

KS Conductive Polymer Aluminum Solid Capacitors

+105 °C, High Ripple Current, Low ESR, Series KS.

Features:

- 105 °C、2000 hours assured
- Low ESR with large ripple current
- RoHS Compliance

Applications

Suitable for Switching Power Supply, DC/DC Converter, PDP /LCD TV and digital equipment.

Photo

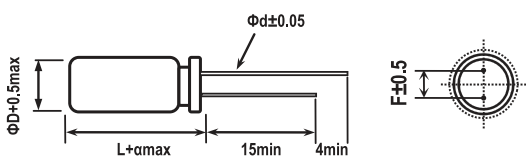


Marking color: Blue

Specifications

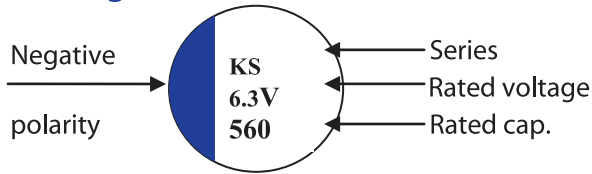
No.	Item	Performance	
1	Temperature range (°C)	-55 to +105	
2	Leakage current (μA)	Less than 0.2CV or 280 whichever is larger (after two minutes) C: Rated Capacitance(μF); V: Rated voltage(V) 20 °C	
3	Capacitance tolerance (%)	±20 (20 °C, 120Hz)	
4	Tangent of the loss angle (Tan δ)	0.12 20 °C, 120Hz	
5	ESR	See Standard Ratings 20 °C, 100K-300KHz	
6	Temperature Characteristics, Impedance Ratio	At -55 °C 100KHz(Low Temperature) Z-55 °C / Z+20 °C ≤ 1.25	
		At +105 °C 100KHz(High Temperature) Z+105 °C / Z+20 °C ≤ 1.25	
7	Endurance (+105 °C 2000hours Rated voltage Applied)	Test time	2000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
8	Humidity Test (+60 °C 90% to 95% RH 1000 hours No applied voltage)	Test time	1000hours
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
9	Surge Voltage Test (At normal temperature, charge at surge voltage for 30 second and discharge via a 1KΩ protective resistor for 330 second. Repeat for 1000 cycles)	Test time	1000 cycles
		Leakage current	The initial specified value or less
		Percentage of capacitance change	Within ±20% of initial value
		ESR	150% or less of the initial specified value
		Tangent of the loss angle	150% or less of the initial specified value
10	Applicable standards	JIS-C-5101-4	

Diagram of Dimensions



φD	4X5.4	5X5.4	5X7	5X8	5X9	6.3X5.4	6.3X6	6.3X7	6.3X8~	8	10
F	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	3.5	5.0
φd	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6
α	L<8: α=1.0 / L≥8: α=1.5										

Marking



Frequency Coefficient for Ripple Current

Frequency (Hz)	$120 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F < 500K$
Coefficient	0.05	0.3	0.7	1

Dimension & Permissible Ripple Current

Dimension: $\Phi D \times L$ (mm)
Ripple Current: mA/rms at 100KHz, 105°C

V.DC Contents μF	2.5V			4V			6.3V		
	$\Phi D \times L$	ESR $m\Omega/100KHz$ 20°C	Ripple Current (mA/rms, 105°C)	$\Phi D \times L$	ESR $m\Omega/100KHz$ 20°C	Ripple Current (mA/rms, 105°C)	$\Phi D \times L$	ESR $m\Omega/100KHz$ 20°C	Ripple Current (mA/rms, 105°C)
220	6.3X6	16	3200						
270	6.3X6	16	3200	6.3X8	16	3200	6.3X8	16	3840
330							6.3X8	16	3840
390	6.3X6	16	3200	6.3X8	16	3200	8X8	14	4600
470	5X9	16	3840	6.3X8	16	3840	8X8	14	4600
560	6.3X8	16	3840	6.3X8	16	3840			
	8X8	14	4600	8X8	14	4600	8X8	14	4600
680	6.3X8	16	3840	8X8	14	4600	8X8	14	4600
	8X8	14	4600	8X11.5	14	5320	8X11.5	14	5320
820	6.3X8	16	4600	8X8	14	4600	8X8	14	4600
	8X8	14	4600	8X11.5	14	5320	8X11.5	14	5320
	8X11.5	14	5320	10X12.5	14	5320	10X12.5	14	5320
1000	8X8	14	4600	8X8	14	4600	8X11.5	14	5320
	8X11.5	14	5320	8X11.5	14	5320	10X12.5	14	5320
1200	8X8	14	4600	8X11.5	14	5320	8X11.5	14	5320
	8X11.5	14	5320	10X12.5	14	5320	10X12.5	14	5320
1500	8X11.5	14	5320	8X11.5	14	5320	10X12.5	14	5320
	10X12.5	14	5320	10X12.5	14	5320			
1800	10X12.5	14	5320	10X12.5	14	5320			
2200	10X12.5	14	5320						
2700	10X12.5	14	5320						
	10X12.5	14	5320						

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Dimension & Permissible Ripple Current

Dimension: ϕ D \times L(mm)
Ripple Current: mA/rms at 100KHz, 105°C

V.DC Contents μ F	10V			16V		
	ϕ D \times L	ESR m Ω /100KHz 20°C	Ripple Current (mA/rms, 105°C)	ϕ D \times L	ESR m Ω /100KHz 20°C	Ripple Current (mA/rms, 105°C)
100				6.3X8	16	3840
150				6.3X8	16	3840
180				6.3X8	16	3840
220	6.3X8	16	3840	8X8	14	4600
270	8X8	14	4600	8X8	14	4600
330	8X8	14	4600	8X11.5	14	5320
390	8X8	14	4600	8X11.5	14	5320
	8X11.5	14	5320	10X12.5	14	5320
470	8X8	14	4600	8X11.5	14	5320
	8X11.5	14	5320	10X12.5	14	5320
560	8X8	14	3840			
	8X11.5	14	5320	10X12.5	14	5320
680	8X11.5	14	4600			
	10X12.5	14	5320	10X12.5	14	5320
820	8X11.5	14	4600			
	10X12.5	14	5320	10X12.5	14	5320
1000	10X12.5	14	5320	10X12.5	14	5320
1200	10X12.5	14	5320			

V.DC Contents μ F	25V			35V		
	ϕ D \times L	ESR m Ω /100KHz 20°C	Ripple Current (mA/rms, 105°C)	ϕ D \times L	ESR m Ω /100KHz 20°C	Ripple Current (mA/rms, 105°C)
22	6.3X8	45	1800	8X11.5	60	1800
33	6.3X8	45	1800	8X11.5	60	1800
47	8X8	45	2160	10X12.5	50	2160
68	8X8	45	2160	10X12.5	50	2160
82	8X8	40	2160	10X12.5	50	2160
100	8X11.5	35	2600	10X12.5	50	2160
150	8X11.5	35	2600	10X12.5	50	2160
180	8X11.5	35	2600			
220	10X12.5	35	3200			
330	10X12.5	35	3200			