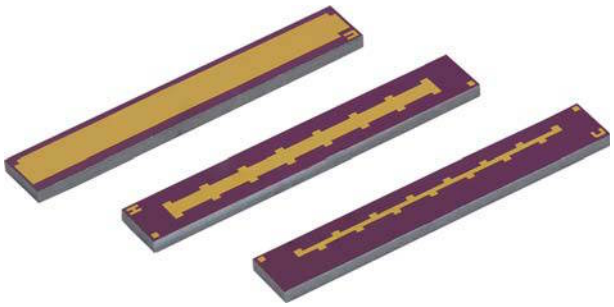
Thin Film Bar MOS Capacitors



Product may not be to scale

The bar capacitor is a MOS capacitor designed for hybrid assemblies requiring ultra high power rating with miniature case size.

FEATURES

- Robust MOS construction
- Allows for multiple wire bonds. At the lowest values, case A will accept 7 bonds and case B will accept 15.
- Low D, high Q
- Excellent load life stability

APPLICATIONS

- Hybrid assemblies
- Low pass LC, RC, or LRC lumped filter
- RF blocking on DC feeds
- Impedance matching
- SiC or GaN high frequency / high power applications

WV (DC) VALUES AND TOLERANCES			
CAPACITOR MODEL	**A**	**B**	**UNIT**
Case Size	1204	2404	
Capacitance Values	5 to 50	10 to 100	pF
Tolerance	5	5	%
DC Working Voltage	100	100	V

STANDARD ELECTRICAL SPECIFICATIONS		
PARAMETER	**VALUE**	**UNIT**
Capacitance Range	5 to 100	pF
Absolute Tolerance, 1 kHz (1)	Down to ± 5	%
Absolute TCC, -55 ° to 125 °C	± 50	ppm/°C
Operating Temperature Range	-55 to +150	°C
Operating Voltage	100 max.	V
Dissipation Factor, 1 MHz	0.01 max.	
Absolute Value Stability, 1 kHz, 1000 h, 70 °C, 100 V_{DC}	± 0.25	%
Short Time Overload, 2 x Rated Voltage, 25 °C, 5 s	± 0.25	%
Thermal Shock, MIL-STD-202, Method 107 F	± 0.25	%
Moisture Resistance, MIL-STD-202, Method 106*	± 0.25	%
High Temperature Exposure, 100 h, 150 °C	± 0.25	%
Low Temperature Operation, -65 °C, 45 min, 100 V_{DC}	± 0.25	%

Note

(1) See table “Case Size Value and Tolerance”.

