

Design Tool Guide

(Component Library, Version 7.0)

Samsung Electro-Mechanics

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- 시스템 권장사양

삼성전기 Component Library를 이용하기 위해서는 아래와 같은 시스템 사양이 필요합니다.

OS : Windows 10 이상 또는 Windows Server 2016 이상

RAM : 2GB

Disk space : 1GB

- 문의

삼성전기는 고객이 Component Library 이용에 어려움이 없도록 지원해드립니다.

문의 사항이나 시스템 이용에 어려움이 있으실 경우 아래 주소를 클릭하시기 바랍니다.

[전체 | FAQ | 삼성전기 \(samsungsem.com\)](#)

[문의하기 | 삼성전기 \(samsungsem.com\)](#)

1 Characteristics Viewer

2 Selection Tool

Product	Data Type	Update Date	List	Download
MLCC	MLCC(simple model) S-parameter data files as touchstone format	2021.09	[List]	[Download]
	MLCC(precise model) S-parameter data files as touchstone format	2021.09	[List]	[Download]
Tantalum	Polymer Tantalum Capacitor S-parameter data files as touchstone format	2021.09	[List]	[Download]
Power Inductor	Power Inductors S-parameter data files as touchstone format	2021.09	[List]	[Download]

3 Notice

- 2021-11-01 Software Library has been updated(S-parameter, etc.)
- 2021-08-23 BuyNow function provide features such as stock check and sample order
- 2021-07-20 The component library website has been renewed!
- 2020-08-10 MLCC : Updated thirty-one items
- 2020-07-27 MLCC : Updated forty-seven items

4 Download & Link

SPICE Library Guide | Design Tool Guide | Measurement System and Die-embedding Process | Contact Us

1. All Categories

지원되는 제품의 카테고리를 보여 주며, 카테고리 클릭 시 해당 메뉴로 이동할 수 있습니다.

2. Software Library

S-Parameter 와 기타 Software Library 및 사용자 가이드 문서를 다운로드 하실 수 있습니다.

3. Notice

1년 이내에 새롭게 업데이트된 소식을 확인할 수 있습니다. 선택한 소식의 세부 내용은 우측 영역에서 확인하실 수 있습니다.

4. Download & Link

사용자 가이드 문서를 다운로드하실 수 있습니다. 관련 사이트 바로가기 기능을 지원합니다.

3-1. 제품별 상세페이지 > 페이지 구성

1. 상단 메뉴
 Component Library | Product Search | MLCC | Power Inductor | Tantalum | Converter Simulation Tool | ENG | FAQ

4. Selected Parts
 * Please select item from the list below

5. Model Mode
 Precise | Simple

6. Graph Type
 DC Bias, AC Volt, Ripple Cur., TCC, DC Bias @ temp, TCC @ DC(V), S(dB), Smith chart

7. Download
 CAD(stp), Footprint(.dxf), S2P, SPICE, Series, Shunt, Precise Model, Simple Model

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL02A102KP2N1N	General	1nF	01005/0402	10Vdc	X5R	0.22mm	±10 %	Super-small
CL02A102KQ2N1N	General	1nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A103KQ2N1N	General	10nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A104KQ2N1N	General	100nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A104MQ2N1N	General	100nF	01005/0402	6.3Vdc	X5R	0.22mm	±20 %	Super-small
CL02A104MR2N1N	General	100nF	01005/0402	4Vdc	X5R	0.22mm	±20 %	Super-small
CL02A222KQ2N1N	General	2.2nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A224MQ2N1N	General	220nF	01005/0402	6.3Vdc	X5R	0.22mm	±20 %	Super-small
CL02A473KQ2N1N	General	47nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02B101KP2N1N	General	100pF	01005/0402	10Vdc	X7R	0.22mm	±10 %	Super-small
CL02B102KP2N1N	General	1nF	01005/0402	10Vdc	X7R	0.22mm	±10 %	Super-small
CL02B221KP2N1N	General	220pF	01005/0402	10Vdc	X7R	0.22mm	±10 %	Super-small
CL02B331KQ2N1N	General	330pF	01005/0402	16Vdc	X7R	0.22mm	±10 %	Super-small
CL02B661KP2N1N	General	680pF	01005/0402	10Vdc	X7R	0.22mm	±10 %	Super-small
CL02C010B02G1N	General	1pF	01005/0402	16Vdc	C0G	0.22mm	±0.1 pF	High-Q
CL02C020B02G1N	General	2pF	01005/0402	16Vdc	C0G	0.22mm	±0.1 pF	High-Q
CL02C030B02G1N	General	3pF	01005/0402	16Vdc	C0G	0.22mm	±0.1 pF	High-Q
CL02C040B02G1N	General	4pF	01005/0402	16Vdc	C0G	0.22mm	±0.1 pF	High-Q

Matching Parts : 1863 | Total Parts : 1863

List Download

1. 상단 메뉴

현재 접속한 페이지를 확인하실 수 있습니다.

2. 필터

원하는 조건으로 제품 필터링이 가능합니다.

3. 파트리스트

관심 있는 파트를 더블 클릭하여 selected parts에 담을 수 있습니다.

4. Selected Parts

Selected Parts에 담긴 파트들 중 원하는 파트를 최종 선택합니다.

5. Model mode

시뮬레이션을 위한 Model mode 선택합니다.

6. 그래프 시뮬레이션

원하는 graph type를 선택하여 그래프를 생성합니다.

7. 시뮬레이션 파일 다운로드

시뮬레이션 데이터 파일을 다운로드하실 수 있습니다.

