KEC70A Series

◆Product Features

High Q, High Power, Low ESR/ESL, low Noise, High Self-Resonance,

Ultra- Stable Performance.

◆KEC70A Series Rated Capacitance Table

Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC
0.5	0R5	A,B,C,D	150V Code 151	3.3	3R3	A,B,C,D	150V Code 151	24	240	F,G, J,K, M	150V Code 151
0.6	0R6			3.6	3R6			27	270		
0.7	0R7			3.9	3R9			30	300		
0.8	0R8			4.3	4R3			33	330		
0.9	0R9			4.7	4R7			36	360		
1.0	1R0			5.1	5R1			39	390		
1.1	1R1			5.6	5R6			43	430		
1.2	1R2			6.2	6R2			47	470		
1.3	1R3			6.8	6R8	B,C,J,K		51	510		
1.4	1R4			7.5	7R5			56	560		
1.5	1R5			8.2	8R2			62	620		
1.6	1R6			9.1	9R1			68	680		
1.7	1R7			10	100	F,G,J,K		75	750		
1.8	1R8			11	110			82	820		
1.9	1R9			12	120			91	910		
2.0	2R0			13	130			100	101		
2.1	2R1			15	150			110	111		
2.2	2R2			16	160			120	121		
2.4	2R4			18	180			130	131		
2.7	2R7			20	200	F,G,J, K,M		150	151		
3.0	3R0			22	220						

Remark: special capacitance, tolerances and WVDC are available, consult with KETE.

◆KEC70A Chip Dimensions

unit:inch(millimeter)

	Length	Width	Thickness
KEC70A Chip Dimensions	0.055+.015~−.010 (1.4+0.38~ −0.25)	.055 ± .010 (1.4 ± 0.25)	.057(1.45)max

◆Performance

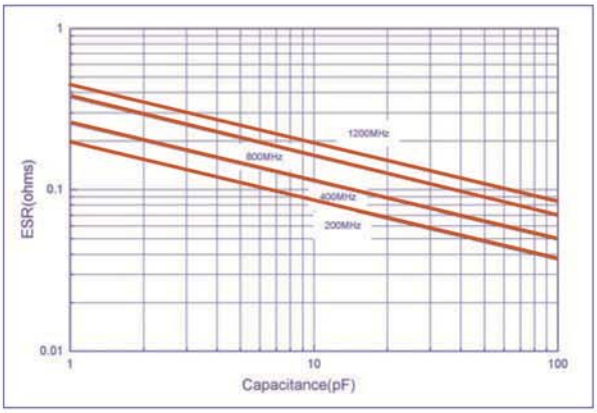
Item	Specifications
Quality Factor (Q)	greater than 10,000 at 1 MHz
Insulation Resistance (IR)	0.1 pF to 100 pF: 10^6 Megohms min. @ +25℃ at rated WVDC. 10^5 Megohms min. @ +125℃ at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage(DWV)	250% of rated Voltage for 5 seconds.
Operating Temperature Range	−55℃ to +125℃
Temperature Coefficient (TC)	0±30ppm/℃
Capacitance Drift	±0.02% or ±0.02pF, whichever is greater.
Piezoelectric Effects	None
Termination Type	See Termination Type Table

◆Environmental Tests

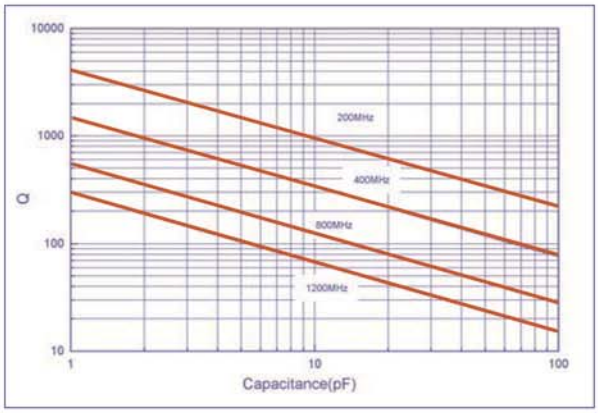
Item	Specifications	Method
Thermal shock	DWV: the initial value IR: Shall be not less than 30% the initial value Capacitance change: no more than 0.5% or 0.5pF.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature(-55°C and 125°C) stay 30 minutes,The time of removing shall be not more than 3 minutes. Perform the five cycles.
Moisture resistance		MIL-STD-202, Method 106.
Humidity (steady state)	DWV: the initial value IR: the initial value Capacitance change: no more than 0.3% or 0.3pF.	MIL-STD-202, Method 103, Condition A, with 1.5 Volts D.C. applied while subjected to an environment of 85°Cwith 85% relative humidity for 240 hours min.
Life	IR: Shall be not less than 30% the initial value Capacitance change: no more than 0.2%	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% Rated voltage D.C. applie

◆KEC70A Performance Curve

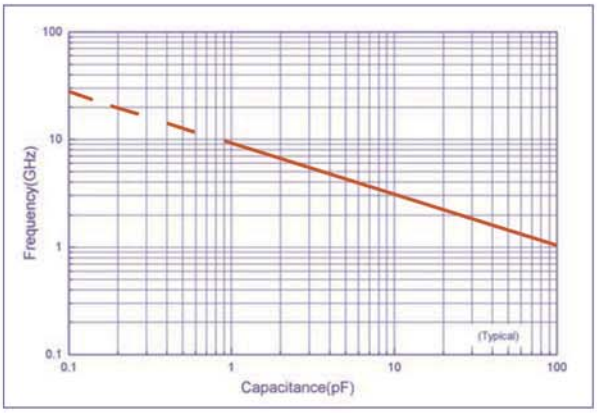
ESR VS Capacitance



Q VS Capacitance



Series resonance VS Capacitance



Current rating VS Capacitance