor (D.F.)	0.15 % to 10%
Packaging	Bulk,Tape/Box,Tape/Reel



# SMD Resistor

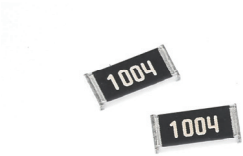
## HWF Series



Automotive Grace Thick Film

Size	0402 to 2512
Max. Working Voltage	50Vdc to 250Vdc
Resistance Range	0R, 1Ω to 10MΩ
Max. Overload Voltage	100Vdc to 500Vdc
Rated Power @ 70°C	1/16W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C , ±200ppm/°C

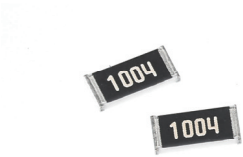
## RC Series



General Purpose Thick Film

Size	0201 to 2512
Max. Working Voltage	25Vdc to 250Vdc
Resistance Range	0R, 1Ω to 20MΩ
Max. Overload Voltage	50Vdc to 500Vdc
Rated Power @ 70°C	1/20W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C , ±200ppm/°C

## RT Series



High Precision Series Thin Film

Size	0201 to 2512
Max. Working Voltage	25Vdc to 200Vdc
Resistance Range	10Ω to 1MΩ
Max. Overload Voltage	50Vdc to 400Vdc
Rated Power @ 70°C	1/32W to 1W
Resistance Tolerance	±0.05%, ±0.1%, ±0.25%, ±0.5%, ±1%
Temp. Coefficient	±10ppm/°C , ±15ppm/°C , ±25ppm/°C , ±50ppm/°C

## RE Series

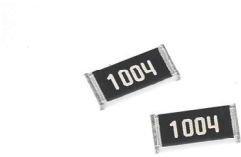


High Precision Thick Film

Size	0402 to 1206
Max. Working Voltage	50Vdc to 200Vdc
Resistance Range	10Ω to 1MΩ
Max. Overload Voltage	100Vdc to 400Vdc
Rated Power @ 70°C	1/16W to 1/4W
Resistance Tolerance	±0.1%, ±0.25%, ±0.5%, ±1%
Temp. Coefficient	±50ppm/°C

# SMD Resistor

## RL Series



Low Ohmic Series  
Thick Film

Size	0603 to 2512
Max. Working Voltage	331mV to 954mV
Resistance Range	10mΩ to 910mΩ
Max. Overload Voltage	754mV to 2133mV
Rated Power @ 70°C	1/10W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C to ±400ppm/°C

## HPF Series



High Power ≥ 1 ohm  
Thick Film

Size	0402 to 2512
Max. Working Voltage	50Vdc to 300Vdc
Resistance Range	0R, 1Ω to 10MΩ
Max. Overload Voltage	100Vdc to 600Vdc
Rated Power @ 70°C	1/8W to 2W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C , ±200ppm/°C

## HPL Series



High Power < 1 ohm  
Thick Film

Size	0603 to 2512
Max. Working Voltage	477mV to 1349mV
Resistance Range	10m to 910m
Max. Overload Voltage	1067mV to 3017mV
Rated Power @ 70°C	1/4W to 2W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C to ±400ppm/°C

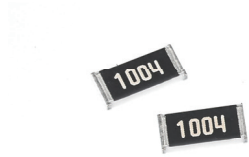
## HSR Series



Surge Series  
Thick Film

Size	0603 to 2512
Max. Working Voltage	50Vdc to 200Vdc
Resistance Range	1Ω to 1MΩ
Max. Overload Voltage	100Vdc to 400Vdc
Rated Power @ 70°C	1/10W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C

## HVR Series



High Voltage Series  
Thick Film

Size	0603 to 2512
Max. Working Voltage	200Vdc to 3000Vdc
Resistance Range	100Ω to 100MΩ
Max. Overload Voltage	400Vdc to 4000Vdc
Rated Power @ 70°C	1/10W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C , ±200ppm/°C

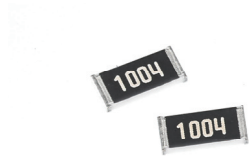
## HHR Series



High Ohmic Series  
Thick Film

Size	0603 to 2512
Max. Working Voltage	75Vdc to 250Vdc
Resistance Range	20M1Ω to 100MΩ
Max. Overload Voltage	150Vdc to 500Vdc
Rated Power @ 70°C	1/10W to 1W
Resistance Tolerance	±5%
Temp. Coefficient	±400ppm/°C

