

Power Electronic Capacitors

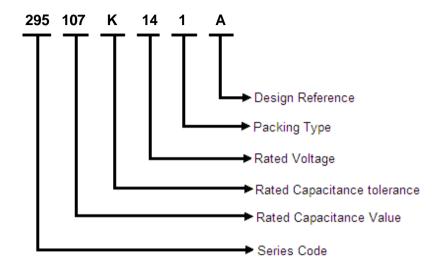
SERIES TYPE: METALLIZED POLYPROPYLENE AC FILTER CAPACITOR-Single phase

Series Code: 295

Date: November 2024



Item Code Description



Rated Capacitance

Three-digit (224) indicate rated capacitance in Pico Farad (First two digits indicate value & third digit indicates Number of zeroes to be suffixed to first two digits).

For example:

103 = 10 ×	10 ³	= 10000 pF	=	10 nF	=0.01 μF
$104 = 10 \times$	10 ⁴	= 100000 pF	=	100 nF	=0.1 μF
105 = 10 ×	10 ⁵	= 1000000 pF	=	1000 nF	=1 μF
106 = 10 ×	10 ⁶	= 10000000 pF	=	10000 nF	=10 μF

Capacitance Tolerance

$$F = \pm 1\%$$
, $G = \pm 2\%$, $H = \pm 2.5\%$, $I = \pm 3.5\%$, $J = \pm 5\%$, $K = \pm 10\%$, $L = \pm 15\%$, $M = \pm 20\%$, $N = \pm 40\%$

Rated Voltage

One digit and one letter (2A) or two digits (05) indicate rated voltage

Rated Voltage Codification

For AC Rated Voltage(VRMs)													
01	02	03	04	05	06	07	80	09	10	11	12	13	14
190	250	275	305	310	440	500	600	700	63	230	330	400	450
15	16	17	18	19	20	21	22	23	24	25	26	27	
350	300	415	420	460	480	530	660	720	780	850	900	1000	



General data

Typical Application

- UPS
- Wind Power
- Variable Frequency Drives
- Inverter

Construction

- Dielectric: Metallized Polypropylene Film
- Self-Healing Property
- Wound capacitor Technology
- Aluminum can
- Mounting and Grounding: Stud on bottom of Can
- Non PCB, Soft Polyurethane resin

Features

- Compact size
- Low Loss
- Low ESR and ESL
- Low leakage current
- Safety device: Over Pressure disconnector
- IP00, IP20

Reference Standard

■ IEC 61071, IEC 60831

Climatic Category

40/70/21

Terminals

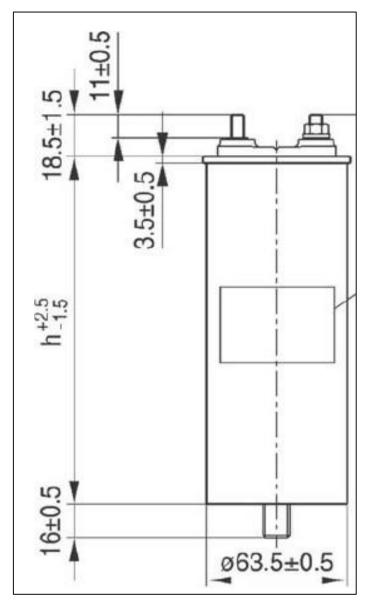
295 series: M6 Stud

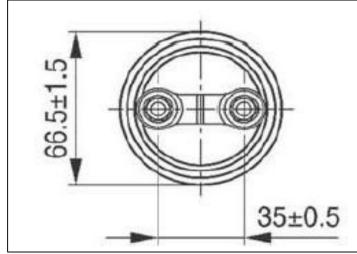
Technical data

Max. Operating Temperature	+70°C
Min. Operating temperature	-40°C
Max. Hotspot temperature	+85°C
Rated Capacitance CR	5600μF (Upon request)
Rated Voltage VR	Upto 1000V AC
Voltage proof(VT-T)	2.15xVRMS, 2s
Voltage proof(VT-C)	4000VAC for 10sec
Dissipation factor tan δ (100Hz)	≤0.001
Life Test	Acc. To IEC 61071-2017
Tolerance	J, ±5%
Degree of Protection	IP00, IP20
Max. permissible altitude	2000m MSL
Safety device	Over pressure disconnector
Max. current(IRMS)	Refer to the chart
Self Inductance(ESL)	Refer to the chart
Service Life at VRMS @ 85°C Hotspot	100000Hrs*

^{*}For conversion at different hotspot temperature and Voltage please see graph







Series 295: M6 Stud with bottom stud for Mounting

Installation Space requirements:

- A minimum distance of 20 mm between the capacitors is necessary to maintain cooling.
- Keep at least 20 mm space above the capacitor and do not attach any mounting components at the crimp or on top to allow proper lateral extension in order to ensure that the over pressure disconnector can fully extend.



