

# SRE Series

- 5mm height
- Endurance : 1,000 hours at 85°C
- Non solvent resistant type
- RoHS Compliant

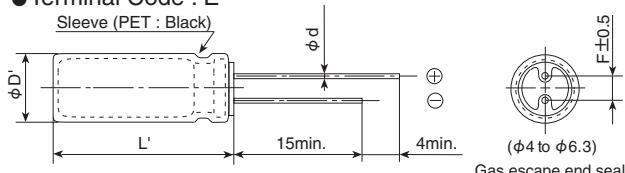


## ◆ SPECIFICATIONS

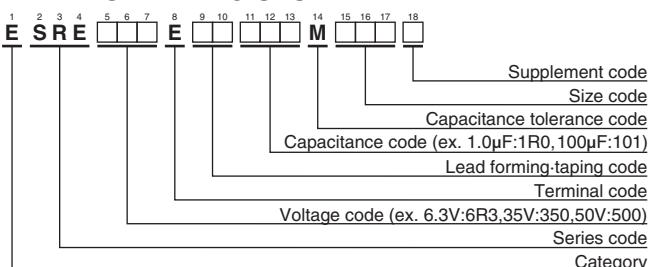
Items	Characteristics							
Category								
Temperature Range	-40 to +85°C							
Rated Voltage Range	4 to 50V <sub>dc</sub>							
Capacitance Tolerance	$\pm 20\%$ (M)							
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current ( $\mu$ A), C : Nominal capacitance ( $\mu$ F), V : Rated voltage (V)							
Dissipation Factor (tan $\delta$ )	Rated voltage (V <sub>dc</sub> )	4V	6.3V	10V	16V	25V	35V	
	tan $\delta$ (Max.)	0.35	0.24	0.20	0.16	0.14	0.12	
Low Temperature Characteristics (Max. Impedance Ratio)	50V	(at 20°C, 120Hz)						
Z(-25°C)/Z(+20°C)	7	4	3	2	2	2	2	
Z(-40°C)/Z(+20°C)	15	10	8	6	4	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 85°C.							
	Capacitance change	$\leq \pm 20\%$ of the initial value						
	D.F. (tan $\delta$ )	$\leq 200\%$ 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 $\delta$ )	$\leq 200\%$ of the initial specified value						
	Leakage current	$\leq$ The initial specified value						

## ◆ DIMENSIONS [mm]

### ● Terminal Code : E



## ◆ PART NUMBERING SYSTEM



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

## ◆ STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap ( $\mu$ F)	Case size $\phi D \times L$ (mm)	$\tan\delta$	Rated ripple current (mA <sub>rms</sub> / 85°C, 120Hz)	Part No.
4	33	4×5	0.35	23	ESRE4R0E□□330MD05D
	10	4×5	0.24	12	ESRE6R3E□□100MD05D
	22	4×5	0.24	23	ESRE6R3E□□220MD05D
	47	5×5	0.24	38	ESRE6R3E□□470ME05D
	100	6.3×5	0.24	60	ESRE6R3E□□101MF05D
10	33	5×5	0.20	35	ESRE100E□□330ME05D
	4.7	4×5	0.16	10	ESRE160E□□4R7MD05D
	10	4×5	0.16	17	ESRE160E□□100MD05D
	22	5×5	0.16	32	ESRE160E□□220ME05D
	47	6.3×5	0.16	50	ESRE160E□□470MF05D
16	3.3	4×5	0.14	9.3	ESRE250E□□3R3MD05D
	4.7	4×5	0.14	12	ESRE250E□□4R7MD05D
	33	6.3×5	0.14	45	ESRE250E□□330MF05D

WV (V <sub>dc</sub> )	Cap ( $\mu$ F)	Case size $\phi D \times L$ (mm)	$\tan\delta$	Rated ripple current (mA <sub>rms</sub> / 85°C, 120Hz)	Part No.
35	2.2	4×5	0.12	8.3	ESRE350E□□2R2MD05D
	3.3	4×5	0.12	11	ESRE350E□□3R3MD05D
	4.7	4×5	0.12	15	ESRE350E□□4R7MD05D
	10	5×5	0.12	25	ESRE350E□□100ME05D
	22	6.3×5	0.12	40	ESRE350E□□220MF05D
50	1.0	4×5	0.10	6.2	ESRE500E□□1R0MD05D
	2.2	4×5	0.10	10	ESRE500E□□2R2MD05D
	3.3	4×5	0.10	14	ESRE500E□□3R3MD05D
	4.7	5×5	0.10	19	ESRE500E□□4R7ME05D
	10	6.3×5	0.10	29	ESRE500E□□100MF05D

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