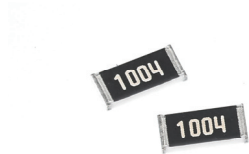
## HMR Series



Mega High Ohmic Series  
Thick Film

Size	0805 to 1206
Max. Working Voltage	150Vdc to 200Vdc
Resistance Range	110MΩ to 1GΩ
Max. Overload Voltage	300Vdc to 400Vdc
Rated Power @ 70°C	1/8W to 1/4W
Resistance Tolerance	±5%
Temp. Coefficient	±500ppm/°C , ±1000ppm/°C

## HLR Series



Low Resistance High Power  
Metal Strip

Size	2512
Max. Working Voltage	
Resistance Range	7mΩ to 100mΩ
Max. Overload Voltage	300Vdc to 400Vdc
Rated Power @ 70°C	1W to 3W
Resistance Tolerance	±0.5%, ±1%, ±5%
Temp. Coefficient	±50ppm/°C to ±75ppm/°C

# SMD Resistor

## HCS Series



Current Sensing Series  
Metal Strip

Size	1206 to 5931
Max. Working Voltage	122mV to 224mV
Resistance Range	1mΩ to 50mΩ
Max. Overload Voltage	274mV to 500mV
Rated Power @ 70°C	1/2W to 5W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±70ppm/°C to ±100ppm/°C

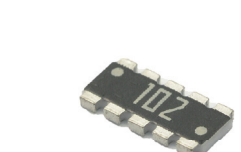
## FVS Series



Safety Certificated  
AEC-Q200 Certified

Size	0603 to 2512
Max. Working Voltage	200V to 3000V
Resistance Range	100KΩ to 100MΩ
Max. Overload Voltage	400V to 4000V
Rated Power @ 70°C	1/10W to 1W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±100ppm/°C to ±200ppm/°C

## HYC/HTC Series



Array Series  
Thick Film

Circuit	Isolated, Dual Common
Max. Working Voltage	25Vdc to 50Vdc
Resistance Range	0R, 10Ω to 1MΩ
Max. Overload Voltage	50Vdc to 100Vdc
Rated Power @ 70°C	1/16W
Resistance Tolerance	±1%, ±5%
Temp. Coefficient	±200ppm/°C , ±300ppm/°C

## CM/CML Series



Melf &Mini Melf  
Carbon Film

Size	0204 to 0309
Max. Working Voltage	250V to 350V
Resistance Range	0R, 1Ω to 10MΩ
Max. Overload Voltage	500V to 700V
Rated Power @ 70°C	1/4W to 2W
Resistance Tolerance	±2%, ±5%
Temp. Coefficient	-1500ppm/°C to ±300ppm/°C

MM/MML Series

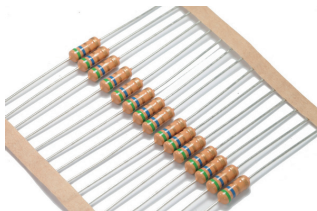


Melf &Mini Melf  
Metal Film

Size	0102 to 0207
Max. Working Voltage	150V to 350V
Resistance Range	0R, 1Ω to 10MΩ
Max. Overload Voltage	300V to 700V
Rated Power @ 70℃	1/8W to 1W
Resistance Tolerance	±0.1% to ±5%
Temp. Coefficient	±15ppm/℃ to ±100ppm/℃

# Dipped Resistor

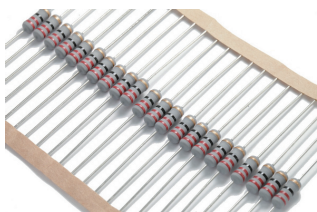
## CR Series



CARBON FILM  
Normal & Miniature Style

Resistance Range	0.1 $\Omega$ to 22M $\Omega$ & 0 $\Omega$
Max. Working Voltage	200Vdc to 500Vdc
Rated Power @ 70°C	1/8W to 3W
Max. Overload Voltage	400Vdc to 1KVdc
Temp. Coefficient	$\pm 300\text{ppm}/^\circ\text{C}$ to $\pm 1000\text{ppm}/^\circ\text{C}$
Packaging	Bulk, Tape/Box,Tape/Reel
Resistance Tolerance	$\pm 2\%$ , $\pm 5\%$