3-2. 제품별 상세페이지 > 상단 메뉴

삼성전기 공식 홈페이지와 프리덕트 서치, 컴포넌트 라이브러리 웹사이트의 메인 페이지로 이동하실 수 있습니다.

The screenshot shows the top navigation bar of the Samsung Electro-Mechanics website. The 'Component Library' and 'Product Search' links are highlighted with a blue box and numbered 1 and 2 respectively. A hand icon is shown clicking on the 'Product Search' link.

Below the navigation bar, there is a 'Selected Parts' section with a message: '* Please select item from below'. To the right, there are links for 'MLCC', 'Power Inductor', 'Tantalum', 'Converter Simulation Tool', 'ENG', 'FAQ', and an email icon.

The main content area features a 'Filter' section with various search criteria:

- Part Number:** Search box for 'Part Number Keyword'.
- Use for:** all, Automotive, General.
- Capacitance:** Range and Match options, with 'from' and 'to' fields in pF.
- Tolerance:** all, -20/+80%, ±0.1pF, ±0.25pF.
- Size(inch/mm):** all, list of part numbers: 008004/0201, 01005/0402, 015008/0502.
- Rated Vdc:** Range and Match options, with 'from' and 'to' fields in Vdc.
- TCC:** all, C0G, JIS-B, X5R.
- T Size Max:** Range and Match options, with 'from' and 'to' fields in mm.
- Features:** all, 3T(Low ESL), 8T(Low ESL), ANSC-A(Low Acoustic).

Buttons for '+ Cross Reference', '+ Advanced Search', and 'Reset' are located above the filter table.

On the left side, there is a 'Model Mode' section with 'Precise' and 'Simple' options, and a 'Graph Type' section with various graph options like |Z|, R, |X|, |Z|,R, C, L, Q, DF, DC Bias, AC Volt, RippleCurr., TCC, DC Bias @ temp, TCC @ DC(V), S[dB], and Smith chart.

Below the graph type section is a 'Download' section with options for 3D CAD(.stp), Footprint(.dxf), S2P, and SPICE, and a 'Series' section with 'Precise Model' and 'Simple Model' options.

The main table below the filter section lists the following data:

Part Number	Data	Use for	Capacitance	Tolerance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Features
CL32A227MQVNNN		General	220uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Features Normal
CL32A157MQVNNN		General	150uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Features Normal
CL31A107MQKNNW		General	100uF	±20%	1206/3216	6.3Vdc	X5R	1.9mm	Features Normal
CL32Y107MQVN4N		General	100uF	±20%	1210/3225	6.3Vdc	X7S	2.8mm	Features Normal
CL32Z107MRV6PN		Automotive	100uF	±20%	1210/3225	4Vdc	X7T	2.8mm	Features Normal
CL32A107MPVNNN		General	100uF	±20%	1210/3225	10Vdc	X5R	2.8mm	Features Normal
CL32X107MQVNNN		General	100uF	±20%	1210/3225	6.3Vdc	X6S	2.8mm	Features Normal
CL32X107MQVNNW		General	100uF	±20%	1210/3225	6.3Vdc	X6S	2.8mm	Features Normal
CL21X107MRYNW		General	100uF	±20%	0805/2012	4Vdc	X6S	1.45mm	Features Normal
CL31A107MQKNNN		General	100uF	±20%	1206/3216	6.3Vdc	X5R	1.9mm	Features Normal
CL31A107MRKNNW		General	100uF	±20%	1206/3216	4Vdc	X5R	1.9mm	Features Normal
CL32Y107MQVNNW		General	100uF	±20%	1210/3225	6.3Vdc	X7S	2.8mm	Features Normal
CL32Z107MSV6PJ		Automotive	100uF	±20%	1210/3225	2.5Vdc	X7T	2.85mm	Soft Termination(5mm)
CL32Z107MQV6PJ		Automotive	100uF	±20%	1210/3225	6.3Vdc	X7T	2.85mm	Soft Termination(5mm)

문의 버튼 클릭 시 삼성전기에 빠른 문의가 가능합니다.

The image shows a screenshot of the Samsung Electro-Mechanics website's product search interface. The top navigation bar includes 'Component Library | Product Search' and various product categories like 'MLCC', 'Power Inductor', 'Tantalum', and 'Converter Simulation Tool'. A 'FAQ' button with a checkmark icon is highlighted with a blue box and a hand cursor, with an arrow pointing to a 'Contact Us' modal window.

The 'Contact Us' modal window is titled 'Contact Us' and contains the following sections:

- Contact Information:** Includes fields for Country (United States), First Name (Ex.: John), Last Name (Ex.: Smith), Company E-mail, Company/Organization, Department, and Company Contact Number (with a '+1' prefix and a phone number: +1 31-1234-1234 +1 901-234-1234).
- Inquiry Contents:** A large text area for entering the inquiry details.
- How did you hear about our products?:** Radio buttons for Search Engine / Web Portal, SAMSUNG Web site, Distributor's Web site, Salesperson, TV/Newspaper/Magazine, and Other.
- Attachment:** A field for uploading files, with a note: 'Please do not attach production when attaching a file if it contains your personal information.' A 'P Q E T N' logo is visible.
- Preventing automatic entries:** A checkbox option.
- Agreement of Collecting and Using Personal Information:**
 - 1. Purpose of Collecting Personal Information:** Samsung Electro-Mechanics collects and uses your Personal Information to be used for the purpose of providing inquiry and request services. We will not disclose, sell, trade, or rent Personal Information without your prior consent, and in case the purpose of collecting and using personal information is altered, we will inform you of the changes and receive your agreement.
 - 2. Personal Information We Collect:**
 - I have read the above terms and hereby agree to them.
 - Yes No
- Would you like to receive our newsletters?:**
 - Information such as product launches, exhibitions and new technology seminars of Samsung Electro-Mechanics will be sent on a regular basis.
 - I agree to collecting personal information and usage, as well as subscribing newsletters.

