

## Aluminum Electrolytic Capacitors - Accessories (Vishay BCcomponents)

### RESISTORS FOR TERMINAL MOUNTING

Resistors are used to balance the voltage over a series connection of screw terminal capacitors or to ensure discharge to a safe voltage after power down. Vishay provides the [CMS series of resistors](#), which are suited for direct mounting on the terminals of screw terminal capacitors.

DIMENSIONS in inches [millimeters]							
DIAMETER	MODEL	CORE DIMENSIONS in inch [mm]				TERMINAL DESIGNATION	
		A TYPICAL	B ± 0.031 [0.79]	C ± 0.062 [1.59]	M ± 0.0118 [0.3]	CM HOLE DIAMETER TYPICAL	CA HOLE DIAMETER TYPICAL
Ø 50 mm	<a href="#">CMS16</a>	0.562 [14.27]	0.312 [7.92]	1.250 [31.75]	0.875 [22.23]	0.196 [4.98]	0.265
Ø 65 mm	<a href="#">CMS20</a>	0.562 [14.27]	0.312 [7.92]	1.75 [44.45]	1.13 [28.7]	0.196 [4.98]	0.265 [6.73]
Ø 76 mm	<a href="#">CMS22</a>	0.562 [14.27]	0.312 [7.92]	1.75 [44.45]	1.254 [31.85]	0.196 [4.98]	0.265 [6.73]
Ø 90 mm							

### MOUNTING ACCESSORIES

#### CLAMPS FOR ST TYPES

To facilitate vertical mounting, a series of rigid clamps is available. These are made of zinc plated steel, chromium (III) passivated, or stainless steel (Ø D = 76 mm).

The clamps have either two or three mounting lugs, may be easily slipped over the capacitor and then clamped with a nut and bolt. Five types of clamps are available, one for each case diameter.

They are delivered without nuts or bolts.

**To avoid damaging the insulation sleeve, do not overtighten the clamp screw.**



**RoHS**  
COMPLIANT

**DIMENSIONS** in millimeters **AND AVAILABLE FORMS**

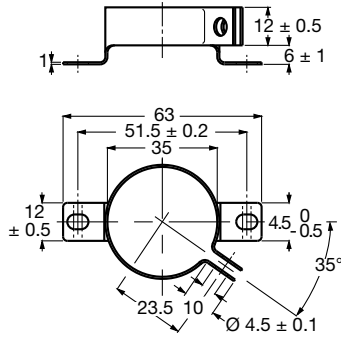


Fig. 1 - Dimensional outline of clamp for case Ø D = 35 mm

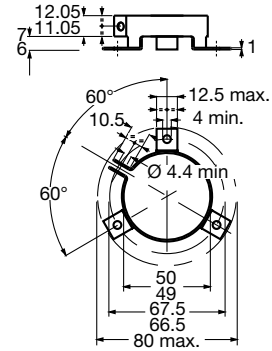


Fig. 2 - Dimensional outline of clamp for case Ø D = 50 mm

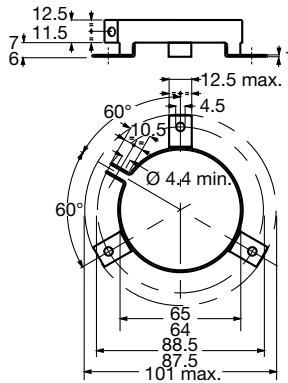


Fig. 3 - Dimensional outline of clamp for case Ø D = 65 mm

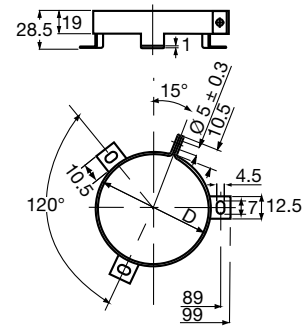


Fig. 4 - Dimensional outline of clamp for case Ø D = 76 mm

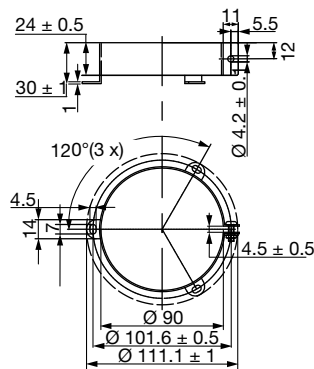


Fig. 5 - Dimensional outline of clamp for case Ø D = 90 mm

Table 1

<b>MOUNTING CLAMPS FOR SCREW TERMINALS</b>	
CASE DIAMETER	ORDERING CODE
35	MAL804324031E3
50	MAL804324051E3
65	MAL804324061E3
76	MAL804323321E3
90	MAL804324921E3

**NUTS AND WASHERS FOR STB-VERSIONS**

When mounting with the bolt, which is an integral part of the case, standard metal M8 and M12 nuts and washers may be used; the maximum permissible torque is 4 Nm for M8 nuts and 10 Nm for M12 nuts.

If insulated mounting is required, synthetic nuts and rubber washers are available; for these nuts the maximum permissible torque is 2 Nm (M8) and 4 Nm (M12).

