MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



- For electronic ballast circuits and other long life applications
- $\ensuremath{\bullet}$ Endurance with ripple current : 8,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS Compliant



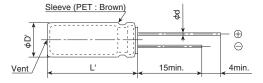


SPECIFICATIONS

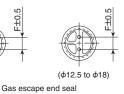
Items	Characteristics						
Category Temperature Range	-40 to +105°C (160 to 400V _{dc}) -25 to+105°C (450V _{dc})						
Rated Voltage Range	160 to 450V _{dc}						
Capacitance Tolerance	±20% (M)						(at 20℃, 120Hz)
Leakage Current		After 1 minute	After 5 minute		ıtes		
	CV≦1,000	I=0.1CV+40		I=0.03CV+1	5		
	CV>1,000	I=0.04CV+100		I=0.02CV+25			
	Where, I: Max. leakage of	: Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20%					
Dissipation Factor							
(tan δ)	tan δ (Max.)	0.20		0.24			(at 20℃, 120Hz)
Low Temperature	Rated voltage (V _{dc})	160 to 250V					
Characteristics	Z(-25°C)/Z(+20°C)	3		5	6		
(Max. Impedance Ratio)	Impedance Hatio) $Z(-40^{\circ}C)/Z(+20^{\circ}C)$ 6 6		_		(at 120Hz)		
Endurance	Endurance The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with ripple current is applied (the peak voltage shall not exceed the rated voltage) for 10,000 hours (8,000 hours for φ 10) at 1						
	Capacitance change	\leq ±20% of the initial value					
D.F. $(\tan \delta)$ $\leq 200\%$ 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°C after exposing them for 1,000 hours at 105°C w						
	voltage applied. Before the	lied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.					
	Capacitance change	\leq ±20% of the initial value					
	D.F. (tan δ)	≦200% of the initia	al spec	ified value			
	Leakage current	Leakage current ≤500% of the initial specified value					

◆DIMENSIONS [mm]

■Terminal Code : E

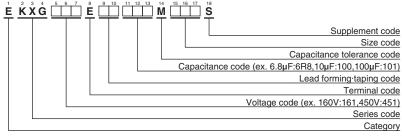






φD	10	12.5	16	18	
φd	0.6	0.6	0.8	0.8	
F	5.0	5.0	7.5	7.5	
φD'	φD+0.5max.				
L'	L+1.5max.				

◆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
6.8 to 82	1.00	1.75	2.25	2.50
100 to 330	1.00	1.67	2.05	2.25

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.