A 'Submit' button is located at the bottom right of the modal window.

메뉴명을 클릭하여 해당 메뉴로 이동할 수 있습니다.

Part Number	Data	Use for	Tolerance	Features
CL32A107MQVNNW		High Reliability	±20 %	Standard
CL32A107MPVNNW		High Reliability	±20 %	Standard
CL32A107MQVNNN		General	±20 %	Standard
CL32A107MPVNNN		General	±20 %	Standard
CL32B476KPJNNW		High Reliability	±10 %	Standard

Part Number	Use for	Inductance	Tolerance	Size(whmm)	T Size Max	Isat Typical	Isat Max	Temp Max	DCR Max	Features
Part Number Keyword	<input checked="" type="checkbox"/> all	Range Match	<input checked="" type="checkbox"/> all	<input checked="" type="checkbox"/> all	<input checked="" type="checkbox"/> all	Range Match	Range Match	Range Match	Range Match	<input checked="" type="checkbox"/> all
	<input checked="" type="checkbox"/> General	from <input type="text"/> uH	±20%	<input checked="" type="checkbox"/> 06031600	<input checked="" type="checkbox"/> 0.55mm	from <input type="text"/> A	from <input type="text"/> A	from <input type="text"/> A	from <input type="text"/> D	<input checked="" type="checkbox"/> Bottom Type
		to <input type="text"/> uH		<input checked="" type="checkbox"/> 06051412	<input checked="" type="checkbox"/> 0.6mm	to <input type="text"/> A	to <input type="text"/> A	to <input type="text"/> A	to <input type="text"/> D	<input checked="" type="checkbox"/> General Type
				<input checked="" type="checkbox"/> 08052012	<input checked="" type="checkbox"/> 0.65mm	to <input type="text"/> A	to <input type="text"/> A	to <input type="text"/> A	to <input type="text"/> D	<input checked="" type="checkbox"/> L Type

Part Number	Use for	Inductance	Tolerance	Size(whmm)	T Size Max	Isat Typical	Isat Max	Temp Max	DCR Max	Features
CG1716006TMR30MB	General	0.33uH	±20%	06031600	0.6mm	3.3A	3A	2.4A	0.040	Bottom Type
CG1616006E247ML	General	0.47uH	±20%	06031600	0.6mm	2.7A	2.3A	3.3A	0.0350	L Type
CG1716006EHR10MN	General	1uH	±20%	06031600	0.65mm	2A	1.7A	1.5A	0.160	General Type
CG1720120EHR10MN	General	1uH	±20%	08052012	0.6mm	2.7A	2.4A	1.8A	0.110	General Type
CG1720120EHR10MN	General	1uH	±20%	08052012	0.6mm	3.5A	3.2A	3.1A	0.0550	General Type
CG1720120EHR10MN	General	0.47uH	±20%	08052012	0.6mm	4.3A	4.1A	3.7A	0.0350	General Type

필터 영역을 숨기거나 표시할 수 있습니다.

Filter 

Part Number	Use for	Capacitance	Size(inch/mm)
Part Number Keyword	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	Match Range <input type="text"/> pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input checked="" type="checkbox"/> 0201/0603

Part Number	Data	Use for	Capacitance	Size(inch/mm)
CL01Y105MR5NLN		General	1uF	0306/0816
CL02A102KP2NNN		General	1nF	01005/0402
CL02A102KQ2NNN		General	1nF	01005/0402
CL02A103KQ2NNN		General	10nF	01005/0402



Filter 

Part Number	Data	Use for	Capacitance	Size(inch/mm)
CL01Y105MR5NLN		General	1uF	0306/0816
CL02A102KP2NNN		General	1nF	01005/0402
CL02A102KQ2NNN		General	1nF	01005/0402
CL02A103KQ2NNN		General	10nF	01005/0402
CL02A104KQ2NNN		General	100nF	01005/0402
CL02A104MQ2NNN		General	100nF	01005/0402
CL02A104MR2NNN		General	100nF	01005/0402
CL02A222KQ2NNN		General	2.2nF	01005/0402
CL02A224MQ2NNN		General	220nF	01005/0402
CL02A473KQ2NNN		General	47nF	01005/0402

Reset 버튼 클릭 시 설정한 모든 필터 조건이 초기화됩니다.

Filter ⌵ Reset

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
<input type="text" value="Part Number Keyword"/>	<input type="checkbox"/> all <input type="checkbox"/> Automotive <input type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	Match Range <input type="text"/> pF	<input type="checkbox"/> all <input type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input type="checkbox"/> 0201/0603	Match Range from <input type="text"/> Vdc ~ to <input type="text"/> Vdc	<input type="checkbox"/> all <input type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	Match Range <input type="text"/> mm	<input type="checkbox"/> all <input type="checkbox"/> +80 % / -20 % <input type="checkbox"/> ± 0.03 pF <input checked="" type="checkbox"/> ± 0.05 pF	<input type="checkbox"/> all <input checked="" type="checkbox"/> DC Bias Improved <input type="checkbox"/> ESD <input checked="" type="checkbox"/> High Bending




Filter ⌵ Reset

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
<input type="text" value="Part Number Keyword"/>	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	Match Range <input type="text"/> pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input checked="" type="checkbox"/> 0201/0603	Match Range <input type="text"/> Vdc	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	Match Range <input type="text"/> mm	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> +80 % / -20 % <input checked="" type="checkbox"/> ± 0.03 pF <input checked="" type="checkbox"/> ± 0.05 pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> DC Bias Improved <input checked="" type="checkbox"/> ESD <input checked="" type="checkbox"/> High Bending

Part Number를 입력하여 원하는 파트를 찾으실 수 있습니다.

