

AG340/350

General technical data

The **BMC mica capacitors** of the AG340 and AG350 series are manufactured from the best Indian Ruby Muscovite mica plates with a burned up silver layer.

The especially reliable AG340/350(L) series is correspondent to the AG300/310 series in type and size. However the capacitors are fabricated in a different way to the direct voltage mica capacitors. The special arrangement of electrodes on each mica plate results in a voltage division for each capacitance, that makes it possible to reach higher puls an a.c. voltage resistance and a higher current load. The secure contact is achieved by a special low resistance metallization. The improved ionization features are reached by a special vacuum-impregnation. The resin encapsulation ensures climatic and mechanical strength. The capacitors are characterized by long-term stability, minimum losses and a small temperature coefficient of the capacitance. We offer close tolerances of capacitance up to 0,5%.

Application:

The AG340/350 **BMC mica capacitors** types are well proven over a long period for the following applications:

- continuous resonant circuits
- filters
- diplexer and timing elements for RF- and LF-engineering
- processing and generating of signals with high voltage and step impulse edges (i.e. pulse former, pulse forming networks, anti-interference devices)
- transmitting and master oscillator applications, low power amplifiers of low-loss circuits in low power electronics, where capacitors with a high allowable reactive power are required
- electronic instruments of high stability for flight electronics
- control and communication engineering
- medical technology
- navigation
- security and alarm devices

Climatic category:

DIN 40400	G	M	D
IEC 68	040	100	021

Qualification:

The technical values are based on:

IEC-384-5
IEC-68
DIN 40400
DIN 40046
MIL-C-5

Temporal capacitance change: $\frac{\Delta C}{C} > 0,1\%$ after one year operation

Temperature coefficient of capacitance: according to DIN and MIL

Characteristic	Temperature coefficient ppm/°C	Drift
D	- 100 ... + 100	± 0,3%
E	- 20 ... + 100	± 0,1%, + 0,1%
F	- 0 ... + 70	± 0,05%, + 0,1%
G	- 20 ... + 50	± 0,05%, + 0,1%

Dissipation factor according to DIN 41120 and VDE 0560 part 19

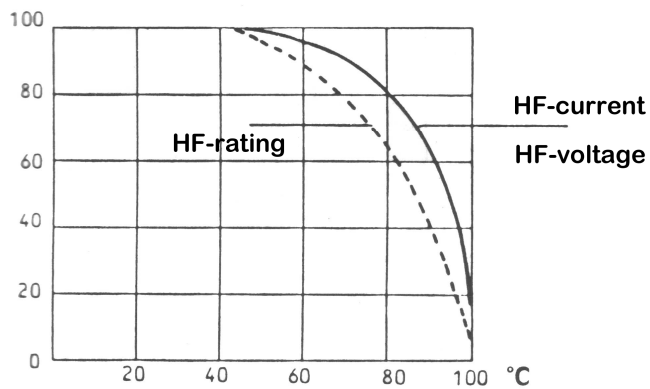
100 ... 1000pF	1×10^{-3}	measured at 1 MHz
> 1000 ... 10000pF	1×10^{-3}	measured at 10 kHz
> 10000 ... >100000pF	$0,5 \times 10^{-3}$	measured at 10 MHz
> 100000pF	$0,5 \times 10^{-3}$	measured at 1 kHz

Rated d.c. voltage U_R Permitted a.c. voltage U_{rms*}	V	500	1000/1500/2000/3000
	V/50 Hz	350	500
	*)Sum of d.c. voltage and superimposed peak a.c. voltage must not exceed U_R		
Testing voltage U_p	3 U_N for 500V- 2 U_N for ≥ 1000V- 3 sec.		
Insulation resistance	$C \leq 50000 \text{ pF} = 100 \text{ G}\Omega$ at 20°C with 100V- after 1 minute		
Self inductance	≈ 10 nH measured at 1 mm terminal		
Operating temperature range	- 40°C ... +100°C		
Climatic category	DIN 40040 IEC 68	G 040 M 100 D 021	

Peak RF-load measured at room temperature and 1 MHz.

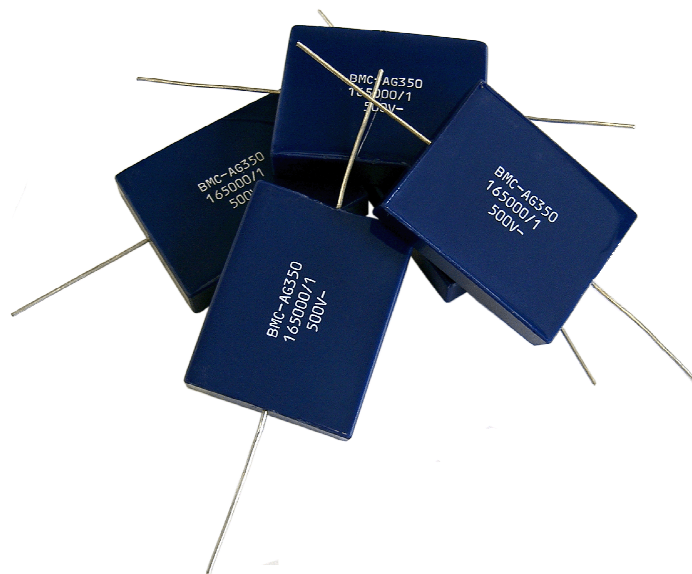
Type	kVA	A	V_{eff} for U_N			
			1000V d.c.	1500V d.c.	2000V d.c.	2500V d.c.
AG340	3	10	300	450	600	750
AG350	6	12				

Fig.1: HF-load against ambient temperature



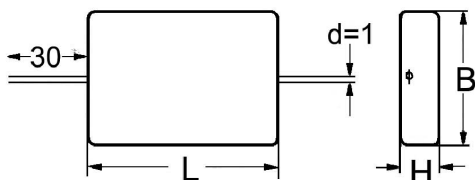
Marking:

The capacitors are marked with the trademark, the capacitance, the capacitance tolerance, the working voltage and the manufacturing date.



AG 340 + 350

Dimensions



Type	Capacitance range in pF				Dimensions in mm (max.)		
	1 kV- 0,6 kV-/50Hz 0,3 kV-/1MHz	1,5 kV- 0,9 kV-/50Hz 0,45 kV-/1Mhz	2 kV- 1,2 kV-/50Hz 0,6 kV-/1MHz	2,5 kV- 1,5 kV-/50Hz 0,75 kV-/1MHz	L	B	H
AG340	330... 4000	100... 1100	47... 600	10... 130	36,5	25	7,5
	>4000... 13500	>1100... 3800	>600... 1800	>130... 450			9,5
	>13500... 23000	>3800... 6500	>1800... 3000	>450... 780			11,5
	>23000... 32500	>6500... 9300	>3000... 4300	>780... 1100			13,5
	>32500... 42500	>9300... 12000	>4300... 5600	>1100... 1400			15,5
AG350	4000... 10000	1100... 3300	600... 1800	130... 750	46,5	36,5	7,5
	>10000... 34000	>3300... 11400	>1800... 6100	>750... 2600			9,5
	>34000... 58000	>11400... 19400	>6100... 10500	>2600... 4500			11,5
	>58000... 82000	>19400... 27500	>10500... 14800	>4500... 6300			13,5
	>82000... 106000	>27500... 35500	>14800... 62000	>6300... 82000			15,5

Ordering information:

