

**GP grade**

**Construction**

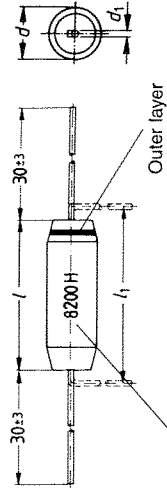
- Wound capacitor
- Central axial leads
- Available on tape

**Features**

- Stabilized mechanical and electrical characteristics due to a special heat treatment

**Application**

- RF and IF filters
- Timing circuits
- Resonant circuits



Legend: Rated capacitance (pF)  
Tolerance (code letter)  
Rated voltage (unencoded or color ring)

Outer layer:	Bar or color ring
Length $l_z$	$l_{min}$ $d_1$
11.0	15.0 0.6
16.5	20.0 0.8
21.5	25.0 0.8

Rated dc voltage $U_n$	160 V	630 V
Color ring	red	black
Type with marking of revision status and rated voltage	B 33063-B1	B 33063-B6
Rated capacitance $C_n$	Dimensions (mm)	
Tolerance	$d_{max} \times l_{max}$	$d_{max} \times l_{max}$
$\pm 1 \text{ pF} \triangleq F$	2 to 20	4.0 x 11.0
$\pm 1 \text{ pF}; \pm 5 \%$	> 20 to 40	4.0 x 11.0
$\pm 1 \text{ pF}; \pm 2.5 \%; \pm 5 \%$	> 40 to 47	4.0 x 11.0
	> 47 to 100	4.5 x 11.0
	> 100 to 330	4.5 x 11.0
	> 330 to 1 000	6.0 x 11.0
	> 1 000 to 1 500	6.9 x 11.0
	> 1 500 to 2 200	7.9 x 11.0
	> 2 200 to 3 300	7.6 x 16.5
	> 3 300 to 7 500	10.4 x 16.5
	> 7 500 to 8 200	9.6 x 21.5
$\pm 1 \%$ $\triangleq F$	> 8 200 to 10 000	10.4 x 21.5
$\pm 2.5 \%$ $\triangleq H$	> 10 000 to 15 000	12.3 x 21.5
$\pm 5 \%$ $\triangleq J$	> 15 000 to 22 000	14.5 x 21.5
	> 22 000 to 27 000	10.2 x 16.5
	> 27 000 to 33 000	10.0 x 21.5
	> 33 000 to 47 000	11.7 x 21.5
	> 47 000 to 82 000	15.0 x 21.5
	> 82 000 to 100 000	16.5 x 21.5

The dimensions apply to the highest capacitance value. Diameters for lower capacitance values can be interpolated. These capacitors are preferably available on tape. Please refer to chapter "Tape packaging".

**Technical data**

Type	B 33063-B1	B 33063-B6
Rated dc voltage $U_n$	160 V	630 V
AC voltage $U_{ac}$	65 V	210 V
Category current $I_c$	$I = 11.0 \text{ mm}$ $I = 16.5 \text{ mm}$ $I = 21.5 \text{ mm}$	1.0 A 1.2 A 1.5 A
IEC climatic category (DIN IEC 68-1)	40/085/21	
Lower category temperature $T_{min}$	-40 °C	
Upper category temperature $T_{max}$	+85 °C	
Test duration	21 days	
Category values after damp heat test:		
Capacitance change $ \Delta C/C $	$\leq (0.75 \% + 0.5 \text{ pF})$	
Dissipation factor $\tan \delta_e$	$\leq 1.4 \cdot \text{tabulated value}$	
Insulation resistance $R_{if}$	$\geq 50 \text{ G}\Omega$	
Climatic category	GPE	
DIN 40 040		
Capacitance drift $t_z^{(1)}$	$\leq (0.3 \% + 0.4 \text{ pF})$	
Temperature coefficient $\alpha_c$ of capacitance $^{(1)}$	- (100 to 300) · 10 <sup>-7</sup> K	
Dissipation factor $\tan \delta$ (10 <sup>-3</sup> )	$\leq 100 \text{ pF} \dots 1000 \text{ pF} \dots 4700 \text{ pF} \dots 22000 \text{ pF} \dots 100000 \text{ pF}$	0.2 0.3 0.4 - 0.2 0.3 0.4 - 0.3 0.4 0.5 - 0.4 0.7 -
Insulation resistance $R_i$ (minimum as-delivered value)	100 GΩ	

**Ordering code example**

B33063-B1823-H Z

Code figure for taping (AMMO pack)

Capacitance tolerance:  $H \triangleq \pm 2.5\%$   
Rated capacitance:  $823 \triangleq 82 \cdot 10^3 \text{ pF} = 82000 \text{ pF}$

Type  
Revision status, rated voltage  $1 \triangleq 160 \text{ V}$

For ordering information refer to page 38.

<sup>1)</sup> for  $C_n \geq 100 \text{ pF}$