Filter
Reset

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
<input style="border: 2px solid cyan; width: 100%;" type="text" value="CL31B22"/> 	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	Match Range <input type="text"/> pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input checked="" type="checkbox"/> 0201/0603	Match Range <input type="text"/> Vdc	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	Match Range <input type="text"/> mm	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> +80 % / -20 % <input checked="" type="checkbox"/> ± 0.03 pF <input checked="" type="checkbox"/> ± 0.05 pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> DC Bias Improved <input checked="" type="checkbox"/> ESD <input checked="" type="checkbox"/> High Bending

Part Number	Data	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL31B222KGFNNN		General	2.2nF	1206/3216	500Vdc	X7R	1.4mm	±10 %	Med-High Volt
CL31B224JBFNNN		General	220nF	1206/3216	50Vdc	X7R	1.4mm	±5 %	Standard
CL31B224KBFNNN		General	220nF	1206/3216	50Vdc	X7R	1.4mm	±10 %	Standard
CL31B224KBFNNW		High Reliability	220nF	1206/3216	50Vdc	X7R	1.4mm	±10 %	Standard
CL31B224MBFNNN		General	220nF	1206/3216	50Vdc	X7R	1.4mm	±20 %	Standard
CL31B224MBFNNW		High Reliability	220nF	1206/3216	50Vdc	X7R	1.4mm	±20 %	Standard
CL31B225KAHNNN		General	2.2uF	1206/3216	25Vdc	X7R	1.8mm	±10 %	Standard
CL31B225KAHNNW		High Reliability	2.2uF	1206/3216	25Vdc	X7R	1.8mm	±10 %	Standard
CL31B225KAHVPN		Automotive	2.2uF	1206/3216	25Vdc	X7R	1.8mm	±10 %	Standard
CL31B225KBHNNN		General	2.2uF	1206/3216	50Vdc	X7R	1.8mm	±10 %	Standard

'all' 옵션을 통하여 전체 옵션 선택/해제가 가능합니다.

Filter
Reset

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
<input type="text" value="Part Number Keyword"/>	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	<input type="text"/> <input type="text"/> <input type="text"/> Match Range pF	<input type="checkbox"/> all <input type="checkbox"/> 01005/0402 <input type="checkbox"/> 015008/05025 <input type="checkbox"/> 0201/0603	<input type="text"/> <input type="text"/> <input type="text"/> Match Range Vdc	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	<input type="text"/> <input type="text"/> <input type="text"/> Match Range mm	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> +80 % / -20 % <input checked="" type="checkbox"/> ± 0.03 pF <input checked="" type="checkbox"/> ± 0.05 pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> DC Bias Improved <input checked="" type="checkbox"/> ESD <input checked="" type="checkbox"/> High Bending

Part Number	Data	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL31A107MQKNNN		General	100uF	1206/3216	6.3Vdc	X5R	1.9mm	±20 %	Standard
CL31A107MQKNNW		High Reliability	100uF	1206/3216	6.3Vdc	X5R	1.9mm	±20 %	Standard
CL32A107MQVNNW		High Reliability	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MPVNNW		High Reliability	100uF	1210/3225	10Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MQVNNN		General	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MPVNNN		General	100uF	1210/3225	10Vdc	X5R	2.8mm	±20 %	Standard

컬럼 헤더에 마우스 오버 시 등장하는 보조도구를 통하여 파트 리스트 정렬이 가능합니다.

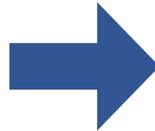
Part Number	Data	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL31A107MQKNNN	☰		100uF	1206/3216	6.3Vdc	X5R	1.9mm	±20 %	Standard
CL31A107MQKNNW	☰	High Reliability	100uF	1206/3216	6.3Vdc	X5R	1.9mm	±20 %	Standard
CL32A107MQVNNW	☰	High Reliability	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MPVNNW	☰	High Reliability	100uF	1210/3225	10Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MQVNNN	☰	General	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard



Part Number	Data	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL01Y105MR5NLN	☰	General	1uF	0306/0816	4Vdc	X7S	0.55mm	±20 %	Low ESL(LICC)
CL02A102KP2NNN	☰	General	1nF	01005/0402	10Vdc	X5R	0.22mm	±10 %	Super-small
CL02A102KQ2NNN	☰	General	1nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A103KQ2NNN	☰	General	10nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small
CL02A104KQ2NNN	☰	General	100nF	01005/0402	6.3Vdc	X5R	0.22mm	±10 %	Super-small

Data 컬럼의 아이콘을 클릭하면 해당 파트의 데이터시트 페이지로 이동 가능하며, 해당 페이지를 PDF 파일로 다운로드할 수 있습니다.

Part Number	Data	Use for
CL31A107MQKNNN		General
CL31A107MQKNNW		High Reliability
CL32A107MQVNNW		High Reliability
CL32A107MPVNNW		High Reliability
CL32A107MQVNNN		General
CL32A107MPVNNN		General
CL32B476KPJNNW		High Reliability
CL10A476MR8NZN		General
CL21A476MQ7LRN		General
CL21A476MQCLRN		General
CL21A476MQYNNN		General
CL21A476MQYNNW		High Reliability
CL21A476MRYNNN		General



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MLCC (Multi Layer Ceramic Capacitor)

CL31A107MQKNNN

Specifications

Property	Nominal Capacitance	Capacitance Tolerance	Rated Vdc	TCC	Size	Length	Width	Thickness
Value	100.0uF	±20 %	6.3Vdc	X5R	1206(unit:inch), 3216(unit:mm)	3.20 ± 0.30 mm	1.60 ± 0.30 mm	1.60 ± 0.30 mm

Data Graph

Temperature Characteristics of Capacitance(TCC)
I CR meter 0.12kHz 0.5Vrms

DC Bias Characteristics
I CR meter 0.12kHz 0.5Vrms

[데이터시트 페이지]

파트 리스트에서 원하는 파트를 더블 클릭하면 Selected Parts 영역 내 맨 앞에 추가되고, 기존에 선택되어있던 파트들은 자동으로 선택 해제됩니다.