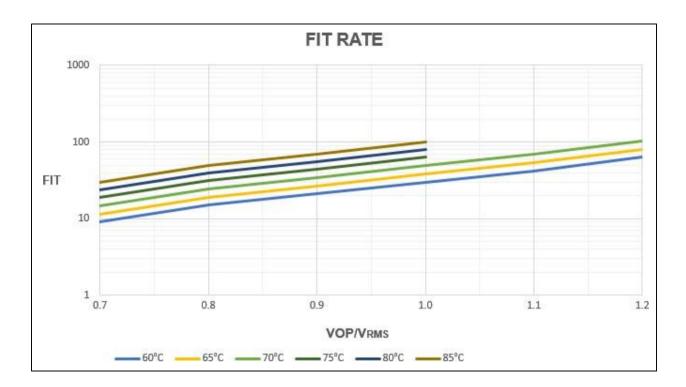
Series 295 - M6 Stud

VR/VRMS	CR(µF)	Irms (A)	Inoak(kA)	D	Н	Item Code
(V)		, ,	lpeak(kA)	mm	mm	
350/250	50	23	1250	63.5	70.5	295 506 J 02 1 *
	60	24	1500	63.5	70.5	295 606 J 02 1 *
	70	25	1600	63.5	70.5	295 706 J 02 1 *
	75	25.5	1400	63.5	70.5	295 756 J 02 1 *
	80	26	1450	63.5	82.5	295 806 J 02 1 *
	100	27.5	1650	63.5	82.5	295 107 J 02 1 *
	130	28	1500	63.5	107.5	295 137 J 02 1 *
	150	30	1600	63.5	132.5	295 157 J 02 1*
	200	30	1750	63.5	132.5	295 207 J 02 1 *
	30	19.5	940	63.5	70.5	295 306 J 12 1 *
	40	21.5	1250	63.5	70.5	295 406 J 12 1 *
	50	23	1100	63.5	82.5	295 506 J 12 1 *
400/000	60	24	1095	63.5	92.5	295 606 J 12 1*
460/330	70	24.5	1000	63.5	107.5	295 706 J 12 1 *
	80	25	1150	63.5	107.5	295 806 J 12 1 *
	100	25.5	1050	63.5	132.5	295 107 J 12 1 *
	120	27.5	1160	63.5	142.5	295 127 J 12 1 *
	10	12.5	350	63.5	70.5	295 106 J 18 1 *
	15	15	530	63.5	70.5	295 156 J 18 1 *
	20	17	710	63.5	70.5	295 206 J 18 1 *
	25	18.5	890	63.5	70.5	295 256 J 18 1 *
	30	20	1050	63.5	70.5	295 306 J 18 1 *
590/420	40	22	760	63.5	82.5	295 406 J 18 1 *
	50	23	1230	63.5	97.5	295 506 J 18 1 *
	60	24	1000	63.5	107.5	295 606 J 18 1 *
	70	25	1030	63.5	117.5	295 706 J 18 1 *
	80	25	990	63.5	132.5	295 806 J 18 1 *
	100	26	1120	63.5	142.5	295 107 J 18 1 *
	10	13	400	63.5	70.5	295 106 J 20 1 *
	15	15.5	600	63.5	70.5	295 156 J 20 1 *
	20	17	800	63.5	70.5	295 206 J 20 1 *
	25	18.5	750	63.5	82.5	295 256 J 20 1 *
680/480	30	20	880	63.5	82.5	295 306 J 20 1 *
	40	21.5	760	63.5	107.5	295 406 J 20 1 *
	50	23	960	63.5	107.5	295 506 J 20 1 *
	60	23.5	850	63.5	132.5	295 606 J 20 1 *
	70	24	900	63.5	142.5	295 706 J 20 1 *
750/530	10	13	470	63.5	70.5	295 106 J 21 1 *
	20	18	680	63.5	82.5	295 206 J 21 1 *
	30	20	650	63.5	107.5	295 306 J 21 1 *
	40	21.5	760	63.5	117.5	295 406 J 21 1 *
	50	23	800	63.5	132.5	295 506 J 21 1 *
	10	13	520	63.5	70.5	295 106 J 08 1 *
850/600	20	17.5	695	63.5	92.5	295 206 J 08 1 *
830/600	30	20	730	63.5	107.5	295 306 J 08 1 *
	40	21.5	720	63.5	132.5	295 406 J 08 1 *



Expected FIT Rate at different hotspot temperature and Voltage

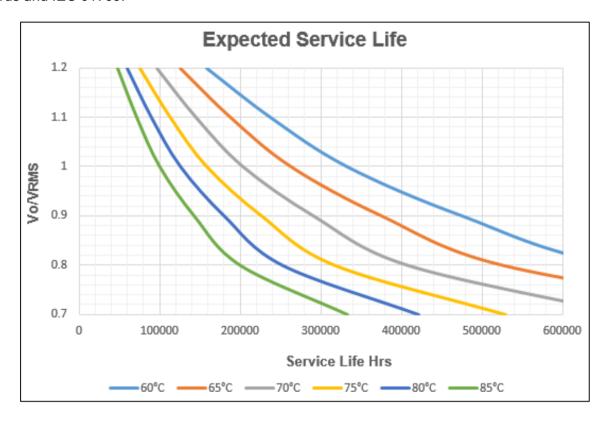
The Expected Failure rate are typical theoretical values derived from lifetime tests. The FIT (Failure in Time) of a component is defined as the number of expected failures in 10^9 hours of operation.





Service life expectancy at different hotspot temperature and Voltage

Lifetime estimations are typical theoretical values derived from lifetime tests based on Deki's internal standards and IEC 61709.



Disclaimer

All our capacitors are designed, manufactured and tested to specifications. We strictly adhere to standards in procurement of materials, in the laid down manufacturing processes and consistently apply stringent process controls and testing parameters. This ensures that our capacitors always perform to the offered specifications. Appropriateness of use in a specific circuit and fitness to a particular application however needs to be verified and its reliability through expected lifetime is required to be validated by the customer. Deki's responsibility is limited to ensuring that the capacitor performs as claimed in the specification/ data sheets provided by Deki. Deki specifically disclaims any implied warranties of fitness for any particular purpose. Liability, in any case is limited to the price paid for the capacitors.