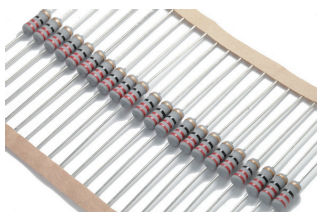
## FCR Series



CARBON FILM FLAME-PROOF  
Normal & Miniature Style

Resistance Range	0.1 $\Omega$ to 22M $\Omega$ & 0 $\Omega$
Max. Working Voltage	200Vdc to 500Vdc
Rated Power @ 70°C	1/8W to 3W
Max. Overload Voltage	400Vdc to 1KVdc
Temp. Coefficient	$\pm 300\text{ppm}/^\circ\text{C}$ to $\pm 800\text{ppm}/^\circ\text{C}$
Packaging	Bulk,Tape/Box,Tape/Reel
Resistance Tolerance	$\pm 2\%$ , $\pm 5\%$

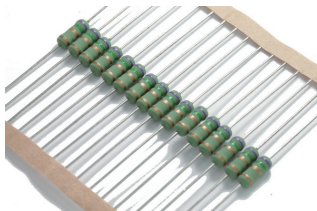
## MG Series



Metal Glaze  
Normal Style

Resistance Range	100k $\Omega$ to 33M $\Omega$
Max. Working Voltage	1000Vdc
Rated Power @ 70°C	1/4W to 2W
Max. Overload Voltage	1500Vdc
Temp. Coefficient	$\pm 200\text{ppm}/^\circ\text{C}$
Packaging	Bulk,Tape/Box,Tape/Reel
Resistance Tolerance	$\pm 1\%$ , $\pm 5\%$

## KNP Series

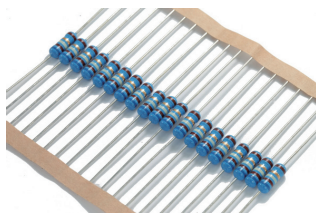


WIREWOUND RESISTORS  
Normal & Miniature Style

Resistance Range	0.1 $\Omega$ to 4.7K $\Omega$
Max. Working Voltage	$\sqrt{P \times R}$
Rated Power @ 70°C	1/4W to 15W
Max. Overload Voltage	$\sqrt{P \times R} \times 10$
Temp. Coefficient	$\pm 200$ to $300\text{ppm}/^\circ\text{C}$
Flameproof Coating Meet	UL94V-0
Resistance Tolerance	$\pm 1\%$ , $\pm 5\%$
Packaging	Bulk,Tape/Box,Tape/Reel



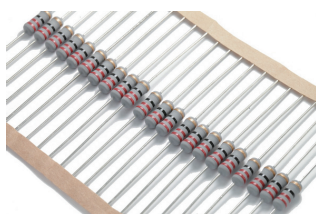
## MFR Series



METAL FILM  
Normal & Miniature Style

Resistance Range	1 $\Omega$ to 10M $\Omega$ & 0 $\Omega$
Max. Working Voltage	200Vdc to 500Vdc
Rated Power @ 70°C	1/8W to 3W
Max. Overload Voltage	400Vdc to 1KVdc
Temp. Coefficient	$\pm 15, \pm 25, \pm 50, \pm 100$ ppm/°C
Packaging	Bulk, Tape/Box, Tape/Reel
Resistance Tolerance	$\pm 0.05\%, \pm 0.1\%, \pm 1\%, \pm 5\%$

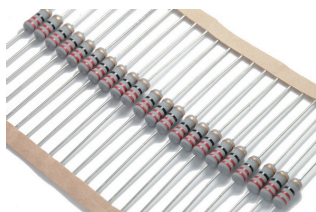
## MFR-SS Series



PROFESSIONAL METAL FILM  
Super Miniature Style

Resistance Range	1 $\Omega$ to 10M $\Omega$ & 0 $\Omega$
Max. Working Voltage	200Vdc to 500Vdc
Rated Power @ 70°C	1/2W to 3W
Max. Overload Voltage	400Vdc to 1KVdc
Temp. Coefficient	$\pm 100 \sim 300$ ppm/°C
Packaging	Bulk, Tape/Box, Tape/Reel
Resistance Tolerance	$\pm 1\%, \pm 5\%$

