LE Series

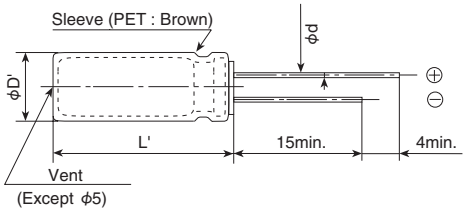
- Suitable for long life products
- Downsize and long life
- Endurance with ripple current : 10,000 hours at 105℃
- Case size range : φ5×11L to φ8×11.5L
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

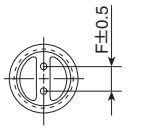
◆SPECIFICATION

Items	Characteristics								
Category Temperature Range	-40 to +105℃								
Rated Voltage Range	10 to 100V_{dc}								
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 (V_{dc})	10V	16V	25V	35V	50V	63V	100V	
	tan δ (Max.)	0.45	0.35	0.30	0.22	0.19	0.17	0.15	(at 20℃,120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V_{dc})	10V	16V	25V	35V	50V	63V	100V	
	Z(-25℃)/Z(20℃)	8	6	4	4	3	3	3	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 10,000 hours at 105℃.								
	Capacitance change	≦±25% of the initial value							
	D.F. (tan δ)	≦300% 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 105℃ 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	≦±25% of the initial value							
	D.F. (tan δ)	≦300% of the initial specified value							
	Leakage current	≦The initial specified value							

◆DIMENSIONS [mm]

●Terminal Code : E

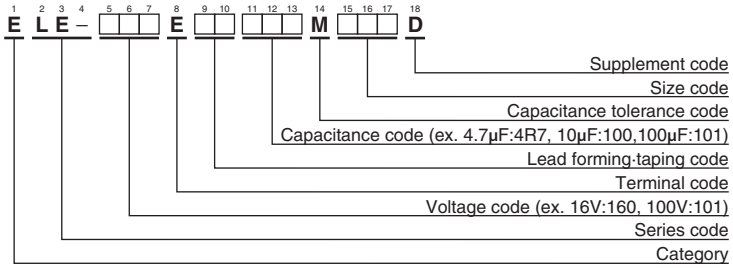




Gas escape end seal

φD	5	6.3	8
φd	0.5	0.5	0.6
F	2.0	2.5	3.5
φD'	φD+0.5max.		
L'	L+1.5max.		

◆PART NUMBERING SYSTEM



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

LE Series

◆STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mArms/105℃, 100kHz)	Part No.
10	100	5×11	0.45	130	ELE-100E□□101ME11D
	220	6.3×11	0.45	210	ELE-100E□□221MF11D
	330	8×11.5	0.45	330	ELE-100E□□331MHB5D
16	47	5×11	0.35	130	ELE-160E□□470ME11D
	100	6.3×11	0.35	210	ELE-160E□□101MF11D
	220	8×11.5	0.35	330	ELE-160E□□221MHB5D
25	33	5×11	0.30	130	ELE-250E□□330ME11D
	47	5×11	0.30	130	ELE-250E□□470ME11D
	100	6.3×11	0.30	210	ELE-250E□□101MF11D
35	33	5×11	0.22	130	ELE-350E□□330ME11D
	47	6.3×11	0.22	210	ELE-350E□□470MF11D
	100	8×11.5	0.22	330	ELE-350E□□101MHB5D
50	1.0	5×11	0.19	25	ELE-500E□□1R0ME11D
	2.2	5×11	0.19	35	ELE-500E□□2R2ME11D
	3.3	5×11	0.19	70	ELE-500E□□3R3ME11D
	4.7	5×11	0.19	80	ELE-500E□□4R7ME11D
	10	5×11	0.19	90	ELE-500E□□100ME11D
	22	5×11	0.19	110	ELE-500E□□220ME11D
	33	6.3×11	0.19	190	ELE-500E□□330MF11D
	47	6.3×11	0.19	190	ELE-500E□□470MF11D
	100	8×11.5	0.19	270	ELE-500E□□101MHB5D
63	10	5×11	0.17	80	ELE-630E□□100ME11D
	22	6.3×11	0.17	170	ELE-630E□□220MF11D
	33	6.3×11	0.17	170	ELE-630E□□330MF11D
	47	8×11.5	0.17	240	ELE-630E□□470MHB5D
100	1.0	5×11	0.15	40	ELE-101E□□1R0ME11D
	2.2	5×11	0.15	50	ELE-101E□□2R2ME11D
	3.3	5×11	0.15	60	ELE-101E□□3R3ME11D
	4.7	5×11	0.15	70	ELE-101E□□4R7ME11D
	10	6.3×11	0.15	150	ELE-101E□□100MF11D
	22	8×11.5	0.15	230	ELE-101E□□220MHB5D

□□ : Enter the appropriate lead forming or taping code.
Production of the products shown in [ ] is scheduled to be discontinued.

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
1.0 to 10	0.42	0.60	0.80	1.00
22 to 33	0.55	0.75	0.90	1.00
47 to 330	0.70	0.85	0.95	1.00

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.

CAT. No. E1001X 2023