

KEC70G Series
◆ Product Features

High Q, High RF Current/Voltage, High RF Power, Low ESR/ESL, Low Noise,
 Ultra- Stable Performance.

◆ KEC70G Series Rated Capacitance Table

Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC	Cap.pF	Code	Tol.	Rated WVDC
1.0	1R0	B,C,D	3000V Code 302 or 5000V Code 502	33	330	F,G,J, K,M	3000V Code 302 or 5000V Code 502	820	821	F,G,J, K,M	2000V Code 202
1.2	1R2			39	390			1000	102		
1.5	1R5			47	470			1200	122		
1.8	1R8			56	560			1500	152		
2.2	2R2			68	680			1800	182		
2.7	2R7			82	820			2200	222		
3.3	3R3			100	101			2700	272		
3.9	3R9			120	121			3300	332		
4.7	4R7			150	151			4700	472		
5.6	5R6			180	181			5100	512		
6.8	6R8			220	221			5600	562		
8.2	8R2			270	271			6800	682		
10	100	F,G,J, K,M		300	331		3000V Code 302	7500	752	G,J, K,M	1000V Code 102
12	120			390	391			8200	822		
15	150			470	471			10000	103		
18	180			560	561						
22	220			680	681						
27	270										

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

◆ Performance

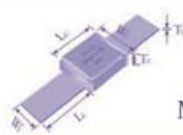
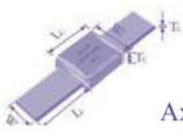
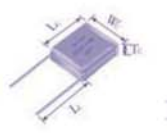
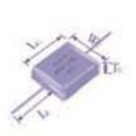
Item	Specifications
Quality Factor (Q)	1 pF to 1000 pF: greater than 2000 at 1 MHz. More than 1000 pF: greater than 2000 at 1 KHz.
Insulation Resistance (IR)	Test Voltage: 500V 10 ⁵ Megohms min. @ +25 °C at rated WVDC. 10 ⁴ Megohms min. @ +125 °C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage(DWV)	250% of rated WVDC for 5 seconds.
Operating Temperature Range	-55 °C to +125 °C
Temperature Coefficient (TC)	0 ± 30ppm/°C
Capacitance Drift	± 0.02% or ± 0.02pF, whichever is greater.
Piezoelectric Effects	None





◆ 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°C with 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. 150% Rated voltage D.C. applied.
Terminal Strength	Microstrip: more than 20 N; lead wire: more than 10 N.	MIL-STD-202, Method 211,

◆KEC70G Lead Type and Dimensions

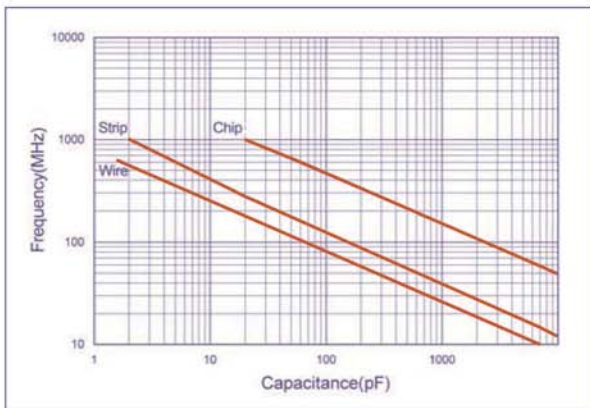
unit: millimeter

Series	Term. Code	Type/Outlines	Capacitor Dimensions			Lead Dimensions			Lead Material	
			Length (L _C)	Width (W _C)	Thickness (T _C)	Length (L _L)	Width (W _L)	Thickness (T _L)		
70G	MS	 Microstrip	.760 +.015 ~.010 (19.3 +0.38~ -0.25)	.760 ±.01 (19.3 ±0.25)	.154 ±.008 (3.90 ±0.20)	.787 (20.00) min	.591 ±.01 (15.0 ±0.25)	.01 ±.005 (0.25 ±0.13)	Silver-plated Copper	
70G	AR	 Axial Ribbon								
70G	RW	 Radial Wire				.787 (20.00) min	Dia.=.03 ± .004 (0.8±0.1)			
70G	AW	 Axial Wire				1.181 (30.00) min				

