SPECIFICATION

APPROVAL SHEET



CUSTOMER:

PRODUCTS: S series -IGBT Snubber capacitor

CATEGORY: 1µF 630Vdc

ORDERING CODE: 105K631D21101

CUSTOMER CODE:

<u>DATE:</u> Jul 12th, 2022 (Ver 0)

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供方/VENDER		客戶 /CUSTONER		
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J.D Jul.12 th 2022	GQ.Y Jul. 12th, 2022	Contract		

Specification Revisions:

Revision Level	Revision Change	Date	Initials

CABO ELECTRONICS(FOSHAN) LIMITED

TEL: 86-757-8879 3288 FAX: 86-757-8619 7918 info@cabonix.com www.cabonix.com

A Hi-Reliability capacitor brand of China (FIDERT)

Failure Rate ≤50FIT | 100% Tested Before Delivery

技術圖紙請勿外傳!該產品引用了多項自主技術專利。CABO 保留追究一切技術圖紙外流損失的權利。 Confidential and invention patents are contained in CABO solution, disclosure or distribution of this specification is prohibited.

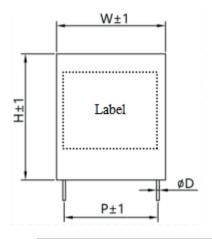


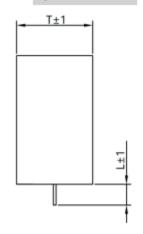
承認書

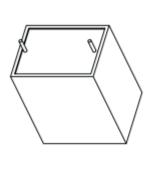
CABONIX

S series - IGBT Snubber Capacitor

1µF630Vdc Ordering code:105K631D21101







W(Width)	H(Height)	T(Thickness)	P(Pitch)	D(diameter)	L(Length)
31.5	23	13.5	27.5	0.8	5.5