Selected Parts(1)

- CL31A107MQKNNW
 - 0 Vdc 25 degC
 - (0 ~ 6.3) (-55~85)

Filter

Part Number	Use for	Capacitance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Tolerance	Features
CL31A107MQKNNN	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability	Match Range pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input checked="" type="checkbox"/> 0201/0603	Match Range Vdc	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	Match Range mm	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> +80 % / -20 % <input checked="" type="checkbox"/> ± 0.03 pF <input checked="" type="checkbox"/> ± 0.05 pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> DC Bias Improved <input checked="" type="checkbox"/> ESD <input checked="" type="checkbox"/> High Bending
CL31A107MQKNNW	General	100uF	1206/3216	6.3Vdc	X5R	1.9mm	±20 %	Standard
CL32A107MQKNNW	High Reliability	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MQKNNW	High Reliability	100uF	1210/3225	10Vdc	X5R	2.8mm	±20 %	Standard
CL32A107MQVNNN	General	100uF	1210/3225	6.3Vdc	X5R	2.8mm	±20 %	Standard

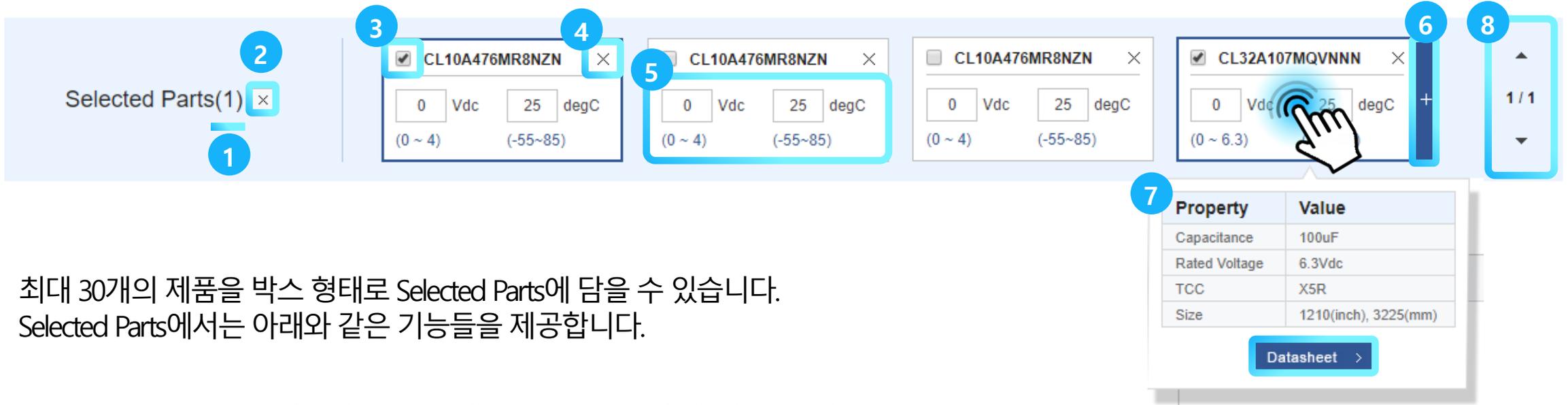
좌측 하단에서는 전체 파트 개수 대비 조건에 부합하는 파트의 개수를 확인 가능합니다.
 우측 하단의 List Download 버튼 클릭 시 현재 보여지는 제품 리스트를 엑셀 파일로 저장할 수 있습니다.

CL21A476MRYNNN		General	47uF	0805/2012	4Vdc	X5R	1.45mm	±20 %	Standard
CL31A476KQHNNN		General	47uF	1206/3216	6.3Vdc	X5R	1.8mm	±10 %	Standard
CL31A476MQHNNN		General	47uF	1206/3216	6.3Vdc	X5R	1.8mm	±20 %	Standard
CL31A476MQHNNW		High Reliability	47uF	1206/3216	6.3Vdc	X5R	1.8mm	±20 %	Standard
CL31X476MRHNNN		General	47uF	1206/3216	4Vdc	X6S	1.8mm	±20 %	Standard
CL21X476MRYNNN		General	47uF	0805/2012	4Vdc	X6S	1.45mm	±20 %	Standard
CL10A476MQ8QRN		General	47uF	0603/1608	6.3Vdc	X5R	1mm	±20 %	Standard
CL10A476MR8NRN		General	47uF	0603/1608	4Vdc	X5R	1mm	±20 %	Standard
CL32B476MPJNNN		General	47uF	1210/3225	10Vdc	X7R	2.7mm	±20 %	Standard
CL32B226KAJNNN		General	22uF	1210/3225	25Vdc	X7R	2.7mm	±10 %	Standard
CL10A226MQ8NUN		General	22uF	0603/1608	6.3Vdc	X5R	1mm	±20 %	Standard
CL32B226KOJNNN		General	22uF	1210/3225	16Vdc	X7R	2.7mm	±10 %	Standard
CL32B226KOJNNW		High Reliability	22uF	1210/3225	16Vdc	X7R	2.7mm	±10 %	Standard

Matching Parts : 1863 | Total Parts : 1863

List Download





최대 30개의 제품을 박스 형태로 Selected Parts에 담을 수 있습니다.
Selected Parts에서는 아래와 같은 기능들을 제공합니다.