For technical questions, contact: efi@vishay.com

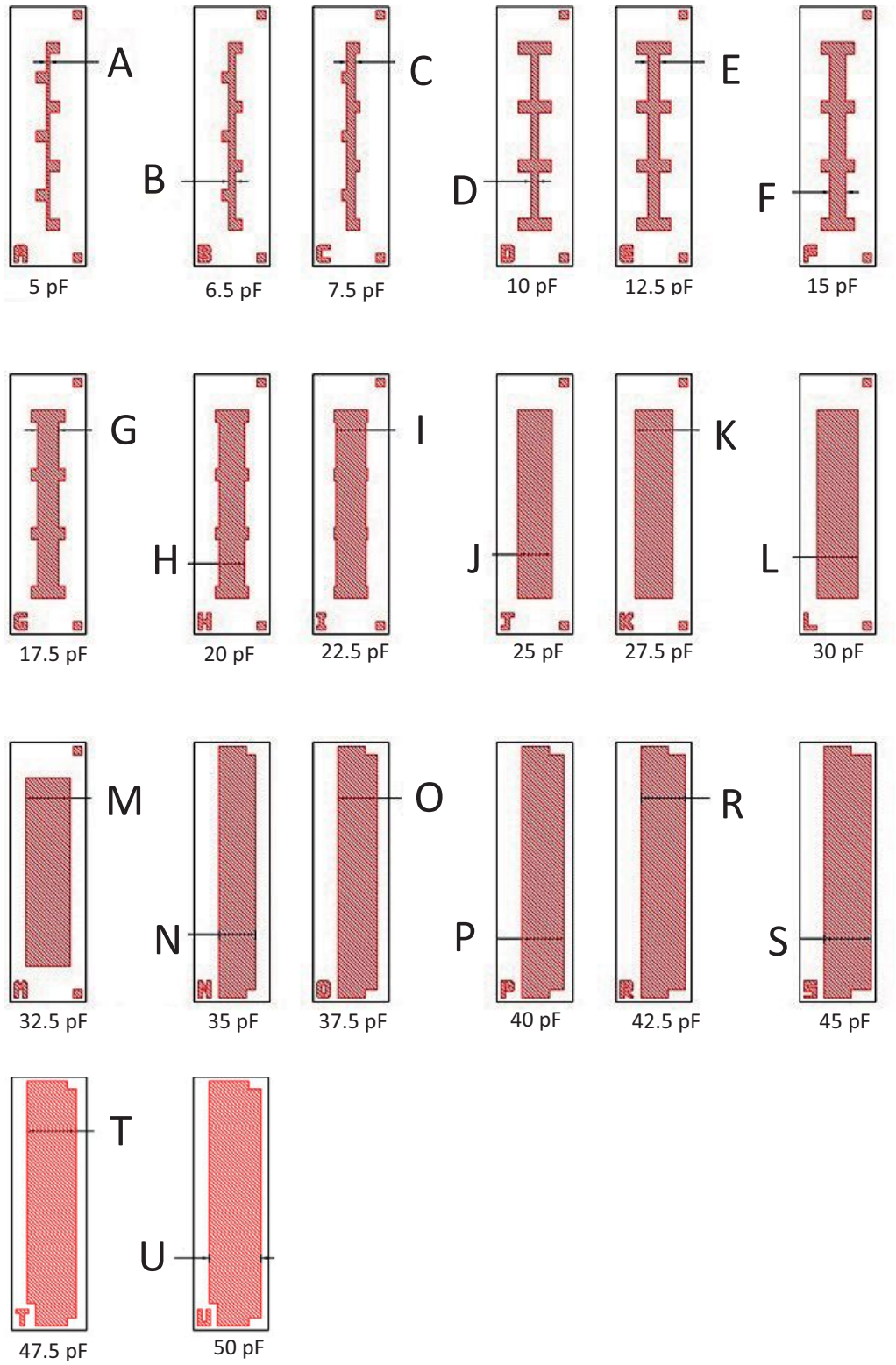
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

MECHANICAL SPECIFICATIONS	
PARAMETER	**VALUE**
Chip Substrate Material	Silicon
Dielectric	Silicon dioxide
Top Termination	Au 1 µm min.
Case Size	See table “Case Size Value and Tolerance”
Passivation	None
Number of Pads	1
Back Termination (Epoxy only)	TiW/Au

CASE SIZE VALUE AND TOLERANCE				
NOMINAL VALUE (pF)	**CASE TYPE A**	**CASE TYPE B**	**BEST TOLERANCE (± %)**	**MAX. OPERATING VOLTAGE (V)**
5	+	-	10	100
7.5	+	-	7	100
10	+	+	5	100
12.5	+	+	5	100
15	+	+	5	100
17.5	+	-	5	100
20	+	+	5	100
22.5	+	-	5	100
25	+	+	5	100
27.5	+	-	5	100
30	+	+	5	100
32.5	+	-	5	100
35	+	+	5	100
37.5	+	-	5	100
40	+	+	5	100
42.5	+	-	5	100
45	+	+	5	100
47.5	+	-	5	100
50	+	+	5	100
55	-	+	5	100
60	-	+	5	100
65	-	+	5	100
70	-	+	5	100
75	-	+	5	100
80	-	+	5	100
85	-	+	5	100
90	-	+	5	100
95	-	+	5	100
100	-	+	5	100