Dimensions in mm, unspecified dimensions tolerance ±1mm

技術參數 Technical specification

Capacitance (Cn) 1μF Capacitance tolerance ±10%(K) Rated voltage (Un) 630Vdc RMS current (Irms) 6A @10kHz, 70°C Pulse current (Ip) 100A dv/dt>100V/μs ESR <35mΩ @10kHz Dissipation factor Tan θ≤0.0008 @1kHz ESL <1 nH per mm of lead spacing Insulation Resistance (Ri) Ri x C >30000s Operating Temperature (Tw) -40~85°C (Hotpot ≤105°C)* Storage temperature (Ts) -40~85°C** Work life 200,000 Hrs @Un, ≤70°C Humidity (RH) 0~90% Altitude <3500m Mechanical and test parameters Test voltage - terminals (Utt) 1008Vdc /10s Test voltage - terminal/case (Utc) 3000Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium separating (Dry type) Metallized PP film, self-healing	Electrical Characteristics				
Rated voltage (Un) 630Vdc RMS current (I_{rms}) 6A @10kHz, 70°C Pulse current (I_p) 100A dv/dt>100V/ μ s ESR $<35m\Omega$ @10kHz Dissipation factor Tan $\theta \le 0.0008$ @1kHz ESL <1 nH per mm of lead spacing Insulation Resistance (Ri) Ri x C >30000s Operating Temperature (Tw) -40~85°C (Hotpot ≤ 105 °C)* Storage temperature (Ts) -40~85°C** Work life 200,000 Hrs @Un, ≤ 70 °C Humidity (RH) 0~90% Altitude $<3500m$ Mechanical and test parameters Test voltage - terminals (Utt) 1008Vdc/10s Test voltage - terminal/case (Utc) 3000Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium $e^{0.0187}$ Metallized PP film, self-healing	Capacitance (Cn)	1μF			
RMS current (I_{rms}) Pulse current (I_p) ESR $35m\Omega$ @10kHz Dissipation factor Tan $\theta \le 0.0008$ @1kHz ESL $1 \text{ In H per mm of lead spacing}$ Insulation Resistance (R_i) Operating Temperature (T_w) Storage temperature (T_w) For age temperature (T_s) Work life $1 In Hospital of the model $	Capacitance tolerance	±10%(K)			
Pulse current (I_p) 100A dv/dt>100V/ μ s ESR $<35m\Omega$ @10kHz Dissipation factor Tan $\theta \le 0.0008$ @1kHz ESL <1 nH per mm of lead spacing Insulation Resistance (R_i) $R_i \times C > 30000s$ Operating Temperature (T_w) $-40 \sim 85^{\circ}$ C (Hotpot $\le 105^{\circ}$ C)* Storage temperature (T_s) $-40 \sim 85^{\circ}$ C** Work life 200,000 Hrs @Un, $\le 70^{\circ}$ C Humidity (RH) $0 \sim 90\%$ Altitude $<3500m$ Mechanical and test parameters Test voltage - terminals (U_{tt}) 1008 Vdc /10s Test voltage - terminal/case (U_{tc}) 3000 Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium $e^{0.018}$	Rated voltage (U _n)	630Vdc			
ESR Dissipation factor ESL InH per mm of lead spacing Insulation Resistance (Ri) Operating Temperature (Tw) Storage temperature (Ts) Work life Humidity (RH) Altitude Mechanical and test parameters Test voltage - terminals (Utt) Test voltage - terminal/case (Utc) ESR Signal (10kHz) Altitude Signal (10kHz) Altitude Signal (10kHz) 100,000 Hrs (200,000 Hrs (200,00	RMS current (I _{rms})	6A @10kHz, 70°C			
Dissipation factor ESL <1 nH per mm of lead spacing Insulation Resistance (R _i) Operating Temperature (T _w) Storage temperature (T _s) Work life Humidity (RH) Altitude Mechanical and test parameters Test voltage - terminals (Utt) Test voltage - terminal/case (Utc) Enclosure material Sealing materials Dislectric medium epails (Insulator) Tan 0≤0.0008 @1kHz C1 nH per mm of lead spacing R _i x C >30000s (Hotpot ≤105°C)* -40~85°C*** 200,000 Hrs @Un, ≤70°C -40~85°C*** 100,000 Hrs @Un, ≤70°C 100,000 Hrs @Un, ≤	Pulse current (Ip)	100A dv/dt>100V/μs			
SSL Signature	ESR	<35mΩ @10kHz			
Insulation Resistance (R _i) Operating Temperature (T _w) Storage temperature (T _s) Work life Humidity (RH) Altitude Mechanical and test parameters Test voltage - terminals (U _{tt}) Test voltage - terminal/case (U _{tc}) Enclosure material Sealing materials Dielectric medium Paramater R _i x C >30000s (Hotpot ≤105°C)* -40~85°C** 200,000 Hrs @Un, ≤70°C 0~90% 3500m 1008Vdc /10s 1008Vdc /10s 1008Vdc /10s Epoxy resin (Dry type) Metallized PP film, self-healing	Dissipation factor	Tan θ≤0.0008 @1kHz			
Operating Temperature (T _w) Storage temperature (T _s) Vork life Humidity (RH) Altitude O~90% Mechanical and test parameters Test voltage - terminals (Utt) Test voltage - terminal/case (Utc) Enclosure material Sealing materials Dielectric mediums Part (Hotpot ≤105°C)* -40~85°C (Hotpot ≤105°C)* -40~85°C (Hotpot ≤105°C)* 100,000 Hrs @Un, ≤70°C 100,	ESL	<1 nH per mm of lead spacing			
Storage temperature (T₅) Work life 200,000 Hrs @Un, ≤70°C Humidity (RH) Altitude O~90% Mechanical and test parameters Test voltage - terminals (Utt) Test voltage - terminal/case (Utc) Enclosure material Sealing materials Dielectric medium Part of the sealing self-healing Metallized PP film, self-healing	Insulation Resistance (R _i)	R _i x C >30000s			
Work life 200,000 Hrs @Un, ≤70°C Humidity (RH) 0~90% Altitude <3500m	Operating Temperature (T _w)	-40~85°C (Hotpot ≤105°C)*			
Humidity (RH) 0~90% Altitude <3500m Mechanical and test parameters Test voltage - terminals (Utt) 1008Vdc /10s Test voltage - terminal/case (Utc) 3000Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium **Patter** Metallized PP film, self-healing	Storage temperature (T₅)	-40~85℃**			
Altitude <3500m Mechanical and test parameters Test voltage - terminals (Utt) 1008Vdc /10s Test voltage - terminal/case (Utc) 3000Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium **Patter** Metallized PP film, self-healing	Work life	200,000 Hrs @Un, ≤70°C			
Mechanical and test parameters Test voltage - terminals (Utt) 1008Vdc /10s Test voltage - terminal/case (Utc) 3000Vac /60s Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium epathar r. Metallized PP film, self-healing	Humidity (RH)	0~90%			
Test voltage - terminals (Utt) Test voltage - terminal/case (Utc) Enclosure material Sealing materials Dielectric medium Patter F. Metallized PP film, self-healing	Altitude	<3500m			
Test voltage - terminal/case (Utc) Enclosure material Sealing materials Dielectric medium Pathar Metallized PP film, self-healing	Mechanical and test parameters				
Enclosure material Plastic shell Sealing materials Epoxy resin (Dry type) Dielectric medium epaular (Dry type) Metallized PP film, self-healing	Test voltage - terminals (Utt)	1008Vdc/10s			
Sealing materials Epoxy resin (Dry type) Dielectric medium epather Metallized PP film, self-healing	Test voltage - terminal/case (Utc)	3000Vac /60s			
Dielectric medium epaular. Metallized PP film, self-healing	Enclosure material	Plastic shell			
Dielectric medium epaums r. Metallized PP film, self-healing		Epoxy resin (Dry type)			
	Dielectric medium	Metallized PP film, self-healing			
Cooling mode Nature cooling	Cooling mode	Nature cooling			
Fire resistance UL 94 V-0	Fire resistance	UL 94 V-0			