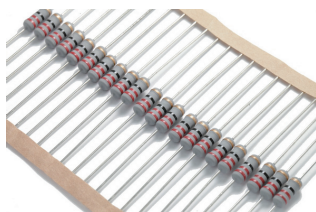
## FMF Series



METAL FILM FLAME-PROOF  
Normal & Miniature Style

Resistance Range	1 $\Omega$ to 10M $\Omega$ & 0 $\Omega$
Max. Working Voltage	200Vdc to 500Vdc
Rated Power @ 70°C	1/8W to 3W
Max. Overload Voltage	400Vdc to 1KVdc
Temp. Coefficient	$\pm 50, \pm 100$ ppm/°C
Flameproof Silicone Coating Meet	UL94V-0
Resistance Tolerance	$\pm 1\%$
Packaging	Bulk, Tape/Box, Tape/Reel

## MOR Series

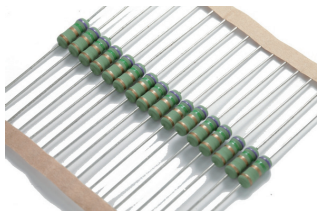


METAL OXIDE FILM  
Normal & Miniature Style

Resistance Range	1 $\Omega$ to 1M $\Omega$
Max. Working Voltage	250Vdc to 700Vdc
Rated Power @ 70°C	1/4W to 5W
Max. Overload Voltage	500Vdc to 1KVdc
Temp. Coefficient	$\pm 300$ ppm/°C
Flameproof Silicone Coating Meet	UL94V-0
Resistance Tolerance	$\pm 1\%, \pm 5\%$
Packaging	Bulk, Tape/Box, Tape/Reel

# Dipped Resistor

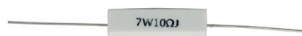
## NKNP Series



NON-INDUCTIVE  
WIRE WOUND RESISTORS  
Normal & Miniature Style

Resistance Range	0.033Ω to 150Ω
Max. Working Voltage	$\sqrt{P \times R}$
Rated Power @ 70°C	1/4W to 5W
Max. Overload Voltage	$\sqrt{P \times R} \times 10$
Temp. Coefficient	$\pm 300 \text{ ppm}/^\circ\text{C}$
Flameproof Coating Meet	UL94V-0
Resistance Tolerance	$\pm 1\%, \pm 5\%$
Packaging	Bulk, Tape/Box, Tape/Reel

## SQP Series



CEMENT RESISTORS  
Axial Lead Style

Resistance Range	0.1Ω to 1MΩ
Max. Working Voltage	350Vdc to 1KVdc
Rated Power @ 70°C	2W to 25W
Max. Overload Voltage	700Vdc to 1.5KVdc
Temp. Coefficient	$\pm 300 \text{ ppm}/^\circ\text{C}$
Packaging	Bulk
Resistance Tolerance	$\pm 1\%, \pm 5\%$

## SQM Series



CEMENT RESISTORS  
Vertical Lead Style

Resistance Range	0.1Ω to 1MΩ
Max. Working Voltage	500Vdc to 1KVdc
Rated Power @ 70°C	2W to 11W
Max. Overload Voltage	1KVdc to 1.5KVdc
Temp. Coefficient	$\pm 300 \text{ ppm}/^\circ\text{C}$
Packaging	Bulk
Resistance Tolerance	$\pm 1\%, \pm 5\%$

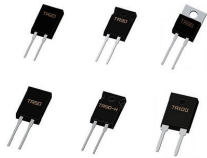
## SQZ Series



CEMENT RESISTORS  
Radial Lead Style

Resistance Range	0.1Ω to 1MΩ
Max. Working Voltage	$E = \sqrt{P \times R}$
Rated Power @ 70°C	5W to 20W
Max. Overload Voltage	$\sqrt{P \times R} \times 25$
Temp. Coefficient	$\pm 300 \text{ ppm}/^\circ\text{C}$
Packaging	Bulk
Resistance Tolerance	$\pm 1\%, \pm 5\%$

### TR Series



POWER RESISTOR  
TO-220 & TO-247 package

Resistance Range	1 $\Omega$ to 10K $\Omega$
Max. Working Voltage	350Vdc to 700Vdc
Rated Power @ 70°C	20W to 100W
Dielectric Strength	1800Vac at 5 sec.
Temp. Coefficient	$\pm 50$ to $\pm 300$ ppm /°C
Packaging	Bulk
Resistance Tolerance	$\pm 1\%$ , $\pm 5\%$

