

# GXM Series

New!

- Suitable for high-temperature applications such as power supplies at communication base stations.
- Rated voltage range : 400 to 450V<sub>dc</sub>, Capacitance range : 39 to 180μF
- Endurance with ripple current : 5,000 hours at 125°C
- Non solvent resistant type
- RoHS2 Compliant

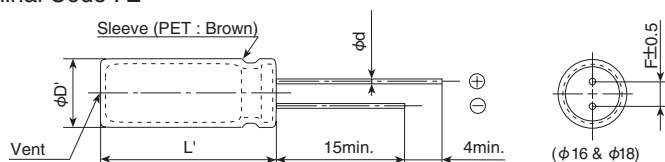


## SPECIFICATIONS

Items	Characteristics		
Category	-40 to +125℃		
Temperature Range			
Rated Voltage Range	400 to 450V <sub>dc</sub>		
Capacitance Tolerance	± 20% (M)		(at 20℃, 120Hz)
Leakage Current	I=0.04CV+100 (after 1 minute) I=0.02CV+25 (after 5 minutes) Where, I : Max. leakage current(μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃)		
Dissipation Factor (tan δ )	Rated voltage (V <sub>dc</sub> )	400 to 450V	(at 20℃, 120Hz)
	tan δ (Max.)	0.24	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	400 to 450V	(at 120Hz)
	Z(-25℃)/Z(+20℃)	6	
	Z(-40℃)/Z(+20℃)	10	
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 5,000 hours at 125℃.		
	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℃ after exposing them for 500 hours at 125℃ 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	

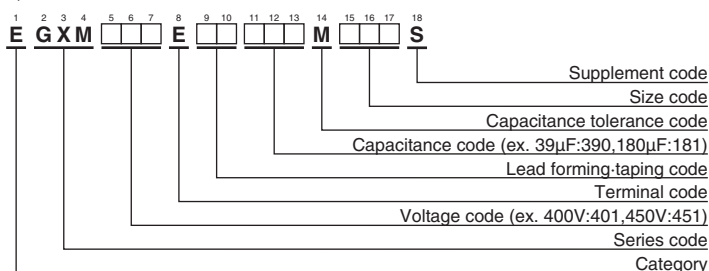
## DIMENSIONS [mm]

- Terminal Code : E



φD	16	18
φd	0.8	0.8
F	7.5	7.5
φD'	φD+0.5 max.	
L'	L+2.0 max.	

## PART NUMBERING SYSTEM



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



## ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA <sub>rms</sub> /125°C, 120Hz)	Part No.
400	47	16×20	0.24	380	EGXM401E□□470ML20S
	68	16×25	0.24	550	EGXM401E□□680ML25S
	68	18×20	0.24	480	EGXM401E□□680MM20S
	100	16×30	0.24	720	EGXM401E□□101ML30S
	100	18×25	0.24	680	EGXM401E□□101MM25S
	120	16×35	0.24	810	EGXM401E□□121ML35S
	120	16×40	0.24	830	EGXM401E□□121ML40S
	120	18×30	0.24	810	EGXM401E□□121MM30S
	150	18×35	0.24	930	EGXM401E□□151MM35S
	180	18×40	0.24	1,040	EGXM401E□□181MM40S
420	47	16×20	0.24	380	EGXM421E□□470ML20S
	56	18×20	0.24	430	EGXM421E□□560MM20S
	68	16×25	0.24	550	EGXM421E□□680ML25S
	82	16×30	0.24	650	EGXM421E□□820ML30S
	82	18×25	0.24	620	EGXM421E□□820MM25S
	100	16×35	0.24	730	EGXM421E□□101ML35S
	120	16×40	0.24	830	EGXM421E□□121ML40S
	120	18×30	0.24	810	EGXM421E□□121MM30S
	120	18×35	0.24	830	EGXM421E□□121MM35S
	150	18×40	0.24	950	EGXM421E□□151MM40S
450	39	16×20	0.24	340	EGXM451E□□390ML20S
	56	16×25	0.24	500	EGXM451E□□560ML25S
	56	18×20	0.24	430	EGXM451E□□560MM20S
	82	16×30	0.24	650	EGXM451E□□820ML30S
	82	18×25	0.24	620	EGXM451E□□820MM25S
	100	16×35	0.24	730	EGXM451E□□101ML35S
	100	16×40	0.24	760	EGXM451E□□101ML40S
	100	18×30	0.24	740	EGXM451E□□101MM30S
	120	18×35	0.24	830	EGXM451E□□121MM35S
	150	18×40	0.24	950	EGXM451E□□151MM40S

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

## ◆RATED RIPPLE CURRENT MULTIPLIERS

### ●Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
39 to 82	1.00	1.60	2.20	2.50
100 to 180	1.00	1.50	2.00	2.25

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.  
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- 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
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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](#)

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