

Aluminum Capacitors + 125 °C, Non-Polar, Miniature



FEATURES

- Extended temperature range
- Exceptional capacitance stability
- Low DF
- Low DC leakage current
- Tantalum foil replacement
- Axial lead
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size Ø D x L in inches [mm]	0.296 x 1.000 [7.518 x 25.40] to 0.390 x 2.812 [9.906 x 71.425]
Operating temperature	- 55 °C to + 125 °C
Rated capacitance range, C _R	0.68 µF to 680 µF
Tolerance on C _R	- 10 %, + 50 %; - 10 %, + 75 %
Rated voltage range, U _R	7 WV _{DC} to 250 WV _{DC}
Termination	Axial leads
Life validation test 2000 h at + 125 °C	ΔCAP < 15 % from initial measurement ΔESR < 1.3 x initial specified limit ΔDCL < initial specified limit
Shelf life 500 h at + 125 °C	ΔCAP < 10 % from initial measurement ΔESR < 1.2 x initial specified limit ΔDCL < 2.0 x initial specified limit

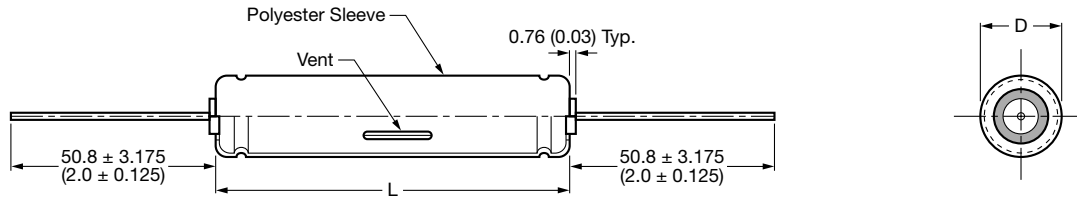
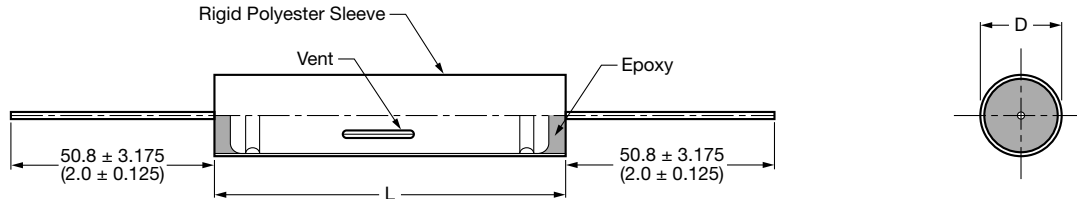
RIPPLE CURRENT MULTIPLIERS				
TEMPERATURE				
AMBIENT TEMPERATURE		MULTIPLIERS		
+ 100 °C		1.5		
+ 85 °C		2.0		
+ 65 °C		2.5		
FREQUENCY (Hz)				
WV _{DC}	50 TO 60	100 TO 120	300 TO 400	> 100K
6 to 60	0.85	1.0	1.10	1.15
61 to 250	0.83	1.0	1.15	1.20

LOW TEMPERATURE PERFORMANCE			
CAPACITANCE: The maximum allowable capacitance change with temperature from + 25 °C shall be in accordance with the following:			
RATED VOLTAGE AT + 125 °C	PERCENT CAPACITANCE CHANGE AT		
	- 55 °C	+ 85 °C	+ 125 °C
5 to 15	- 30	+ 15	+ 20
20 and up	- 25	+ 15	+ 20

DIMENSIONS in inches [millimeters]			
CASE CODE	WITH OUTER INSULATION		
	DIAMETER	LENGTH ⁽¹⁾ (max.)	TYPICAL WEIGHT (g)
KD	0.297 ± 0.031 [7.54 ± 0.79]	1.000 [25.40]	1.90
DE	0.390 ± 0.031 [9.92 ± 0.79]	1.187 [30.16]	3.90
DU	0.390 ± 0.031 [9.92 ± 0.79]	1.500 [38.10]	4.90
DL	0.390 ± 0.031 [9.92 ± 0.79]	2.187 [55.56]	7.00
DR	0.390 ± 0.031 [9.92 ± 0.79]	2.812 [71.42]	8.60

Note

⁽¹⁾ Style 2. For style 5, increase the maximum length by 0.125" [3.18 mm].

DIMENSIONS AND AVAILABLE FORMS
Style 2

Style 5


Lead diameter
No. 20 AWG (0.032" [0.813 mm] Dia.)

PART NUMBER INFORMATION
610D
TYPE

Identifies the series name.

476
CAPACITANCE

Expressed in pF. The first two digits are significant figures. The third is the number of zeros.

F
CAPACITANCE TOLERANCE

 F = - 10 %/+ 50 %
G = - 10 %/+ 75 %

007
DC VOLTAGE RATING

Expressed in volts. Zeros are used to precede the voltage rating (i.e. 007 = 7 V).

KD
CASE CODE

See table Dimensions

2
CASE STYLE

 2 = Polyester sleeve (std.)
5 = Polyester sleeve with resin end seal (required for exposure to halogenated cleaning solvents)

Note

- For lead (Pb)-free/RoHS compliant products add suffix "E3" to part number.
Example: 610D105F200KD2E3



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.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.