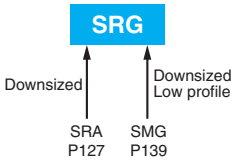
SRG Series

- Low profile : φ4×7mm to φ18×25mm
- Endurance : 1,000 to 2,000 hours at 85℃
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

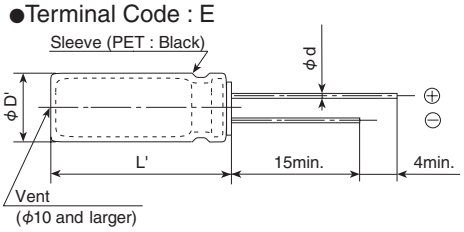


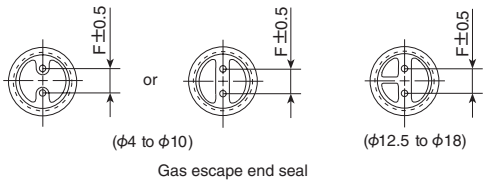
◆SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-40 to +85℃							
Rated Voltage Range	4 to 50Vdc							
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)							
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 2 minutes)							
Dissipation Factor (tan δ)	Rated voltage (Vdc)	4V	6.3V	10V	16V	25V	35V	50V
	tan δ (Max.)	0.38	0.28	0.24	0.20	0.16	0.14	0.12
	When nominal capacitance exceeds 1,000μF, add 0.03 to the value above for each 1,000μF increase. (at 20℃, 120Hz)							
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	4V	6.3V	10V	16V	25V	35V	50V
	Z(-25℃)/Z(+20℃)	6	5	4	3	2	2	2
	Z(-40℃)/Z(+20℃)	12	12	10	8	5	4	3
	(at 120Hz)							
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 hours (1,000 hours for φ8 and smaller) at 85℃.							
	Capacitance change	≦±20% of the initial value						
	D.F. (tan δ)	≦200% of the initial specified value						
	Leakage current	≦The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 85℃ 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	≦±20% of the initial value						
	D.F. (tan δ)	≦200% of the initial specified value						
	Leakage current	≦The initial specified value						

◆DIMENSIONS [mm]

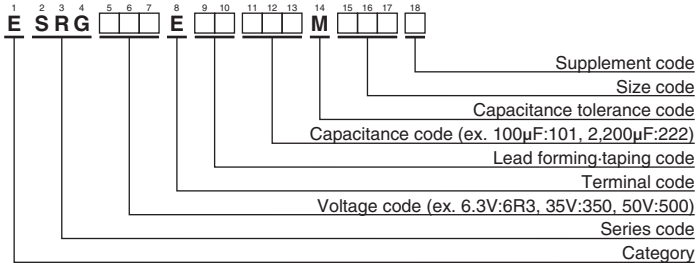
●Terminal Code : E





φD		4	5	6.3	8	10 & 12.5	16 & 18
φd	7L	0.45	0.45	0.45	0.45	—	—
	≧9L	–	0.5	0.5	0.6	0.6	0.8
F		1.5	2.0	2.5	3.5	5.0	7.5
φD'		φD+0.5max.					
L'		L+1.5max. (7L : L+1.0max.)					