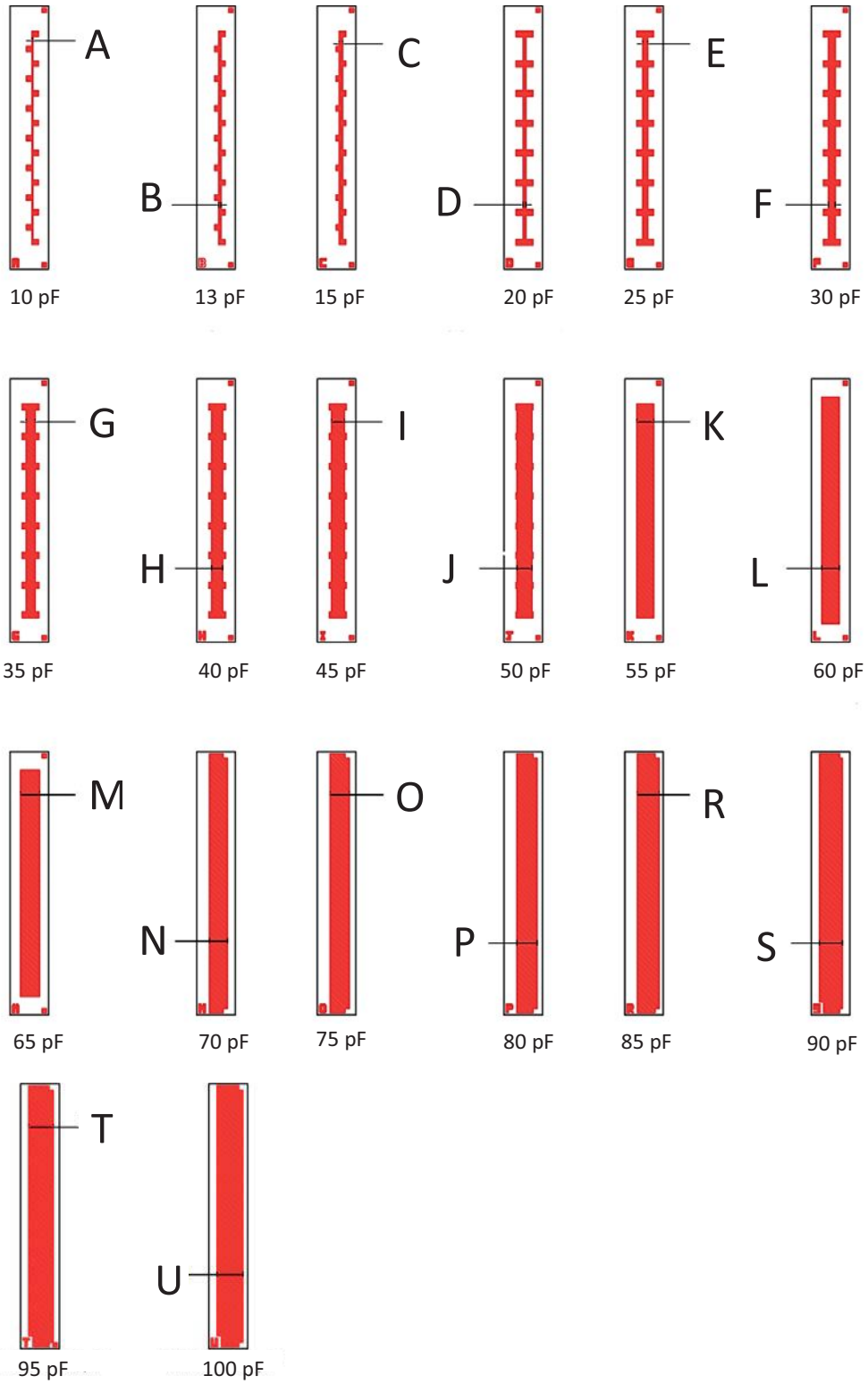
For technical questions, contact: efi@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

CASE SIZE A 0.12" x 0.035"



For technical questions, contact: efi@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

CASE SIZE B 0.24" x 0.035"



For technical questions, contact: efi@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

GLOBAL PART NUMBER INFORMATION

Global Part Number: BRCPA1000BKGCST
Global Part Number Description: BRCP 3 mm 10 pF 10 % Au C ST

B	R	C	P	A	1	0	0	0	B	K	G	C	S	T

MODEL	SIZE	CAPACITANCE (pF)	CAPACITANCE MULTIPLIER CODE	TOLERANCE CODE	TERMINATION	VISUAL CLASS	PACKAGING CODE
BRCP Bar Capacitor	**A** = 3 mm x 1 mm **B** = 6 mm x 1 mm	First 4 digits are significant figures of capacitance	**C** = 0.001 **B** = 0.01 **A** = 0.1	**J** = 5 % **K** = 10 % **M** = 20 % **L** = 25 %	**G** = Au **A** = Al	**C** = Commerical **E** = Electrical test only **H** = Class H **K** = Class K	**WS** = Waffle pack 100 min., 1 mult **FW** = Full wafer **HW** = Half wafer **ST** = Diced on tape

For technical questions, contact: efi@vishay.com

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay’s knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer’s responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer’s technical experts. Product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2017 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED