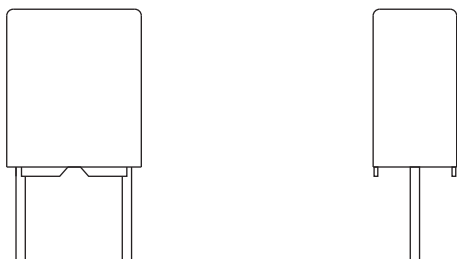




## AC and Pulse Metallized Polypropylene Film Capacitors MKP Radial Potted Type



### FEATURES

- 5 mm pitch
- Material categorization:  
for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### APPLICATIONS

Low losses due to low contact resistance and low loss dielectric make these products suitable for applications where high currents at high frequency occur or high stability is preferred.

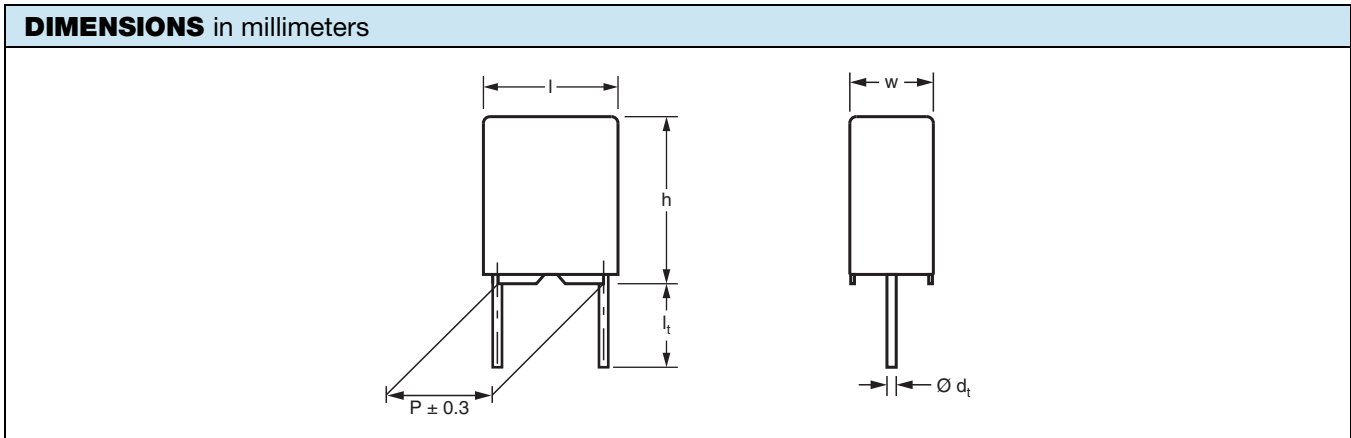


**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

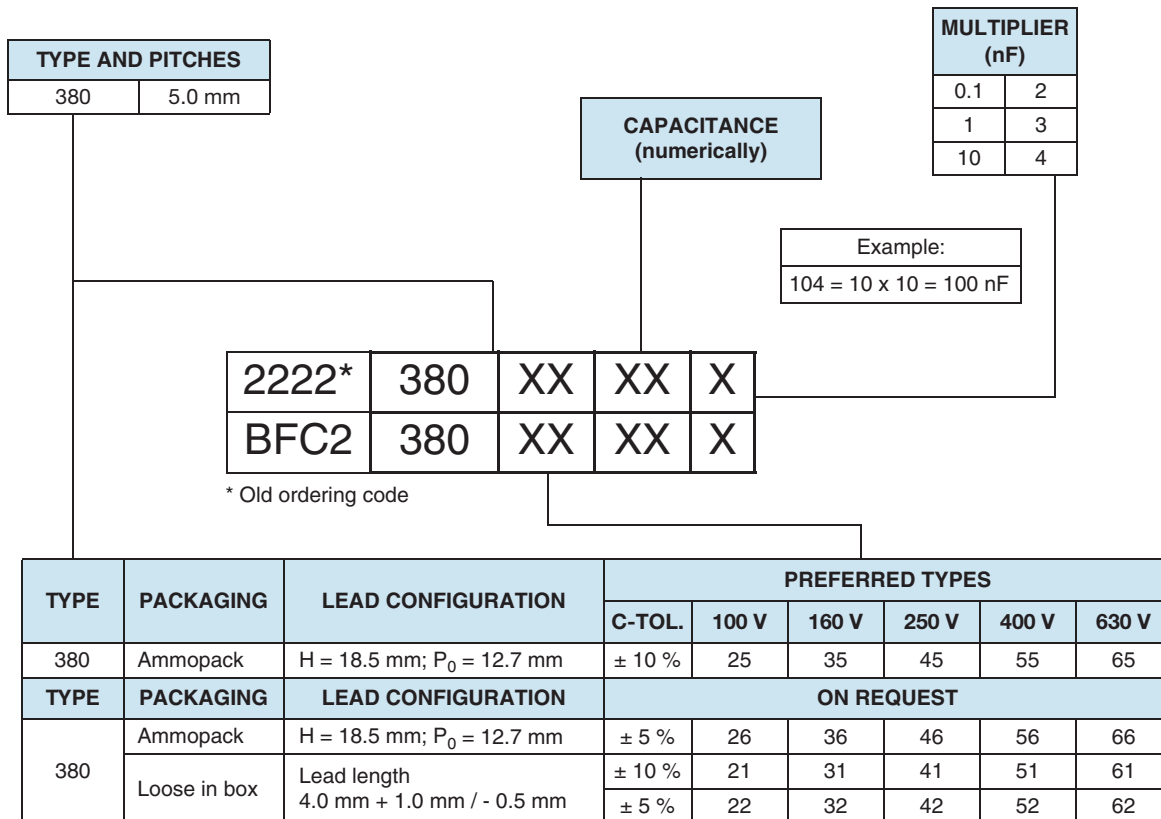
QUICK REFERENCE DATA	
Capacitance range (E24 series)	0.0022 $\mu$ F to 0.1 $\mu$ F
Capacitance tolerance	$\pm 10 \%$ , $\pm 5 \%$
Climatic category	55/085/56
Maximum application temperature	85 °C
Reference specifications	IEC 60384-17
Dielectric	Polypropylene film
Electrodes	Metallized film
Construction	Wound mono construction
Encapsulation	Flame retardant plastic case and epoxy resin UL-class 94 V-0
Leads	Tinned wire
Marking	C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; manufacturer's emblem; code for factory of origin; year and week of manufacture
Rated DC voltage	100 V <sub>DC</sub> ; 160 V <sub>DC</sub> ; 250 V <sub>DC</sub> ; 400 V <sub>DC</sub> ; 630 V <sub>DC</sub>
Rated AC voltage	63 V <sub>AC</sub> ; 100 V <sub>AC</sub> ; 160 V <sub>AC</sub> ; 200 V <sub>AC</sub>
Rated peak-to-peak voltage	180 V; 280 V; 450 V; 560 V
Rated temperature	85 °C
Performance grade	Grade 1 (long life)
Stability grade	Grade 2

### Note

- For more detailed data and test requirements contact: [dc-film@vishay.com](mailto:dc-film@vishay.com)



**COMPOSITION OF CATALOG NUMBER**





SPECIFIC REFERENCE DATA - 100 V <sub>DC</sub>		
DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:		
0.018 μF ≤ C ≤ 0.027 μF	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
0.027 μF < C ≤ 0.075 μF	≤ 10 x 10 <sup>-4</sup>	≤ 20 x 10 <sup>-4</sup>
0.075 μF < C ≤ 0.1 μF	≤ 10 x 10 <sup>-4</sup>	≤ 25 x 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 100 V (DC)	80 V/μs	
R between leads for C ≤ 1.0 μF at 100 V; 1 min	> 100 000 MΩ	
R between interconnected leads and case; 100 V; 1 min	> 100 000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA) <sup>(1)</sup> ; rise time 1000 V/s	160 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