### SIP Series



RESISTOR NETWORK  
Single in Line Package

Resistance Range	10 $\Omega$ to 1M $\Omega$
Max. Working Voltage	100Vdc
Rated Power	0.125W to 0.2W
Dielectric Strength	500V
Temp. Coefficient	$\pm 100$ to $\pm 250$ ppm /°C
Packaging	Bulk
Resistance Tolerance	$\pm 2\%$ , $\pm 5\%$

### AH Series

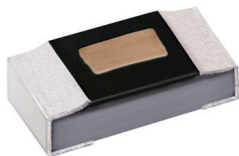


ALUMINUM HOUSED  
Power Type

Resistance Range	0.1 $\Omega$ to 100K $\Omega$
Max. Working Voltage	400Vdc to 1KVdc
Rated Power	10W to 250W
Temp. Coefficient	$\pm 50$ , $\pm 100$ , $\pm 200$ ppm/°C
Packaging	Bulk
Resistance Tolerance	$\pm 1\%$ , $\pm 5\%$

# Chip Inductors

## SAL Series



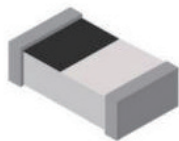
Thin Film High Frequency

## SMI Series



MULTILAYER FERRITE  
General Application

## SFI Series



MULTILAYER CERAMIC  
General Application

## SWI Series



WIRE WOUND  
OPEN TYPE

## SCI Series



WIRE WOUND  
MOLDED TYPE

Size	0201, 0402
Tolerance	$\pm 0.1\text{nH}$ , $\pm 0.2\text{nH}$ , $\pm 0.3\text{nH}$ , $\pm 1\%$ , $\pm 2\%$ , $\pm 3\%$ , $\pm 5\%$
Inductance Range	0.1nH to 33nH
Rated Current	75mA to 1000mA
Test Frequency	500MHz
Packaging	Tape & Reel

Size	0603, 0805, 1206
Tolerance	$\pm 10\%$ , $\pm 20\%$
Inductance Range	10nH to 100uH
Rated Current	2mA to 300mA
Test Frequency	0.4 to 50MHz
Packaging	Tape & Reel

Size	0402, 0603
Tolerance	$\pm 0.3\text{nH}$ to $\pm 5\%$
Inductance Range	1nH to 270nH
Rated Current	100mA to 1000mA
Test Frequency	50 to 100MHz
Packaging	Tape & Reel

Size	0402,0603,0805,1008,1210
Tolerance	$\pm 5\%$ $\pm 10\%$ , $\pm 20\%$
Inductance Range	1nH to 330uH
Rated Current	100mA to 1360mA
Test Frequency	100KHz to 250MHz
Packaging	Tape & Reel

Size	1008, 1210, 1812
Tolerance	$\pm 5\%$ $\pm 10\%$ , $\pm 20\%$
Inductance Range	0.01uH to 1000uH
Rated Current	30mA to 800mA
Test Frequency	252KHz to 100MHz
Packaging	Tape & Reel

## SCI-HT Series



WIRE WOUND MOLDED TYPE  
High Current

## FBM Series



MULTILAYER FERRITE  
General Application

Size	1210
Tolerance	$\pm 10\%$ , $\pm 20\%$
Inductance Range	1 $\mu$ H to 100 $\mu$ H
Rated Current	70mA to 1000mA
Test Frequency	796KHz to 7.96MHz
Packaging	Tape & Reel

Size	0402, 0603, 0805, 1206, 1210, 1806, 1812
DC Resistance	0.05 $\Omega$ to 1 $\Omega$
Impedance Range	6 $\Omega$ to 2200 $\Omega$
Rated Current	50mA to 600mA
Test Frequency	30m to 100MHz
Packaging	Tape/Reel
Tolerance	$\pm 25\%$

