

SRG Series



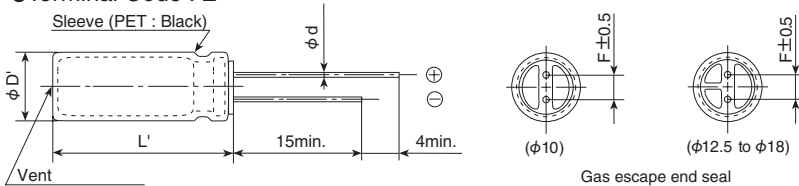
- Low profile : $\phi 10 \times 12.5\text{mm}$ to $\phi 18 \times 25\text{mm}$
- Endurance : 2,000 hours at 85°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

SPECIFICATIONS

Items	Characteristics						
Category	-40 to +85°C						
Temperature Range	-40 to +85°C						
Rated Voltage Range	6.3 to 50V _{dc}						
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)						
Leakage Current	I=0.01CV or 3 μ A, whichever is greater. Where, I : Max. leakage current (μ A), C : Nominal capacitance (μ F), V : Rated voltage (V) (at 20°C after 2 minutes)						
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V
	tan δ (Max.)	0.28	0.24	0.20	0.16	0.14	0.12
	When nominal capacitance exceeds 1,000 μ F, add 0.03 to the value above for each 1,000 μ F increase. (at 20°C, 120Hz)						
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V
	Z(-25°C)/Z(+20°C)	5	4	3	2	2	2
	Z(-40°C)/Z(+20°C)	12	10	8	5	4	3
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 85°C.						
	Capacitance change	$\leq \pm 20\%$ of the initial value					
	D.F. (tan δ)	$\leq 200\%$ of the initial specified value					
	Leakage current	\leq The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.						
	Capacitance change	$\leq \pm 20\%$ of the initial value					
	D.F. (tan δ)	$\leq 200\%$ of the initial specified value					
	Leakage current	\leq The initial specified value					

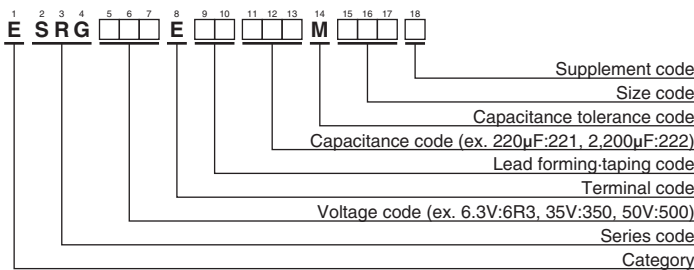
DIMENSIONS [mm]

● Terminal Code : E



ϕD	10 & 12.5	16 & 18
ϕd	0.6	0.8
F	5.0	7.5
$\phi D'$	$\phi D + 0.5\text{max.}$	
L'	L + 1.5max.	

PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"



SRG Series

◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case code φD×L(mm)	tan δ	Rated ripple current (mA _{rms} /85°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case code φD×L(mm)	tan δ	Rated ripple current (mA _{rms} /85°C, 120Hz)	Part No.
6.3	4,700	16 × 15	0.37	1,410	ESRG6R3E□□472ML15S	25	470	10 × 12.5	0.16	525	ESRG250E□□471MJC5S
	6,800	18 × 15	0.43	1,660	ESRG6R3E□□682MM15S		1,000	12.5 × 15	0.16	830	ESRG250E□□102MK15S
	10,000	18 × 20	0.55	2,020	ESRG6R3E□□103MM20S		2,200	18 × 15	0.19	1,360	ESRG250E□□222MM15S
10	1,000	10 × 12.5	0.24	625	ESRG100E□□102MJC5S	35	3,300	18 × 20	0.22	1,720	ESRG250E□□332MM20S
	2,200	12.5 × 15	0.27	970	ESRG100E□□222MK15S		4,700	18 × 25	0.25	2,070	ESRG250E□□472MM25S
	3,300	16 × 15	0.30	1,310	ESRG100E□□332ML15S		330	10 × 12.5	0.14	475	ESRG350E□□331MJC5S
	4,700	18 × 15	0.33	1,560	ESRG100E□□472MM15S	470	12.5 × 13	0.14	585	ESRG350E□□471MK13S	
	6,800	18 × 20	0.39	1,870	ESRG100E□□682MM20S	1,000	16 × 15	0.14	1,010	ESRG350E□□102ML15S	
	10,000	18 × 25	0.51	2,370	ESRG100E□□103MM25S	2,200	18 × 20	0.17	1,560	ESRG350E□□222MM20S	
16	1,000	12.5 × 13	0.20	715	ESRG160E□□102MK13S	50	220	10 × 12.5	0.12	415	ESRG500E□□221MJC5S
	2,200	16 × 15	0.23	1,160	ESRG160E□□222ML15S		330	12.5 × 13	0.12	525	ESRG500E□□331MK13S
	3,300	18 × 15	0.26	1,460	ESRG160E□□332MM15S		470	16 × 15	0.12	745	ESRG500E□□471ML15S
	4,700	18 × 20	0.29	1,770	ESRG160E□□472MM20S		1,000	18 × 20	0.12	1,160	ESRG500E□□102MM20S
	6,800	18 × 25	0.35	2,170	ESRG160E□□682MM25S						

□□ : Enter the appropriate lead forming or taping code.

◆ RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Capacitance(μF)	Frequency(Hz)	50	120	300	1k	10k	100k
220 to 1,000		0.80	1.00	1.15	1.30	1.40	1.50
2,200 to		0.85	1.00	1.03	1.05	1.08	1.08

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
Please make sure that you take appropriate safety measures such as use of redundant design and malfunction prevention measures in order to prevent fatal accidents and/or fires in the event any of our products malfunction.
- We strongly recommend our customers to purchase Nippon Chemi-Con products only through our official sales channels. We assume no responsibility for any defects or damages caused by using products purchased from outside our official sales channel or of counterfeit goods. In addition, we will ask the customer to pay the investigation cost for products purchased outside our official sales channel.
- We reserve the right to discontinue production and delivery of products. We do not guarantee that all the products included in this catalog will be available in the future.
The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products
- We continually strive to improve the quality and reliability of our products, but in any case that our product does not meet our published specifications, please stop using it promptly and contact us immediately. As for compensation for non-conforming goods delivered by Chemi-Con, we will limit it only to goods found in non-compliance of our published specifications. This may be accomplished by a no cost replacement of non-conforming individual products, a credit of the piece price paid per each individual non-conforming product, or in other ways deemed necessary.
In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

[Available Items by Manufacturing Locations](#)

[Environmental Measures](#)

[Technical Note](#)

[Precautions and Guidelines](#)

[Recommended Soldering Conditions](#)

[Taping, Lead-preforming and Packaging](#)

[Available Terminals for Snap-in and Screw Mount Type](#)