1. 시뮬레이션을 위하여 선택된 제품 박스의 개수를 표시합니다. (최대 6개까지 선택 가능합니다)
2. 버튼을 클릭하면, Selected Parts에 담긴 전체 제품 박스를 전체 삭제할 수 있습니다.
3. 선택/해제가 가능하며, 선택된 제품 박스는 파란색 라인으로 표시됩니다.
4. 삭제 버튼 선택 시 해당 제품박스는 Selected Parts 리스트에서 삭제됩니다.
5. 입력 필드에 해당 파트의 시뮬레이션 조건 값을 입력할 수 있습니다. 입력 필드 하단에는 설정 가능한 조건 범위가 안내되오니 참고하시기 바랍니다.
6. 박스 우측에 노출되는 + 버튼을 클릭하면 우측으로 해당 제품 박스가 복사됩니다. 여러 조건으로 시뮬레이션을 진행하실 때 용이합니다.
7. 박스 하단에 노출되는 툴팁을 통하여 해당 제품의 특성 정보를 확인 및 데이터시트 접근이 가능합니다.
8. 해당 버튼과 마우스 스크롤로 리스트 내 위아래로 이동할 수 있습니다.

* 좌측 사이드 바에서 최종적으로 선택한 제품박스의 시뮬레이션을 진행할 수 있습니다.

좌측 Side Panel을 숨기거나 표시할 수 있습니다.

Hide side panel

Model Mode ?

Precise Simple

Graph Type

|Z| R |X| |Z|,R

C L Q DF

DC Bias AC Volt.

RippleCurr. TCC

DC Bias @ temp TCC @ DC(V)

S[dB] Smith chart

Download * Only for supported items.

S2P SPICE

Series Shunt

Filter ^

Part Number

Part Number Keyword

Part Number	Data
CL31A107MQKNNN	[E]
CL31A107MQKNNW	[E]
CL32A107MQVNNW	[E]
CL32A107MPVNNW	[E]
CL32A107MQVNNN	[E]
CL32A107MPVNNN	[E]
CL32B476KPJNNW	[E]
CL10A476MR8NZN	[E]
CL21A476MQ7LRN	[E]
CL21A476MQCLRN	[E]



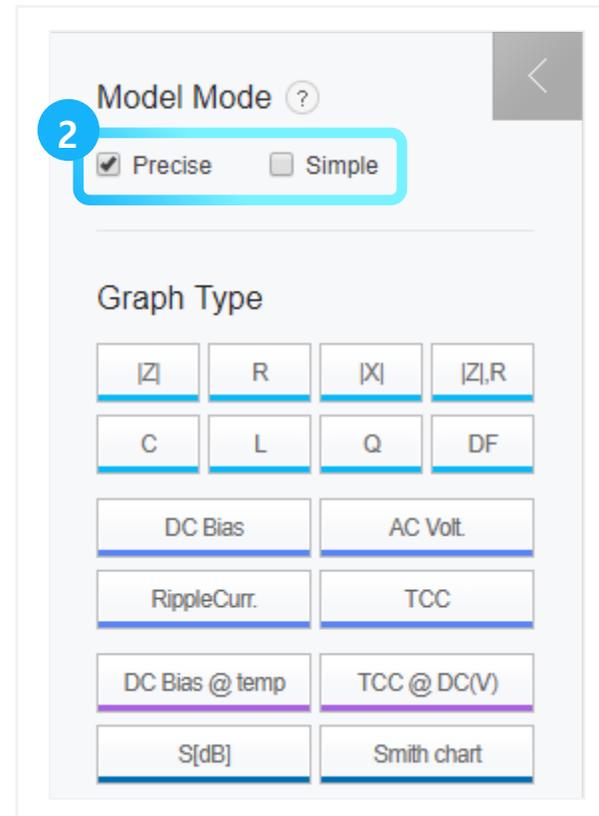
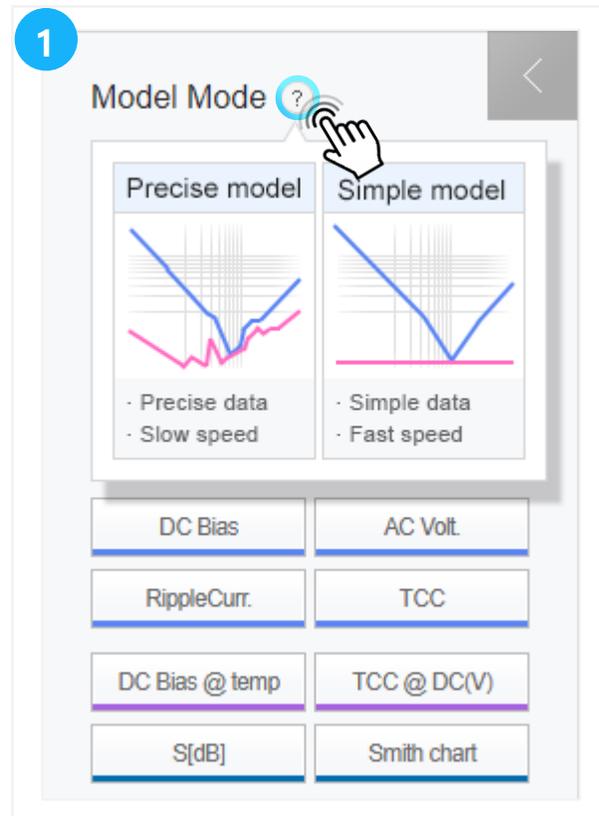
Show side panel