**Note**

<sup>(1)</sup> See "Voltage Proof Test for Metalized Film Capacitors": [www.vishay.com/doc?28169](http://www.vishay.com/doc?28169)

ELECTRICAL DATA AND ORDERING CODE						
U <sub>RDC</sub> (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS <sup>(2)</sup> (g)	CATALOG NUMBER BFC2 380 ..... AND PACKAGING		
				AMMOPACK <sup>(1)</sup>		LOOSE IN BOX
				H = 18.5 mm, P <sub>0</sub> = 12.7 mm		I <sub>t</sub> = 4.0 mm + 1.0 mm / - 0.5 mm
				C-TOL. = ± 10 %	SPQ	SPQ
LAST 5 DIGITS OF CATALOG NUMBER						
PITCH = 5.0 mm ± 0.3 mm; d <sub>t</sub> = 0.50 mm ± 0.05 mm; U <sub>RAC</sub> = 63 V; U <sub>p-p</sub> = 180 V						
100	0.018	3.5 x 8.0 x 7.2	0.30	25183	1500	2000
	0.020			25203		
	0.022			25223		
	0.024			25243		
	0.027			25273		
	0.030			25303		
	0.033			25333		
	0.036			25363		
	0.039	25393	1000			
	0.043	25433				
	0.047	25473				
	0.051	25513				
	0.056	4.5 x 9.0 x 7.2	0.42	25563	750	
	0.062			25623		
	0.068			25683		
	0.075			25753		
0.082	6.0 x 11.0 x 7.2	0.64	25823			
0.091			25913			
0.100			25104			

**Notes**

- <sup>(1)</sup> H = in-tape height; P<sub>0</sub> = sprocket hole distance; for detailed specifications refer to packaging information
- <sup>(2)</sup> Weight for short lead product only
- SPQ = Standard Packing Quantity



SPECIFIC REFERENCE DATA - 160 V <sub>DC</sub>		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
0.013 μF ≤ C ≤ 0.027 μF	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
0.027 μF < C ≤ 0.068 μF	≤ 10 x 10 <sup>-4</sup>	≤ 20 x 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 160 V (DC)	80 V/μs	
R between leads for C ≤ 1.0 μF at 100 V; 1 min	> 100 000 MΩ	
R between interconnected leads and case; 100 V; 1 min	> 100 000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA) <sup>(1)</sup> ; rise time 1000 V/s	256 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

**Note**

<sup>(1)</sup> See "Voltage Proof Test for Metalized Film Capacitors": [www.vishay.com/doc?28169](http://www.vishay.com/doc?28169)

ELECTRICAL DATA AND ORDERING CODE						
U <sub>RDC</sub> (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS <sup>(2)</sup> (g)	CATALOG NUMBER BFC2 380 ..... AND PACKAGING		
				AMMOPACK <sup>(1)</sup>		LOOSE IN BOX
				H = 18.5 mm, P <sub>0</sub> = 12.7 mm		I <sub>t</sub> = 4.0 mm + 1.0 mm / - 0.5 mm
				C-TOL. = ± 10 %	SPQ	SPQ
				LAST 5 DIGITS OF CATALOG NUMBER		
PITCH = 5.0 mm ± 0.3 mm; d <sub>t</sub> = 0.50 mm ± 0.05 mm; U <sub>RAC</sub> = 100 V; U <sub>p-p</sub> = 280 V						
160	0.013	3.5 x 8.0 x 7.2	0.30	35133	1500	2000
	0.015			35153		
	0.016			35163		
	0.018			35183		
	0.020			35203		
	0.022			35223		
	0.024			35243	1000	
	0.027			35273		
	0.030			35303		
	0.033			35333		
	0.036	35363	750			
	0.039	35393				
	0.043	35433				
	0.047	35473				
0.051	4.5 x 9.0 x 7.2	0.42	35513	750	2000	
0.056			35563			
0.062			35623			
0.068			35683			

**Notes**

<sup>(1)</sup> H = in-tape height; P<sub>0</sub> = sprocket hole distance; for detailed specifications refer to packaging information

