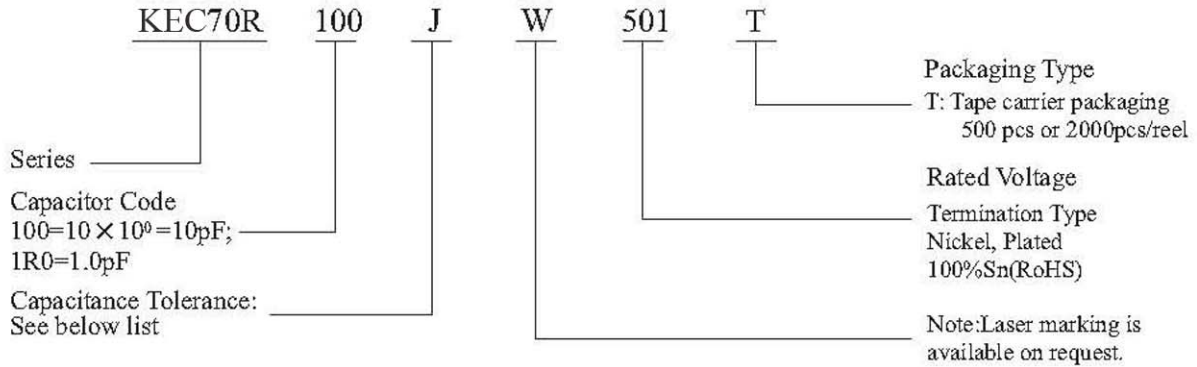


KEC70R (.070" x .100")

◆ KEC70R 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	500V Code 501	3.9	3R9	B, C,D	500V Code 501	22	220	G, J	500V Code 501
1.1	1R1			4.3	4R3			24	240		
1.2	1R2			4.7	4R7			27	270		
1.3	1R3			5.1	5R1			30	300		
1.4	1R4			5.6	5R6			33	330		
1.5	1R5			6.2	6R2			36	360		
1.6	1R6			6.8	6R8			39	390		
1.7	1R7			7.5	7R5			43	430		
1.8	1R8			8.2	8R2			47	470		
1.9	1R9			9.1	9R1			51	510		
2.0	2R0	G, J	500V Code 501	10	100	G, J	500V Code 501	56	560	G, J	500V Code 501
2.1	2R1			11	110			62	620		
2.2	2R2			12	120			68	680		
2.4	2R4			13	130			75	750		
2.7	2R7			15	150			82	820		
3.0	3R0			16	160			91	910		
3.3	3R3			18	180			100	101		
3.6	3R6			20	200						

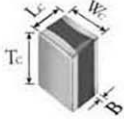
◆ **Part Numbering**



Code	B	C	D	G	J	K	
Tolerance	$\pm 0.1\text{pF}$	$\pm 0.25\text{pF}$	$\pm 0.5\text{pF}$	$\pm 2\%$	$\pm 5\%$	$\pm 10\%$	

◆ **KEC70R Capacitor Dimensions**

unit: inch (millimeter)

Series	Term. Code	Type / Outlines	Capacitor Dimensions			Plated Material
			Length (L _c)	Width (W _c)	Thickness (T _c)	
KEC70R	W	 Chip	.070 ± .015 (1.78 ± 0.38)	.100 ± .015 (2.54 ± 0.38)	.120 (3.05) max	Sn/Ni (RoHS)

◆ Performance

Item	Specifications
Quality Factor (Q)	Greater than 5000 at 1 MHz.
Insulation Resistance (IR)	10 ⁶ Megohms min. @ +25°C at rated WVDC. 10 ⁵ Megohms min. @ +125°C at rated WVDC.
Rated Voltage	See Rated Voltage Table
Dielectric Withstanding Voltage (DWV)	250% of Rated Voltage for 5 seconds, Rated Voltage ≤ 500VDC
Operating Temperature Range	−55°C to +175°C
Temperature Coefficient (TC)	0 ± 30 ppm/°C (−55°C to +125°C)
Capacitance Drift	± 0.02% or ± 0.02pF, whichever is greater.
Piezoelectric Effects	None
Termination Type	See Termination Type Table

Capacitors are designed and manufactured to meet the requirements of MIL-PRF-55681 and MIL-PRF-123.

◆ Environmental Tests

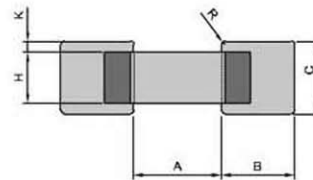
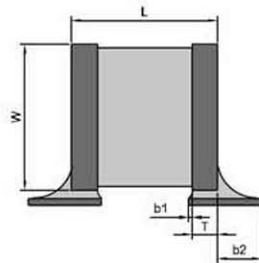
Item	Specifications	Method
Thermal Shock	DWV: the initial value IR: Shall not be less than 30% of the initial value Capacitance change: no more than 0.5% or 0.5pF. whichever is greater.	MIL-STD-202, Method 107, Condition A. At the maximum rated temperature (−55°C and 125°C) stay 30 minutes. The time of removing shall not be 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. whichever is greater.	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 minimum.
Life	IR: Shall not be less than 30% of the initial value Capacitance change: no more than 2.0% or 0.5pF. whichever is greater.	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% Rated Voltage DC applied.

◆ Recommended Land Pattern Dimensions

When mounting the capacitor to substrate, it's important to carefully consider that the amount of solder (size of fillet) used has a direct effect upon the capacitor once it's mounted.

- 1) The greater the amount of solder, the greater the stress to the elements. This may cause the substrate to break or crack.
- 2) In the situation where two or more devices are mounted onto a common land, be sure to separate the device into exclusive pads by using soldering resist.

Orientation	EIA	A	B	C
Vertical	0710	0.90	1.00	2.90



◆ Tape & Reel Specifications

Orientation	EIA	A0	B0	K0	W	P0	P1	T	F	Qty/Min	Qty/reel	Tape Material
Vertical	0710	1.90	2.65	2.20	12.00	4.00	4.00	0.30	5.50	500	1500	Plastic