◆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 (mArms/ 85℃, 120Hz)	Part No.
4	470	8×7	0.38	154	ESRG4R0E□□471MH07D
6.3	47	4×7	0.28	50	ESRG6R3E□□470MD07D
	100	5×7	0.28	87	ESRG6R3E□□101ME07D
	220	6.3×7	0.28	133	ESRG6R3E□□221MF07D
	330	6.3×9	0.28	247	ESRG6R3E□□331MF09D
	330	8×7	0.28	191	ESRG6R3E□□331MH07D
	1,000	10×9	0.28	505	ESRG6R3E□□102MJ09S
	4,700	16×15	0.37	1,410	ESRG6R3E□□472ML15S
	6,800	18×15	0.43	1,660	ESRG6R3E□□682MM15S
	10,000	18×20	0.55	2,020	ESRG6R3E□□103MM20S
10	33	4×7	0.24	46	ESRG100E□□330MD07D
	100	5×9	0.24	132	ESRG100E□□101ME09D
	220	6.3×9	0.24	218	ESRG100E□□221MF09D
	220	8×7	0.24	171	ESRG100E□□221MH07D
	470	8×9	0.24	385	ESRG100E□□471MH09D
	1,000	10×12.5	0.24	625	ESRG100E□□102MJC5S
	2,200	12.5×15	0.27	970	ESRG100E□□222MK15S
	3,300	16×15	0.30	1,310	ESRG100E□□332ML15S
	4,700	18×15	0.33	1,560	ESRG100E□□472MM15S
	6,800	18×20	0.39	1,870	ESRG100E□□682MM20S
	10,000	18×25	0.51	2,370	ESRG100E□□103MM25S
16	22	4×7	0.20	42	ESRG160E□□220MD07D
	47	5×7	0.20	73	ESRG160E□□470ME07D
	100	6.3×7	0.20	110	ESRG160E□□101MF07D
	220	8×9	0.20	290	ESRG160E□□221MH09D
	330	8×9	0.20	355	ESRG160E□□331MH09D
	470	10×9	0.20	410	ESRG160E□□471MJ09S
	1,000	12.5×13	0.20	715	ESRG160E□□102MK13S
	2,200	16×15	0.23	1,160	ESRG160E□□222ML15S
	3,300	18×15	0.26	1,460	ESRG160E□□332MM15S
	4,700	18×20	0.29	1,770	ESRG160E□□472MM20S
	6,800	18×25	0.35	2,170	ESRG160E□□682MM25S
25	33	5×7	0.16	66	ESRG250E□□330ME07D
	47	5×9	0.16	105	ESRG250E□□470ME09D
	47	6.3×7	0.16	80	ESRG250E□□470MF07D
	100	6.3×9	0.16	172	ESRG250E□□101MF09D
	330	10×9	0.16	380	ESRG250E□□331MJ09S
25	470	10×12.5	0.16	525	ESRG250E□□471MJC5S
	1,000	12.5×15	0.16	830	ESRG250E□□102MK15S
	2,200	18×15	0.19	1,360	ESRG250E□□222MM15S
	3,300	18×20	0.22	1,720	ESRG250E□□332MM20S
	4,700	18×25	0.25	2,070	ESRG250E□□472MM25S
35	10	4×7	0.14	32	ESRG350E□□100MD07D
	22	5×7	0.14	57	ESRG350E□□220ME07D
	33	5×9	0.14	94	ESRG350E□□330ME09D
	33	6.3×7	0.14	73	ESRG350E□□330MF07D
	47	8×7	0.14	101	ESRG350E□□470MH07D
	100	8×9	0.14	220	ESRG350E□□101MH09D
	220	10×9	0.14	335	ESRG350E□□221MJ09S
	330	10×12.5	0.14	475	ESRG350E□□331MJC5S
	470	12.5×13	0.14	585	ESRG350E□□471MK13S
	1,000	16×15	0.14	1,010	ESRG350E□□102ML15S
	2,200	18×20	0.17	1,560	ESRG350E□□222MM20S
50	1.0	4×7	0.12	10	ESRG500E□□1R0MD07D
	1.0	5×9	0.12	13	ESRG500E□□1R0ME09D
	2.2	4×7	0.12	15	ESRG500E□□2R2MD07D
	2.2	5×9	0.12	26	ESRG500E□□2R2ME09D
	3.3	4×7	0.12	19	ESRG500E□□3R3MD07D
	3.3	5×9	0.12	32	ESRG500E□□3R3ME09D
	4.7	4×7	0.12	24	ESRG500E□□4R7MD07D
	4.7	5×9	0.12	38	ESRG500E□□4R7ME09D
	10	5×7	0.12	42	ESRG500E□□100ME07D
	10	5×9	0.12	64	ESRG500E□□100ME09D
	22	5×9	0.12	86	ESRG500E□□220ME09D
	22	6.3×7	0.12	64	ESRG500E□□220MF07D
	33	6.3×9	0.12	113	ESRG500E□□330MF09D
	33	8×7	0.12	93	ESRG500E□□330MH07D
	47	6.3×9	0.12	135	ESRG500E□□470MF09D
	100	10×9	0.12	240	ESRG500E□□101MJ09S
	220	10×12.5	0.12	415	ESRG500E□□221MJC5S
	330	12.5×13	0.12	525	ESRG500E□□331MK13S
	470	16×15	0.12	745	ESRG500E□□471ML15S
	1,000	18×20	0.12	1,160	ESRG500E□□102MM20S

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

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	50	120	300	1k	10k	100k
to 4.7	0.65	1.00	1.35	1.75	2.30	2.50
10 to 47	0.75	1.00	1.25	1.50	1.75	1.80
100 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