<sup>(2)</sup> Weight for short lead product only

- SPQ = Standard Packing Quantity



SPECIFIC REFERENCE DATA - 250 V <sub>DC</sub>		
DESCRIPTION	VALUE	
Tangent of loss angle: 0.0091 μF ≤ C ≤ 0.027 μF 0.027 μF < C ≤ 0.043 μF	at 10 kHz	at 100 kHz
	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
	≤ 10 x 10 <sup>-4</sup>	≤ 20 x 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 250 V (DC)	90 V/μs	
R between leads for C ≤ 1.0 μF at 100 V; 1 min	> 100 000 MΩ	
R between interconnected leads and case; 100 V; 1 min	> 100 000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA) <sup>(1)</sup> ; rise time 100 V/s	400 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

**Note**

<sup>(1)</sup> See "Voltage Proof Test for Metalized Film Capacitors": [www.vishay.com/doc?28169](http://www.vishay.com/doc?28169)

ELECTRICAL DATA AND ORDERING CODE						
U <sub>RDC</sub> (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS <sup>(2)</sup> (g)	CATALOG NUMBER BFC2 380 ..... AND PACKAGING		
				AMMOPACK <sup>(1)</sup>		LOOSE IN BOX
				H = 18.5 mm, P <sub>0</sub> = 12.7 mm		l <sub>t</sub> = 4.0 mm + 1.0 mm / - 0.5 mm
				C-TOL. = ± 10 %	SPQ	SPQ
				LAST 5 DIGITS OF CATALOG NUMBER		
PITCH = 5.0 mm ± 0.3 mm; d <sub>t</sub> = 0.50 mm ± 0.05 mm; U <sub>RAC</sub> = 160 V; U <sub>p-p</sub> = 450 V						
250	0.0091	3.5 x 8.0 x 7.2	0.30	45912	1500	2000
	0.010			45103		
	0.011			45113		
	0.012			45123		
	0.013			45133		
	0.015			45153		
	0.016			45163	1000	2000
	0.018			45183		
	0.020			45203		
	0.022			45223		
	0.024			45243		
	0.027			45273		
	0.030	45303	750	2000		
	0.033	45333				
	0.036	45363				
	0.039	45393				
	0.043	45433				
					45433	750
	4.5 x 9.0 x 7.2	0.42	45433	750	2000	

**Notes**

- <sup>(1)</sup> H = in-tape height; P<sub>0</sub> = sprocket hole distance; for detailed specifications refer to packaging information
- <sup>(2)</sup> Weight for short lead product only
- SPQ = Standard Packing Quantity



SPECIFIC REFERENCE DATA - 400 V <sub>DC</sub>		
DESCRIPTION	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz
0.0043 μF ≤ C ≤ 0.0091 μF	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
0.0091 μF < C ≤ 0.02 μF	≤ 10 x 10 <sup>-4</sup>	≤ 20 x 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 400 V (DC)	100 V/μs	
R between leads for C ≤ 1.0 μF at 100 V; 1 min	> 100 000 MΩ	
R between interconnected leads and case; 100 V; 1 min	> 100 000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA) <sup>(1)</sup> ; rise time 100 V/s	640 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

**Note**

<sup>(1)</sup> See "Voltage Proof Test for Metalized Film Capacitors": [www.vishay.com/doc?28169](http://www.vishay.com/doc?28169)