# Air Coil

## SQA Series



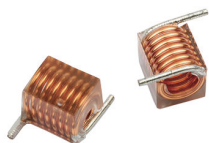
High Frequency Air Coil SMD Type

## SQB Series



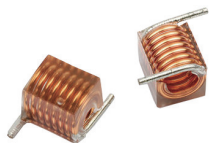
High Frequency Air Coil SMD Type

## RSA Series



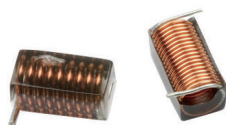
High Frequency Air Coil SMD Type

## MSA Series



High Frequency Air Coil SMD Type

## DSA Series



High Frequency Air Coil SMD Type

Size	0806, 0807, 0908
Inductance Range	5.5nH to 27nH
Packaging	Tape/Reel
Rated Current	2.7A to 4.4A
Test Frequency	400MHz
Tolerance	±2%, ±5%, ±10%

Size	1515,2222,2929
Inductance Range	47nH to 500nH
Packaging	Tape/Reel
Rated Current	3.7A to 5.7A
Test Frequency	50MHz400MHz
Tolerance	±2%, ±5%

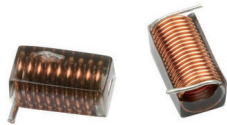
Size	0906,1606
Inductance Range	1.65nH to 12.55nH
Packaging	Tape/Reel
Rated Current	1.6A
Test Frequency	800MHz
Tolerance	±2%, ±5%, ±10%

Size	1512,2712
Inductance Range	2.5nH to 43nH
Packaging	Tape/Reel
Rated Current	4.0A
Test Frequency	150MHz
Tolerance	±2%, ±5%, ±10%

Size	1915
Inductance Range	22nH to 120nH
Packaging	Tape/Reel
Rated Current	1.5A to 3.5A
Test Frequency	150MHz
Tolerance	±2%, ±5%, ±10%



### XSA Series



High Frequency Air Coil SMD Type

### PC Series



Power Choke

Size	4225
Inductance Range	90nH to 538nH
Packaging	Tape/Reel
Rated Current	2.0A to 3.5A
Test Frequency	50MHz
Tolerance	$\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$

Size	0808, 0908, 1210
Inductance Range	1.0nH to 15mH
Packaging	Bull
Rated Current	0.08A to 10A
Test Frequency	0.079~7.9MHz
Tolerance	$\pm 2\%$ , $\pm 5\%$

# Power Inductors

## CSS Series



POWER TYPE Closed Magnetic  
Closed Magnetic Circuit Core

Size	6025, 6028, 7032, 7045, 10145, 12555, 12565, 12575
Inductance Range	1.2uH to 1500uH
Packaging	Tape/Reel
Rated Current	0.13A to 8.2A
Test Frequency	1K HZ
Tolerance	±20%

## CSM Series



POWER TYPE  
Magnetic resin shield

Size	2012,2410,2412,3010,3012,3015, 4010,4012, 4018,5010,5012,5014, 5020,5040,6010,6012, 6020,6028,6045,8040
Inductance Range	1.2uH to 1500uH
Packaging	Tape/Reel
Rated Current	0.17A to 7.8A
Test Frequency	100KHz & 1MHz
Tolerance	±20%, ±30%

## CSN Series



POWER TYPE  
Unshield

Size	0302,0403,0604,0705,1040,1054, 1303,1305
Inductance Range	1.0uH to 1000uH
Packaging	Tape/Reel
Rated Current	0.05A to 6.8A
Test Frequency	1K~100KHz
Tolerance	±10%, ±15%, ±20%

## CSP Series



POWER TYPE  
Unshield

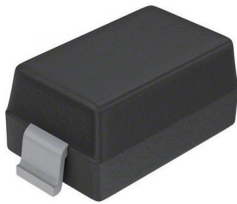
Size	0603~1209
Inductance Range	0.54uH to 1000uH
Packaging	Tape/Reel
Rated Current	180mA to 9000mA
Test Frequency	1KHz to 100KHz
Tolerance	±20%, ±30%

## CSG Series



POWER TYPE  
Unshield

Size	2D11 to 10D25
Inductance Range	1uH to 100uH
Packaging	Tape/Reel
Rated Current	30mA to 5800mA
Test Frequency	100KHz
Tolerance	±20%, ±30%

**SMF Series**

SMD Type 200W

Package	SOD123S
Working Peak Reverse Voltage VRWM	5.0V ~ 220V
Max. Reverse Leakage IR@ VRWM	1uA ~ 400uA
Max. Clamping Voltage Vc@Ipp	9.2V ~ 356V
Max. Reverse Surge Current Ipp	0.56A ~ 21.74A