^{+85°}Cto +105° (Esse):decreasing factor (S%) per °C for Un(do)

CM KONTO CABO Electronics (Foshan) Ltd.



^{**} The storage temperature must <105°C, and the work lifetime based on the storage temperature -40°C +80°C. E | | | |

SPECIFICATION



承認書

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引用標準 Reference standard

IEC61071-1/2, IEC60664-1:2007, UL94, CABO standard

包裝與運輸 Packing and shipment

The capacitors are packed into a cardboard box, any kinds of shipment are permitted. But the sprinkle of rain or snow and mechanical damage must be avoided.

標識 Marking

The capacitor is marked by laser print or stamp or adhesive label, With following information:

- 1.Rated capacitance value(1µF)
- 2.Rated voltage(630Vdc)
- 3. Tolerance on rated capacitance(K: ±10%)
- 4.Part number(Code for ordering 105K631D21101)
- 5.Trace code and serial number(MFR-WEEK-SN)



1μF ±10% 630Vdc 105K631D21101 MFR-WEEK-SN WWW.CABONIX.COM

提醒和警示 Cautions and Warnings

- (1) The capacitor have not discharge resistors between terminals, so the energy stocked in the capacitor may be lethal, before handle capacitors please discharge through resistor, short-circuit the capacitor is not permit.
- Check thickness of the connections/terminals periodically.
- (3) Do not use or store capacitors in corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. In the dusty environment regular maintenance and cleaning especially of the terminals is required to avoid conductive path between phases.
- (4) All the data measured at Room Temperature(R.T. 23±8℃) unless otherwise specified.
- (5) CABO is not responsible for any damages, which are caused by the improper installation and application. Before using the capacitor in any application, please read carefully this technical data-sheet.
- (6) Specifications are subject to change without prior notice. Don't hesitate to contact us for any doubts and more detail information.





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