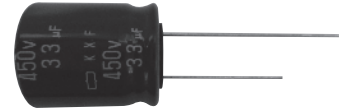




KXF Series

- For LED light circuits and other long life applications
- Rated voltage range : 160 to 450 V_{dc} , Capacitance range : 5.6 to 68μF
- Endurance with ripple current : 15,000 to 20,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

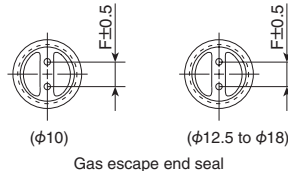
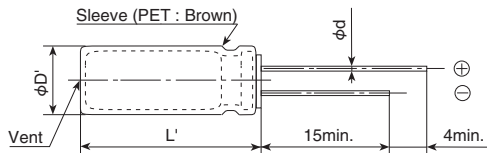


SPECIFICATIONS

Items	Characteristics		
Category	-40 to +105°C		
Temperature Range	-40 to +105°C		
Rated Voltage Range	160 to 450V _{dc}		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	After 1 minute	After 5 minutes	
	I=0.04CV+100	I=0.02CV+25	
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)		
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	160 to 450V	
	tan δ (Max.)	0.24	(at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	160 to 250V	400, 450V
	Z(-25°C)/Z(+20°C)	3	6
	Z(-40°C)/Z(+20°C)	8	10
	(at 120Hz)		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 20,000 hours (15,000 hours for φ10×12.5L) at 105°C.		
	Capacitance change	≤ ±30% 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°C after exposing them for 1,000 hours at 105°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	≤ ±30% of the initial value	
	D.F. (tan δ)	≤300% of the initial specified value	
	Leakage current	≤500% of the initial specified value	

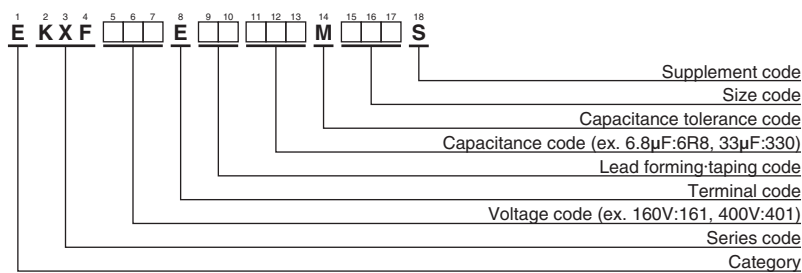
DIMENSIONS [mm]

- Terminal Code : E



φD	10	12.5	16	18
φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
φD'	φD+0.5max.			
L'	L+1.5max.			

PART NUMBERING SYSTEM



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

RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
5.6 ~ 68	1.00	1.75	2.25	2.50

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.



KXF Series

◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φ D × L (mm)	tan δ	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part No.
160	22	10 × 12.5	0.24	121	EKXF161E□□220MJC5S
	33	10 × 16	0.24	158	EKXF161E□□330MJ16S
200	18	10 × 12.5	0.24	113	EKXF201E□□180MJC5S
	27	10 × 16	0.24	149	EKXF201E□□270MJ16S
250	10	10 × 12.5	0.24	90	EKXF251E□□100MJC5S
	12	10 × 12.5	0.24	97	EKXF251E□□120MJC5S
	18	10 × 16	0.24	129	EKXF251E□□180MJ16S
400	5.6	10 × 12.5	0.24	64	EKXF401E□□5R6MJC5S
	8.2	10 × 16	0.24	88	EKXF401E□□8R2MJ16S
450	6.8	10 × 16	0.24	62	EKXF451E□□6R8MJ16S
	8.2	10 × 16	0.24	88	EKXF451E□□8R2MJ16S
	10	10 × 20	0.24	92	EKXF451E□□100MJ20S
	15	12.5 × 20	0.24	140	EKXF451E□□150MK20S
	22	12.5 × 25	0.24	240	EKXF451E□□220MK25S
	27	16 × 20	0.24	305	EKXF451E□□270ML20S
	33	16 × 25	0.24	392	EKXF451E□□330ML25S
	33	18 × 20	0.24	312	EKXF451E□□330MM20S
	47	18 × 25	0.24	480	EKXF451E□□470MM25S
68	18 × 31.5	0.24	520	EKXF451E□□680MMN3S	

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



- 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](#)