**P4SMA Series**

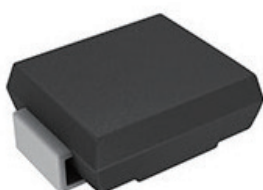
SMD Type 400W

Package	DO-214AC(SMA)
Working Peak Reverse Voltage VRWM	5.0V ~ 440V
Max. Reverse Leakage IR@ VRWM	5uA ~ 800uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 713V
Max. Reverse Surge Current Ipp	0.56A ~ 41.67A

**P6SMB Series**

SMD Type 600W

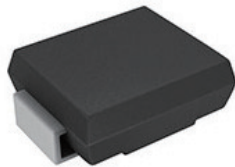
Package	DO-214AA(SMB)
Working Peak Reverse Voltage VRWM	5.0V ~ 440V
Max. Reverse Leakage IR@ VRWM	5uA ~ 800uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 713V
Max. Reverse Surge Current Ipp	0.8A ~ 62.5A

**1.5SMCJ Series**

SMD Type 1500W

Package	DO-214AB(SMC)
Working Peak Reverse Voltage VRWM	5.0V ~ 440V
Max. Reverse Leakage IR@ VRWM	5uA ~ 800uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 713V
Max. Reverse Surge Current Ipp	2.1A ~ 156.3A

3.0SMCJ Series



SMD Type 3000W

Package	DO-214AB(SMC)
Working Peak Reverse Voltage VRWM	5.0V ~ 440V
Max. Reverse Leakage IR@ VRWM	2uA ~ 5000uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 713V
Max. Reverse Surge Current Ipp	4.21A ~ 312.5A

5.0SMCJ Series



SMD Type 5000W

Package	DO-214AB(SMC)
Working Peak Reverse Voltage VRWM	11V ~ 440V
Max. Reverse Leakage IR@ VRWM	5uA ~ 800uA
Max. Clamping Voltage Vc@Ipp	18.2V ~ 713V
Max. Reverse Surge Current Ipp	7.0A ~ 274.7A

P4KE Series



Axial Type 400W

Package	DO-41
Working Peak Reverse Voltage VRWM	5.5V ~ 459V
Max. Reverse Leakage IR@ VRWM	5uA ~ 1000/2000uA
Max. Clamping Voltage Vc@Ipp	10.8V ~ 740V
Max. Reverse Surge Current Ipp	0.54A ~ 40A

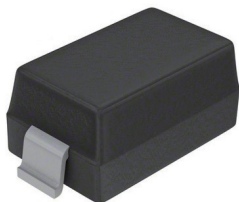
P6KE Series



Axial Type 600W

Package	DO-15
Working Peak Reverse Voltage VRWM	5.5V ~ 459V
Max. Reverse Leakage IR@ VRWM	5uA ~ 1000/2000uA
Max. Clamping Voltage Vc@Ipp	10.8V ~ 740V
Max. Reverse Surge Current Ipp	0.81A ~ 57A

### 1.5KE Series



Axial Type 1500W

Package	DO-201AE
Working Peak Reverse Voltage VRWM	5.5V ~ 459V
Max. Reverse Leakage IR@ VRWM	5uA ~ 1000uA
Max. Clamping Voltage Vc@Ipp	10.8V ~ 740V
Max. Reverse Surge Current Ipp	2.03A ~ 143A

### 3KP Series



Axial Type 3000W

Package	P6
Working Peak Reverse Voltage VRWM	5V ~ 180V
Max. Reverse Leakage IR@ VRWM	2uA ~ 5000uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 322.2V
Max. Reverse Surge Current Ipp	9.31A ~ 326.09A

### 5KP Series



Axial Type 5000W

Package	P6
Working Peak Reverse Voltage VRWM	5V ~ 180V
Max. Reverse Leakage IR@ VRWM	2uA ~ 5000uA
Max. Clamping Voltage Vc@Ipp	9.6V ~ 322.2V
Max. Reverse Surge Current Ipp	15.52A ~ 543.48A

### KA/KB/KC Series



Axial Type 5000W

Package	Axial Lead
Working Peak Reverse Voltage VRWM	58Vdc ~ 430Vdc
Max. Reverse Leakage IR@ VRWM	10uA
Max. Clamping Voltage Vc@Ipp	110V ~ 625V
Max. Reverse Surge Current Ipp	64V~440V