ELECTRICAL DATA AND ORDERING CODE						
U <sub>RDC</sub> (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS <sup>(2)</sup> (g)	CATALOG NUMBER BFC2 380 ..... AND PACKAGING		
				AMMOPACK <sup>(1)</sup>		LOOSE IN BOX
				H = 18.5 mm, P <sub>0</sub> = 12.7 mm		l <sub>t</sub> = 4.0 mm + 1.0 mm / - 0.5 mm
				C-TOL. = ± 10 %	SPQ	SPQ
				LAST 5 DIGITS OF CATALOG NUMBER		
PITCH = 5.0 mm ± 0.3 mm; d <sub>t</sub> = 0.50 mm ± 0.05 mm; U <sub>RAC</sub> = 200 V; U <sub>p-p</sub> = 560 V						
400	0.0043	3.5 x 8.0 x 7.2	0.30	55432	1500	2000
	0.0047			55472		
	0.0051			55512		
	0.0056			55562		
	0.0062			55622		
	0.0068			55682		
	0.0075			55752		
	0.0082			55822		
	0.0091	55912	1000			
	0.010	55103				
	0.011	55113				
	0.012	55123				
	0.013	4.5 x 9.0 x 7.2	0.42	55133	750	
	0.015			55153		
	0.016			55163		
	0.018			55183		
0.020	6.0 x 11.0 x 7.2	0.64	55203			

**Notes**

- <sup>(1)</sup> H = in-tape height; P<sub>0</sub> = sprocket hole distance; for detailed specifications refer to packaging information
- <sup>(2)</sup> Weight for short lead product only
- SPQ = Standard Packing Quantity



SPECIFIC REFERENCE DATA - 630 V <sub>DC</sub>		
DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:		
0.0015 μF ≤ C ≤ 0.0091 μF	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
0.0091 μF < C ≤ 0.01 μF	≤ 10 x 10 <sup>-4</sup>	≤ 15 x 10 <sup>-4</sup>
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 630 V (DC)	120 V/μs	
R between leads for C ≤ 1.0 μF at 500 V; 1 min	> 100 000 MΩ	
R between interconnected leads and case; 500 V; 1 min	> 100 000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA) <sup>(1)</sup> ; rise time 1000 V/s	880 V; 1 min	
Withstanding (DC) voltage between leads and case	2840 V; 1 min	

**Note**

<sup>(1)</sup> See "Voltage Proof Test for Metalized Film Capacitors": [www.vishay.com/doc?228169](http://www.vishay.com/doc?228169)

ELECTRICAL DATA AND ORDERING CODE						
U <sub>RDC</sub> (V)	CAP. (μF)	DIMENSIONS w x h x l (mm)	MASS <sup>(2)</sup> (g)	CATALOG NUMBER BFC2 380 ..... AND PACKAGING		
				AMMOPACK <sup>(1)</sup>		LOOSE IN BOX
				H = 18.5 mm, P <sub>0</sub> = 12.7 mm		I <sub>t</sub> = 4.0 mm + 1.0 mm / - 0.5 mm
				C-TOL. = ± 10 %	SPQ	SPQ
LAST 5 DIGITS OF CATALOG NUMBER						
PITCH = 5.0 ± 0.3 mm; d <sub>t</sub> = 0.50 ± 0.05 mm; U <sub>RAC</sub> = 200 V; U <sub>p-p</sub> = 560 V						
630	0.0022	3.5 x 8.0 x 7.2	0.30	65222	1500	2000
	0.0024			65242		
	0.0027			65272		
	0.0030			65302		
	0.0033			65332		
	0.0036			65362		
	0.0039			65392		
	0.0043			65432		
	0.0047	65472				
	0.0051	65512				
	0.0056	65562				
	0.0062	65622	750			
	0.0068	65682				
	0.0075	65752				
	0.0082	65822				
	0.0091	65912				
0.010	65103					
		4.5 x 9.0 x 7.2	0.42			

**Notes**

<sup>(1)</sup> H = in-tape height; P<sub>0</sub> = sprocket hole distance; for detailed specifications refer to packaging information

<sup>(2)</sup> Weight for short lead product only

- SPQ = Standard Packing Quantity



## 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.**





Поставка электронных компонентов

**Юридический адрес организации:**  
198099, г. Санкт-Петербург, ул. Калинина, дом 2, кор. 4, лит А.  
**Фактический адрес организации:**  
198099, г. Санкт-Петербург, ул. Калинина, дом 2, кор. 4, лит А.  
ИНН 780277764  
КПП 780501001  
Р/С 40702810422510004035 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в Санкт-Петербурге К/С 30101810900000000703  
БИК 044030703  
**Телефон:** 8 (812) 309-44-11 (многоканальный)  
**Факс:** 8 (812) 309-44-11  
**Электронная почта:** [sales@timechips.ru](mailto:sales@timechips.ru)  
**Сайт:** [timechips.ru](http://timechips.ru)