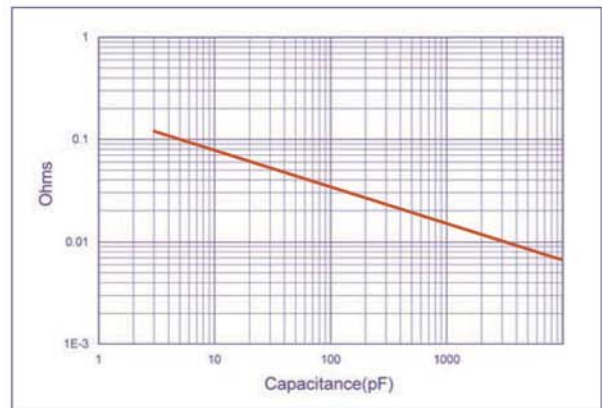
Series	Term. Code	Type/Outlines	Capacitor Dimensions			Lead Dimensions			Lead Material	
			Length (L _C)	Width (W _C)	Thickness (T _C)	Length (L _L)	Width (W _L)	Thickness (T _L)		
70G	MN (non-mag)	 Microstrip	.760 +.015 ~.010 (19.3 +0.38~ -0.25)	.760 ±.01 (19.3 ±0.25)	.154 ±.008 (3.90 ±0.20)	.787 (20.00) min	.591 ±.01 (15.0 ±0.25)	.01 ±.005 (0.25 ±0.13)	Silver-plated Copper	
70G	AN (non-mag)	 Axial Ribbon								
70G	RN (non-mag)	 Radial Wire				.787 (20.00) min	Dia.=.03 ± .004 (0.8±0.1)			
70G	BN (non-mag)	 Axial Wire				1.181 (30.00) min				

◆ KEC70G Performance Curve

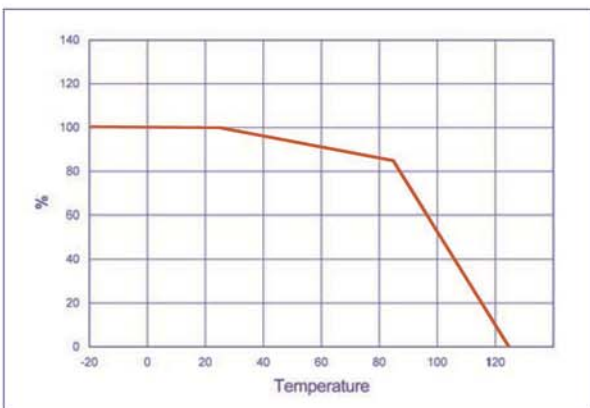
Self Resonant Frequency vs Capacitance



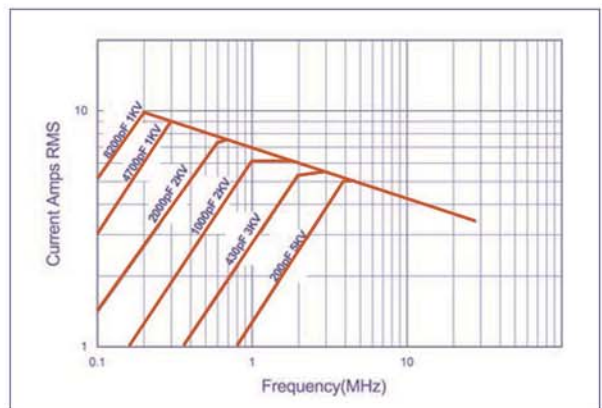
ESR vs Capacitance measured @ 30MHz



%Maximum Current vs Ambient Temperature



KEC70G Wire Terminals Rated Current vs Frequency



KEC70G Strip Terminals Rated Current vs Frequency