Filter ^

Part Number	Use for
Part Number Keyword	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General <input checked="" type="checkbox"/> High Reliability

Part Number	Data	Use for
CL31A107MQKNNN	[E]	General
CL31A107MQKNNW	[E]	High Reliability
CL32A107MQVNNW	[E]	High Reliability
CL32A107MPVNNW	[E]	High Reliability
CL32A107MQVNNN	[E]	General
CL32A107MPVNNN	[E]	General
CL32B476KPJNNW	[E]	High Reliability
CL10A476MR8NZN	[E]	General
CL21A476MQ7LRN	[E]	General

1. 물음표 아이콘 마우스 오버 시 Model Mode 가이드 툴팁을 확인하실 수 있습니다.
2. Precise/Simple 옵션은 단일/중복 선택이 가능합니다.



1. Selected Parts에서 파트를 선택하신 후, 그래프 버튼을 눌러 시뮬레이션 하실 수 있습니다. 각 파트별로 지원하는 그래프는 상이 할 수 있습니다.
2. 그래프는 우측에 새 창으로 뜨며, 그래프 창은 화면 내에서 자유롭게 이동 가능합니다.

Graph Type

$ Z $	R	$ X $	$ Z , R$
C	L	Q	DF
DC Bias		AC Volt.	
RippleCurr.		TCC	
DC Bias @ temp		TCC @ DC(V)	
S[dB]		Smith chart	

