



Series MHK

The MHK series offers units with a very high capacitance per unit volume which are ideal for modern high technology electronic assemblies and sub-assemblies.

The leaded styles employ fine silver tapes or wires that are bonded to the element by a unique solderless process which enables them to withstand temperatures far in excess of the melting point of solder.

The glass encapsulated styles confer the benefits of maximum resistance to moisture and surface contaminants whilst the chips offer advantages where minimum inductance is essential for correct circuit operation.

Technical Data

Temperature Range:

-55°C to +125°C without derating.

Capacitance Tolerance:

±20%, ±10%, +80% -20%.

Capacitance Temperature Coefficient:

±15% max. over the range -55°C to +125°C

Dissipation Factor:

0.025 max. at 1KHz and +25°C.

Insulation Resistance:

At +25°C and rated d.c. voltage: $>10^3$ M Ω or 1000 ohm farads.

At +125°C and 0.1x rated d.c.voltage: $>10^3$ M Ω or 1000 ohm farads.

† Working voltage: 50Vdc for $C \leq 0.47\mu\text{F}$

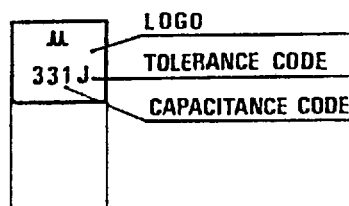
25Vdc for $C > 0.47\mu\text{F}$

Dielectric Test Voltage

2 x WV d.c for 5 seconds at +25°C, 50mA max.

† Also available in 100V d.c. and 200V d.c. with reduced maximum capacitance.
For further details please consult our technical department.

Standard Marking



- Glass encapsulated
- Leaded types with fine silver ribbon or wire in axial or radial configurations.
- Designed for direct mounting to P.C.B's and hybrid substrates.
- High volumetric efficiency.
- Standard range 0.001 μF to 1.0 μF
- -55°C to +125°C operation.

Axial Ribbon leads

Styles	Case size				Lead size	
	L & W		T		inch ±0.03	mm. ±0.07
	inch ±0.039	mm. ±1.00	inch ±0.40	mm. ±1.00		
MHK 11	.140	3.55	.060	1.50	.050 X .010	1.25 X 0.25
MHK 12	.250	6.35	.070	1.75	.050 X .010	1.25 X 0.25
MHK 13	.410	10.40	.080	2.00	.050 X .010	1.25 X 0.25

Radial and Axial wire leads

Styles	Case size						Wire Diameter	
	L & W		T		B		inch ±0.03	mm. ±0.07
	inch ±0.039	mm. ±1.00	inch ±0.40	mm. ±1.00	inch ±0.25	mm. ±0.60		
MHK 21	.140	3.55	.060	1.50	.125	3.15	.023	0.58
MHK 22	.250	6.35	.070	1.75	.225	5.70	.023	0.58
MHK 23	.410	10.40	.080	2.00	.375	9.50	.023	0.58

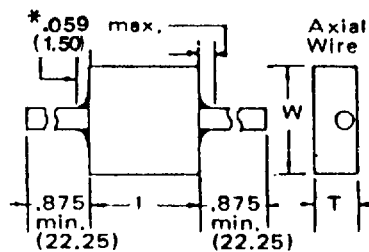
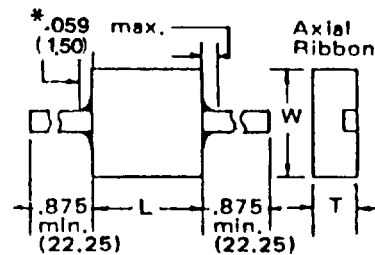
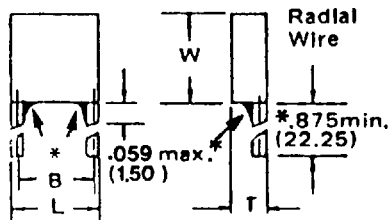
Standard capacitance values

Available Case Styles	Capacitance Code	Capacitance (Mfd)
MHK11 MHK21 MHK31	102	.001
	152	.0015
	222	.0022
	332	.0033
	472	.0047
	682	.0068
	103	.010
MHK12 MHK22 MHK32	153	.015
	223	.022
	333	.033
	473	.047
	683	.068
	104	.10
	154	.15
MHK13 MHK23 MHK33	224	.22
	334	.33
	474	.47
	684	.68
	105	1.0



Series MHK

Outline Drawings & Dimensions



* Glass meniscus can extend .059 (1.50) max. from the body of the capacitor, it can be held closer on special order.

Ordering Information

MHK	1	2	33	1	K
Type designation	Configuration	Case Size	Capacitance Code	No. of Zeros	Capacitance Tolerance
	Axial Ribbon 1	1	First two digits of capacitance value	Following the two digits of capacitance value in pF.	K = $\pm 10\%$
	Axial Wire 2	2			M = $\pm 20\%$
	Radial Wire 3	3			Z = 80%, -20%

Example shown is a case style MHK12 330pF $\pm 10\%$ with a maximum WV d.c. of 50.