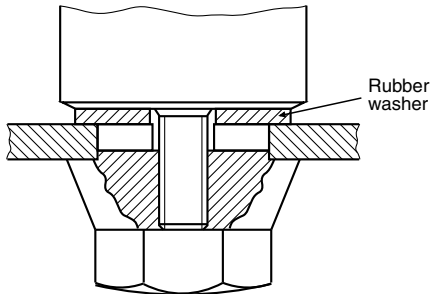
**DIMENSIONS in millimeters AND AVAILABLE FORMS**


Fig. 6 - Insulated mounting

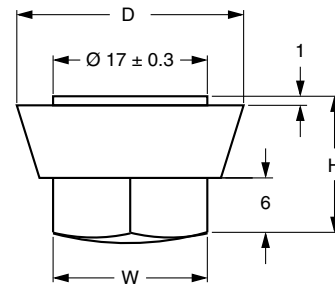


Fig. 7 - Synthetic cap nut; see Table 2 for dimensions D, H and W

Table 2

<b>SYNTHETIC CAP NUTS</b>						
CASE DIAMETER (mm)	THREAD	D (mm)	H (mm)	W <sup>(1)</sup> (mm)	MIN. THREADED DEPTH (mm)	ORDERING CODE
35	M8	25	15	17	11.5	MAL804305561E3
≥ 50	M12	30	20	19	15.5	MAL804305571E3

**Note**

<sup>(1)</sup> Dimension W is measured across flats.

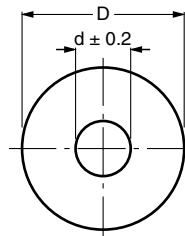


Fig. 8 - Rubber washer; thickness 2 mm

<b>RUBBER WASHERS</b>		
D (mm)	d (mm)	ORDERING CODE
34	8.4	MAL804305591E3
49	13.0	MAL804305531E3
64	13.0	MAL804305521E3
74	13.0	MAL804313001E3
88	13.0	MAL804329961E3

**CLAMPS FOR SL-VERSIONS**,  $\varnothing D = 25 \text{ mm}, 30 \text{ mm}, 35 \text{ mm}, \text{ and } 40 \text{ mm}$ 

To facilitate vertical mounting, a series of rigid clamps made of zinc plated steel is available. These are made of zinc plated steel, chromium (III) passivated.

The clamps have two mounting lugs, may be easily slipped over the capacitor and then clamped with a nut and bolt. Four types of clamps are available, one for each case diameter.

They are delivered without nuts or bolts.

**To avoid damaging the insulation sleeve, do not overtighten the clamp screw.**


**RoHS**  
COMPLIANT

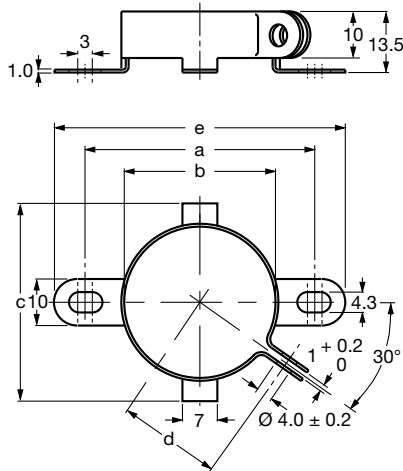
**DIMENSIONS** in millimeters


Fig. 9 - Dimensional outline of clamp for case  $\varnothing D = 25 \text{ mm}, 30 \text{ mm}$  and  $40 \text{ mm}$

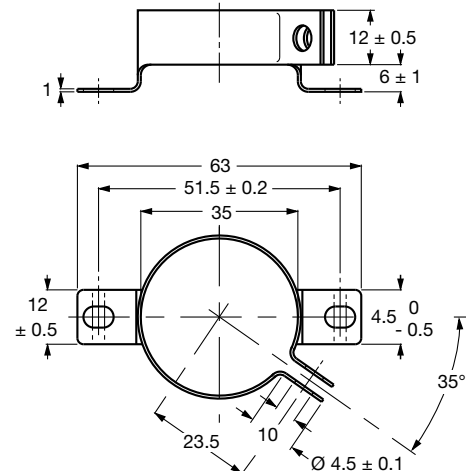


Fig. 10 - Dimensional outline of clamp for case  $\varnothing D = 35 \text{ mm}$

Table 3

<b>MOUNTING CLAMPS FOR SOLDER LUGS</b>						
<b>CASE DIAMETER (mm)</b>	<b>a (mm)</b>	<b>b (mm)</b>	<b>c (mm)</b>	<b>d (mm)</b>	<b>e (mm)</b>	<b>ORDERING CODE</b>
25	41.5 ± 0.2	25	35	18.5	56	MAL804324011E3
30	46.5 ± 0.2	30	40	21	61	MAL804324021E3
35	51.5 ± 0.2	35	-	23.5	63	MAL804324031E3
40	56.5 ± 0.2	40	50	26	71	MAL804324041E3