STANDARD RATINGS

WV Cap (V _{dc}) (μF)	Cap	Case size φ D×L(mm)	tan δ	Rated ripple curi	David M.	
				120Hz	100kHz	Part No.
	10	10 × 16	0.20	125	315	EKXG161E□□100MJ169
160	22	10 × 20	0.20	200	500	EKXG161E□□220MJ205
	33	10 × 20	0.20	250	625	EKXG161E□□330MJ205
	47	10 × 20	0.20	300	750	EKXG161E□□470MJ203
	68	12.5 × 20	0.20	470	1,175	EKXG161E□□680MK20
	82	12.5 × 20	0.20	510	1,275	EKXG161E□□820MK20
	100	12.5 × 25	0.20	620	1,395	EKXG161E□□101MK25
	100	16 × 20	0.20	630	1,420	EKXG161E□□101ML20
	150	16 × 20	0.20	770	1,735	EKXG161E□□151ML20
	220	16 × 25	0.20	1,020	2,295	EKXG161E□□221ML25
	330	18 × 31.5	0.20	1,390	3,130	EKXG161E□□331MMN
10 22 33 47 68		10 × 16	0.20	125	315	EKXG201E□□100MJ16
		10 × 20	0.20	200	500	EKXG201E 220MJ20
		10 × 20	0.20	260	650	EKXG201E□□330MJ20
		12.5 × 20	0.20	390	975	EKXG201E□□470MK20
		12.5 × 20	0.20	470	1,175	EKXG201E□□680MK20
	82	16 × 20	0.20	550	1,375	EKXG201E□□820ML20
	100	16 × 20	0.20	630	1,420	EKXG201E□□101ML20
	150	16 × 25	0.20	840	1,890	EKXG201E 151ML25
	220	18 × 25	0.20	1,050	2,365	EKXG201E 221MM2
	330	18 × 35.5	0.20	1,430	3,220	EKXG201E 331MMP
	10	10 × 20	0.20	140	350	EKXG251E 100MJ20
	22	10 × 20	0.20	200	500	EKXG251E 220MJ20
	33	12.5 × 20	0.20	320	800	EKXG251E□□330MK20
	47		0.20	390	975	
050	68	12.5 × 20	0.20	520	+	EKXG251E□□470MK20 EKXG251E□□680ML20
250	82	16 × 20 16 × 20	0.20	550	1,300	
					1,375	EKXG251E B20ML20
	100	16 × 25	0.20	680	1,530	EKXG251E 101ML25
	150	18 × 25	0.20	860	1,935	EKXG251E 151MM2
	220	18 × 31.5	0.20	1,130	2,545	EKXG251E 221MMN
	6.8	10 × 16	0.24	110	275	EKXG351E□□6R8MJ1
-	10	10 × 20	0.24	140	350	EKXG351E 100MJ20
	22	12.5 × 20	0.24	260	650	EKXG351E 220MK2
	33	16 × 20	0.24	360	900	EKXG351E□□330ML20
	47	16 × 20	0.24	430	1,075	EKXG351E 470ML20
350	68	16 × 25	0.24	560	1,400	EKXG351E 680ML25
	68	18 × 20	0.24	550	1,375	EKXG351E□□680MM2
	82	18 × 25	0.24	610	1,525	EKXG351E□□820MM2
-	100	18 × 25	0.24	700	1,575	EKXG351E□□101MM2
	120	18 × 31.5	0.24	830	1,865	EKXG351E□□121MMN
	150	18 × 35.5	0.24	960	2,160	EKXG351E□□151MMP
	6.8	10 × 16	0.24	110	275	EKXG401E□□6R8MJ16
400	10	10 × 20	0.24	140	350	EKXG401E 100MJ20
	15	12.5 × 20	0.24	220	550	EKXG401E□□150MK20
	22	12.5 × 20	0.24	260	650	EKXG401E□□220MK20
	33	16 × 20	0.24	360	900	EKXG401E□□330ML20
	47	16 × 25	0.24	470	1,175	EKXG401E□□470ML25
	47	18 × 20	0.24	450	1,125	EKXG401E□□470MM2
	68	18 × 25	0.24	585	1,465	EKXG401E□□680MM2
	82	18 × 25	0.24	610	1,525	EKXG401E□□820MM2
	100	18 × 31.5	0.24	765	1,720	EKXG401E□□101MMN
	120	18 × 35.5	0.24	865	1,945	EKXG401E□□121MMP
	150	18 × 40	0.24	985	2,215	EKXG401E□□151MM4
_	6.8	10 × 20	0.24	110	275	EKXG451E□□6R8MJ20
	10	12.5 × 20	0.24	180	450	EKXG451E□□100MK20
		12.5 × 25	0.24	240	600	EKXG451E□□150MK2
	15					
	15 22	16 × 20	0.24	290	725	ENXG45TE 220ML20
	22	16 × 20	0.24 0.24	290 390		
450	22 33	16 × 20 16 × 25	0.24	390	975	EKXG451E□□330ML25
450	22 33 33	16 × 20 16 × 25 18 × 20	0.24 0.24	390 380	975 950	EKXG451E□□330ML25 EKXG451E□□330MM2
450	22 33 33 47	16 × 20 16 × 25 18 × 20 18 × 25	0.24 0.24 0.24	390 380 480	975 950 1,200	EKXG451E□□330ML25 EKXG451E□□330MM2 EKXG451E□□470MM2
450	22 33 33	16 × 20 16 × 25 18 × 20	0.24 0.24	390 380	975 950	EKXG451E 220ML20 EKXG451E 330ML25 EKXG451E 330MM20 EKXG451E 470MM20 EKXG451E 5680MMN EKXG451E 820MMP

 $\square\,\square$: Enter the appropriate lead forming or taping code.