# Metal Oxide Varistors

## General Purpose



Dipped Type  
Radial Ledded

## High Surge Absorption



Dipped Type  
Radial Ledded

## C Series



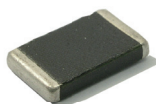
Wide Range Application  
SMD Type

## A Series



High Surge Absorption  
SMD Type

## K Series A type



High Surge Absorption  
SMD Type

Size	05D to 53D
Varistors Voltage	18Vdc to 1600Vdc
Max. Energy (10/1000uS)	0.4Joule to 2500Joule
Working Temp. Range	-40°C to +85°C
Max. Peak Current(8/20uS)	100Amps to 70,000Amps
Varistors Tolerance	±10%, ±15%

Size	05D to 53D
Varistors Voltage	18Vdc to 1600Vdc
Max. Energy (10/1000uS)	0.6Joule to 2500Joule
Working Temp. Range	-40°C to +85°C
Max. Peak Current(8/20uS)	250Amps to 70,000Amps
Varistors Tolerance	±10%, ±15%

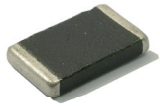
Size	0402 to 2220
Varistors Voltage	8Vdc to 100Vdc
Max. Energy (10/1000uS)	0.05Joule to 8.8Joule
Working Temp. Range	-40°C to +85°C
Max. Peak Current(8/20uS)	20Amps to 1,000Amps
Varistors Tolerance	±10%

Size	1206 to 2220
Varistors Voltage	18Vdc to 56Vdc
Max. Energy (10/1000uS)	0.5Joule to 12Joule
Working Temp. Range	-40°C to +85°C
Max. Peak Current(8/20uS)	200Amps to 1,200Amps
Varistors Tolerance	±10%

Size	3220 (08CH)
Varistors Voltage	68Vdc to 150Vdc
Max. Energy (10/1000uS)	5.5Joule to 14Joule
Working Temp. Range	-40°C to +85°C
Max. Peak Current(8/20uS)	1000Amps
Varistors Tolerance	±10%



## K Series C type



Wide Range Application  
SMD Type

Size	3220 (08CH)
Varistors Voltage	56Vdc to 470Vdc
Max. Energy (10/1000uS)	2.5Joule to 21.6Joule
Working Temp. Range	-40°C to+85°C
Max. Peak Current(8/20uS)	400Amps to 1000Amps
Varistors Tolerance	±10%

# Resettable Fuse (PPTC)

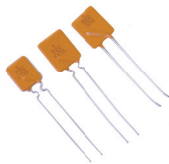
## RDL 60V Series



Radial Type

Voltage	6Vdc to 15Vdc
Hold Current	0.1Amp to 3.75Amp
Trip Current	0.2Amp to 7.50Amp
Initial resistance	0.03Ω to 2.50Ω
Max. Power Dissipation	0.38Watt to 3.20 Watt

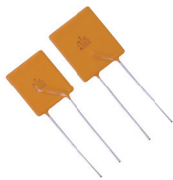
## RDL 30V Series



Radial Type

Voltage	30Vdc
Hold Current	0.09Amp to 9.0Amp
Trip Current	1.8Amp to 18.0Amp
Initial resistance	0.005Ω to 0.07Ω
Max. Power Dissipation	0.60Watt to 4.20 Watt

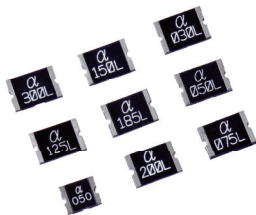
## RDL 16V Series



Radial Type

Voltage	16Vdc
Hold Current	0.7Amp to 15.0Amp
Trip Current	1.4Amp to 25.5Amp
Initial resistance	0.002Ω to 0.13Ω
Max. Power Dissipation	0.60Watt to 4.80 Watt

## 0603~2920 Series



SMD Type

Voltage	6Vdc to 60Vdc
Hold Current	0.3Amp to 3.0Amp
Trip Current	0.6Amp to 6.0Amp
Initial resistance	0.012Ω to 0.60Ω
Max. Power Dissipation	1.50Watt

### Note

[illegible]



# HITANO

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