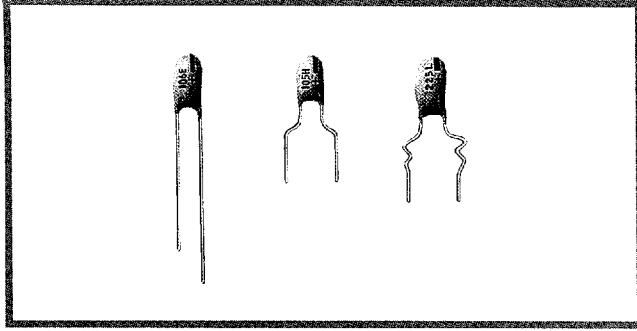
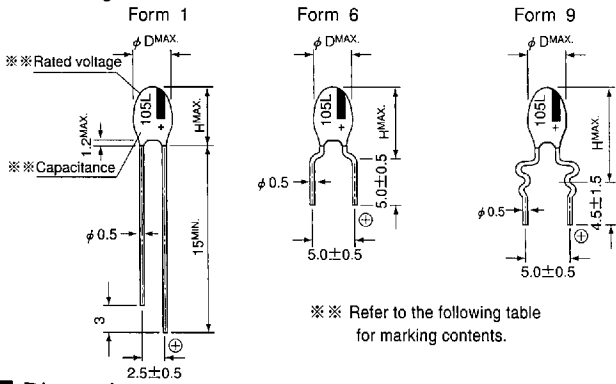


**S89** Resin-coated,  
Standard Series



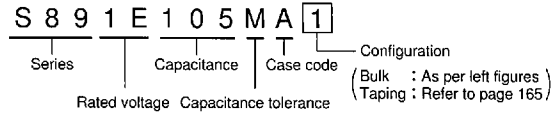
**Drawing**



**Dimensions**

Case code	D	H (mm)		
		Form 1	Form 6	Form 9
A	3.5	6.0	9.3	10.0
B	3.8	6.5	9.8	10.5
C	4.4	7.5	10.5	11.5
D	4.8	8.5	11.5	12.5
E	5.2	9.5	12.5	13.5

**Type numbering system (Example : 25V 1 μ F)**



**Specifications**

Item	Performance Characteristics
Operating Temperature Range	-55~+85°C
Capacitance Tolerance	±20%, ±10% (at 120Hz)
Dissipation Factor	0.1~1 μ F 4%Max. 1.5~6.8 μ F 6%Max. 10~68 μ F 8%Max. 100 μ F~ 10%Max. (at 120Hz)
Leakage Current	•After 1 minute's application of rated voltage, leakage current at 25°C is not more than 0.01CV or 0.5 μ A, whichever is greater. •After 1 minute's application of rated voltage, leakage current at 85°C is not more than 0.1CV or 5 μ A, whichever is greater.
Capacitance Change by Temperature	+12%Max. (at +85°C) -12%Max. (at -55°C)
Surge Voltage *	After application of surge voltage in series with a 33 Ω resistor at the rate of 30 seconds ON, 30 seconds OFF, for 1000 successive test cycles at 85°C, capacitors meet the characteristics requirements listed below. Capacitance Change ..... Within ±5% of initial value Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Resistance to Soldering Heat	After immersing the bottom parts of capacitor bodies by 2~2.5mm in a solder pot at 270±5°C for 3±0.5 seconds, Capacitance Change ..... Within ±3% of initial value Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Humidity Resistance	At 40°C, 90~95% R.H., For 500 hours (No voltage applied) Capacitance Change ..... Within ±12% of initial value Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Load Life	After 1000 hours' application of rated voltage in series with a 3 Ω resistor at 85°C, capacitors meet the characteristics requirements listed below. Capacitance Change ..... Within ±10% of initial value Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Applicable Standard	JIS C 5142

\* As for the surge voltage, refer to page 163 for details.

**Standard ratings**

Cap. (μ F)	V	V						Capacitance Code
		4	6.3	10	16	25	35	
0.1	104						A	104
0.15	154						A	154
0.22	224						A	224
0.33	334						A	334
0.47	474						A	474
0.68	684					A	B	684
1	105					A	B	105
1.5	155				A	B	C	155
2.2	225				A	B	C	225
3.3	335			A	B	C	D	335
4.7	475		A	A	B	C	D	475
6.8	685		A	B	C	D	E	685
10	106	A	B	B	C	D	E	106
15	156	B	B	C	D	E		156
22	226	B	C	C	D			226
33	336	C	C	D	E			336
47	476	C	D	D				476
68	686	D	D	E				686
100	107	D	E					107
150	157	E						157
***Rated voltage code		C	D	E	F	H	L	