## Информационное письмо

Компания «ТаймЧипс» - одна из наиболее динамично развивающихся компаний в сфере поставок электронных компонентов. Мы поставляем широкую номенклатуру электронных компонентов отечественных и импортных производителей, как напрямую, так и с крупных мировых складов, позволяющих охватить выборочную номенклатуру более 300 брендов, а также специализируемся на поставках дисплеев и является официальным дистрибьютором компании Shenzhen Startek Electronic Technology Co, на территории Российской Федерации.

Наличие собственной логистики позволяет в кратчайшие сроки доставлять товар нашим клиентам. В нашей компании имеется Конструкторский отдел, где наши специалисты проводят технические консультации клиентов, квалифицированную поддержку и помощь российским разработчикам. Осуществляем Поставки импортной продукции под контролем ВП МО РФ, на предприятия Оборонно-промышленного комплекса России. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001-2011.

Благодаря нацеленности на результат, мы уверенно занимаем новые позиции на рынке, заинтересовывая Клиента не только актуальными ценами и гибким подходом, но и постоянным вниманием.

**Миссия** – обеспечение долгосрочного и взаимовыгодного партнерства с клиентами.

**Наша цель** – Обеспечение клиентам самого широкого ассортимента электронных компонентов и бесперебойности поставок.

**Мы - это развитие! Мы задаем темп! Мы разные, но вместе! Мы работаем для вас!**

Так же имеем прямые поставки от производителей:

TAI-SAW Пав-компоненты ([www.taisaw.com](http://www.taisaw.com))

TRANSCOM СВЧ-компоненты ([www.transcominc.com.tw](http://www.transcominc.com.tw))

Mini Circuits ВЧ-СВЧ-компоненты ([minicircuits.com](http://minicircuits.com))

SAMTEC- разъемы ([www.samtec.com](http://www.samtec.com))

4Star Разъемы РЧ (Даташиты по продукции 4Star, которые Вы сможете загрузить по этой ссылке: <https://yadi.sk/i/tPjnmGGrpmbYj>)

ULNION Преобразователи напряжения ([converterdc.com/](http://converterdc.com/))

**Отличные рекомендации на рынке, уверенность в качестве поставляемой продукции делают нас надежными партнерами для наших клиентов.**

**«ТаймЧипс» - это:**

- Гарантия качества поставляемой продукции;
- Широкий ассортимент;
- Минимальные сроки поставок;
- Техническая поддержка;
- Подбор комплектации;
- Индивидуальный подход;
- Гибкие цены.

**Модули, микросхемы, пассивные компоненты, Xilinx (XC), Altera (EP,EPF, EPM) и силовая электроника** – это наши ведущие позиции, на поставку которых мы гарантированно дадим Вам самые выгодные предложения!

**В структуру компании так же входит конструкторский отдел, который помогает разработчикам и конструкторам в решении следующих задач:**

- Оценка стоимости проекта по компонентам;
- Подбор оптимального решения при выборе компонента;
- Подбор аналогов;
- Техническая поддержка;
- Консультации у производителей;
- Поставка прототипов;

*С Уважением, Чернов Павел.*

*Руководитель отдела продаж ООО "ТАЙМЧИПС"*

*Официальный дистрибьютор Shenzhen Startek Electronic Technology Co.,Ltd в России (USB Display Modules , LED Displays, Serial Modules).*

<http://www.timechips.ru/>

<http://lcd-timechips.ru/>

**Телефон: +7 (812) 309-44-11 доб. 141**

**Факс: +7 (812) 309-44-11 доб. 152**

**Моб. Тел. +7 (905) 232-40-65**

**Skype: time.chips5**

**Электронная почта: [manager1@timechips.ru](mailto:manager1@timechips.ru)**

---