Quality Factor

CL31B226KPHNNN, Q, 0Vdc, 25degC, Precise

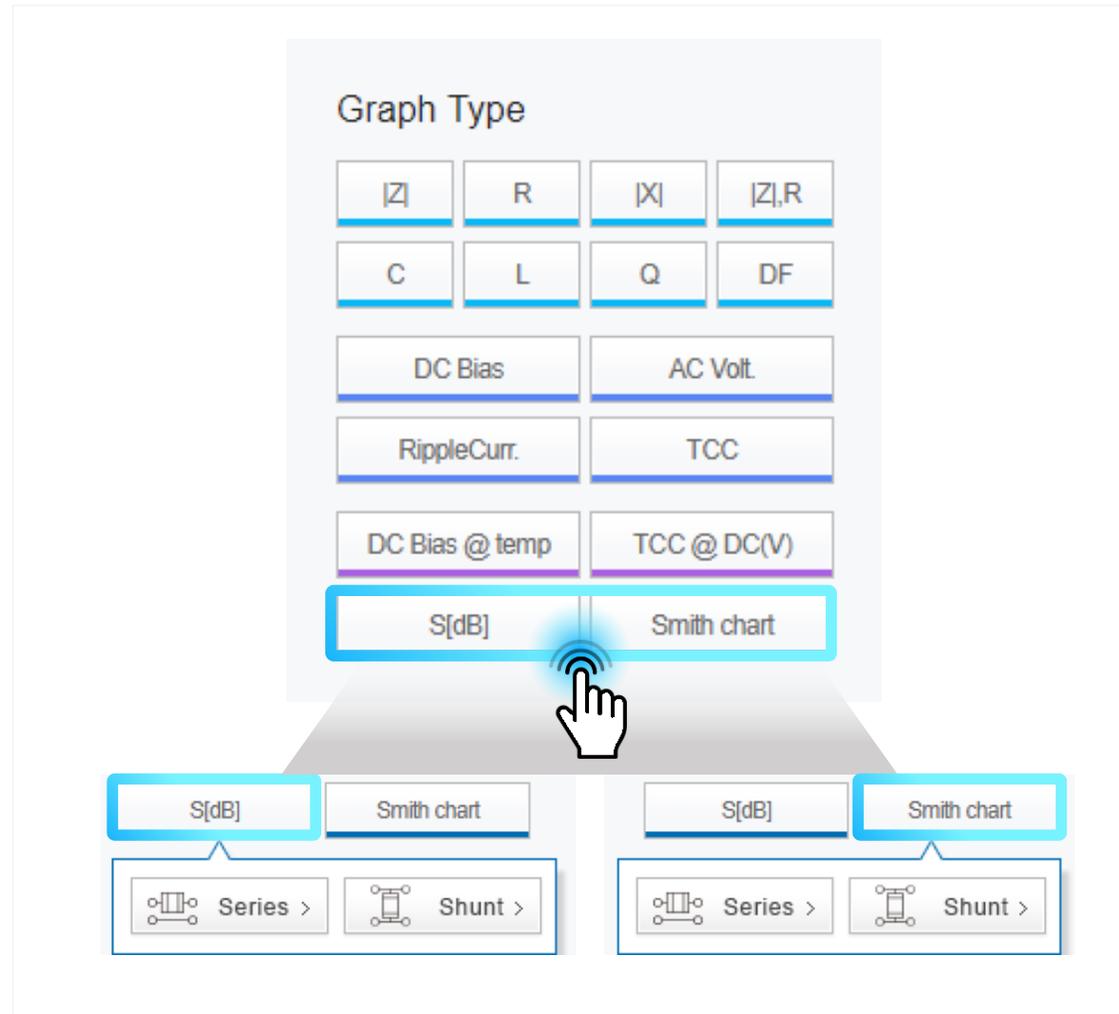
Impedance

CL31B226KPHNNN, |Z|, 0Vdc, 25degC, Precise

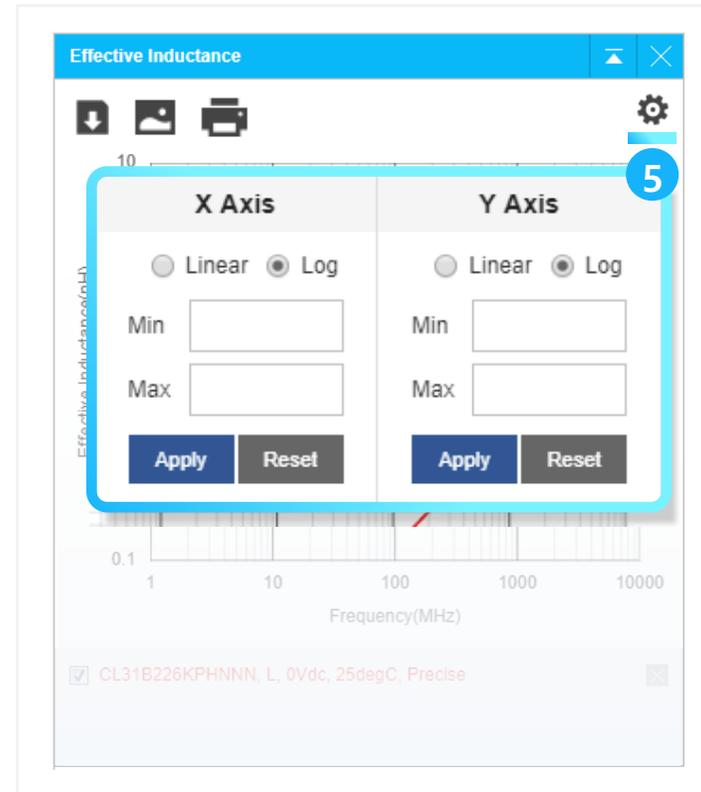
Effective Capacitance

CL31B226KPHNNN, C, 0Vdc, 25degC, Precise

S[dB]와 Smith chart 그래프는 버튼 마우스 오버 시 S-parameter 회로를 설정하여 시뮬레이션 가능합니다.



1. 해당 그래프의 Raw data를 저장하실 수 있습니다.
2. 해당 그래프를 이미지 파일(png)로 저장하실 수 있습니다.
3. 해당 그래프를 인쇄하실 수 있습니다.
4. 해당 그래프 중 선택/해제 옵션을 통해 원하는 그래프를 볼 수 있으며 삭제가 가능합니다.
5. 그래프 축과 관련한 세부 설정이 가능합니다.



Selected Parts에서 파트를 선택하신 후, 원하는 시뮬레이션 파일을 저장하실 수 있습니다.

* 3D CAD(.stp) : 제품의 3D CAD 형상을 확인할 수 있습니다. * Footprint(.dxf) : 제품의 권장 PAD Size를 확인할 수 있습니다.

여러 개의 파트를 선택한 경우 압축된 한 개의 파일로 제공됩니다.

Model Mode ?

Precise Simple

Graph Type

|Z| R |X| |Z|R

C L Q DF

DC Bias AC Volt.

RippleCurr. TCC

DC Bias @ temp TCC @ DC(V)

S[dB] Smith chart

Filter Reset

Part Number	Use for	Capacitance	Tolerance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Features
Part Number Keyword	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> Automotive <input checked="" type="checkbox"/> General	Range Match from ~ pF to ~ pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> -20/+80% <input checked="" type="checkbox"/> ±0.1pF <input checked="" type="checkbox"/> ±0.25pF	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 01005/0402 <input checked="" type="checkbox"/> 015008/05025 <input checked="" type="checkbox"/> 0201/0603	Range Match from ~ Vdc to ~ Vdc	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> C0G <input checked="" type="checkbox"/> X5R <input checked="" type="checkbox"/> X6S	Range Match from ~ mm to ~ mm	<input checked="" type="checkbox"/> all <input checked="" type="checkbox"/> 3T(Low ESL) <input checked="" type="checkbox"/> 8T(Array) <input checked="" type="checkbox"/> 8T(Low ESL)

Part Number	Data	Use for	Capacitance	Tolerance	Size(inch/mm)	Rated Vdc	TCC	T Size Max	Features
CL32A227MQVNNN		General	220uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Normal
CL32A157MQVNNN		General	150uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Normal
CL31X107MRKNNW		General	100uF	±20%	1206/3216	4Vdc	X6S	1.9mm	Normal
CL31A107MRKNNW		General	100uF	±20%	1206/3216	4Vdc	X5R	1.9mm	Normal
CL32X107MRVNNW		General	100uF	±20%	1210/3225	4Vdc	X6S	2.8mm	Normal
CL31A107MQHNNN		General	100uF	±20%	1206/3216	6.3Vdc	X5R	1.8mm	Normal
CL32X107MQVNNW		General	100uF	±20%	1210/3225	6.3Vdc	X6S	2.7mm	Normal
CL32A107MPVNNN		General	100uF	±20%	1210/3225	10Vdc	X5R	2.8mm	Normal
CL32A107MQVNNN		General	100uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Normal
CL32A107MQVNNW		General	100uF	±20%	1210/3225	6.3Vdc	X5R	2.8mm	Normal
CL32X107MQVNNN		General	100uF	±20%	1210/3225	6.3Vdc	X6S	2.7mm	Normal
CL32Y107MQVN4N		General	100uF	±20%	1210/3225	6.3Vdc	X7S	2.8mm	Normal
CL32Y107MQVNNW		General	100uF	±20%	1210/3225	6.3Vdc	X7S	2.8mm	Normal

Download * Only for supported items.

3D CAD(.stp) Footprint(.dxf)

S2P SPICE

Series Shunt

Precise Model Simple Model

