KXQ Series

KXJ → Downsized **KXQ**

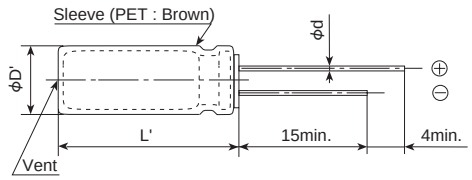
- Ideal for on-board charger
- Downsized from KXJ series
- Rated voltage range : 400 to 450Vdc, Capacitance range : 47 to 180μF
- Endurance with ripple current : 10,000 to 12,000 hours at 105℃
- Non solvent resistant type
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

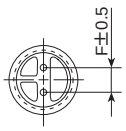
◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	-40 to +105℃		
Rated Voltage Range	400 to 450Vdc		
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 (Vdc)	400 to 450V	
	tan δ (Max.)	0.30	(at 20℃, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (Vdc)	400 to 450V	
	Z(-25℃)/Z(+20℃)	6	(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 12,000 hours (10,000 hours for 25L and less) at 105℃.		
	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 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	≦±20% of the initial value	
	D.F. (tan δ)	≦200% of the initial specified value	
	Leakage current	≦500% of the initial specified value	

◆DIMENSIONS [mm]

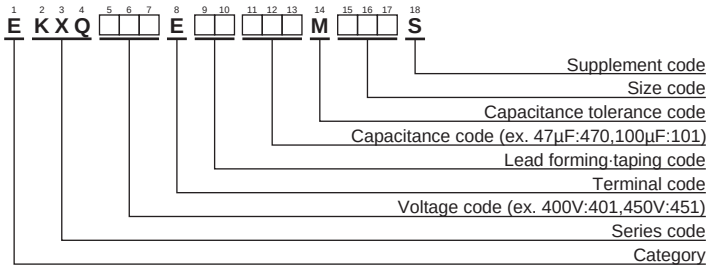
●Terminal Code : E





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)"

KXQ Series

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mArms/ 105℃, 120Hz)	Part No.
400	56	16×20	0.30	450	EKXQ401E□□560ML20S
	68	18×20	0.30	530	EKXQ401E□□680MM20S
	75	16×25	0.30	580	EKXQ401E□□750ML25S
	100	16×31.5	0.30	730	EKXQ401E□□101MLN3S
	100	18×25	0.30	660	EKXQ401E□□101MM25S
	120	16×35.5	0.30	830	EKXQ401E□□121MLP1S
	130	16×40	0.30	910	EKXQ401E□□131ML40S
	130	18×31.5	0.30	860	EKXQ401E□□131MMN3S
	160	18×35.5	0.30	980	EKXQ401E□□161MMP1S
	180	18×40	0.30	1,020	EKXQ401E□□181MM40S
	180	18×45	0.30	1,080	EKXQ401E□□181MM45S
420	51	16×20	0.30	400	EKXQ421E□□510ML20S
	68	16×25	0.30	510	EKXQ421E□□680ML25S
	68	18×20	0.30	510	EKXQ421E□□680MM20S
	91	16×31.5	0.30	650	EKXQ421E□□910MLN3S
	91	18×25	0.30	640	EKXQ421E□□910MM25S
	110	16×35.5	0.30	750	EKXQ421E□□111MLP1S
	120	18×31.5	0.30	800	EKXQ421E□□121MMN3S
	130	16×40	0.30	860	EKXQ421E□□131ML40S
	150	18×35.5	0.30	920	EKXQ421E□□151MMP1S
	160	18×40	0.30	980	EKXQ421E□□161MM40S
	180	18×45	0.30	1,000	EKXQ421E□□181MM45S

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mArms/ 105℃, 120Hz)	Part No.
450	47	16×20	0.30	400	EKXQ451E□□470ML20S
	62	16×25	0.30	510	EKXQ451E□□620ML25S
	62	18×20	0.30	510	EKXQ451E□□620MM20S
	82	16×31.5	0.30	650	EKXQ451E□□820MLN3S
	82	18×25	0.30	640	EKXQ451E□□820MM25S
	100	16×35.5	0.30	750	EKXQ451E□□101MLP1S
	110	18×31.5	0.30	800	EKXQ451E□□111MMN3S
	120	16×40	0.30	860	EKXQ451E□□121ML40S
	130	18×35.5	0.30	920	EKXQ451E□□131MMP1S
	160	18×40	0.30	980	EKXQ451E□□161MM40S
	180	18×45	0.30	1,000	EKXQ451E□□181MM45S

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

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	120	1k	10k	100k
47 to 91	1.00	1.50	1.90	2.00
100 to 180	1.00	1.40	1.65	1.70

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.