



智新电子（厦门）有限公司

JIMSON ELECTRONICS (XIAMEN) CO.,LTD.

规 格 书

SPECIFICATION

☆客户名称

CUSTOMER: Mobicon

☆产品名称

PROD NAME: 电容器/Capacitor

☆类别

TYPE: MKP

☆规格

DESCRIPTION: 4.7uF K 275VAC

☆日期

DATE: 2012-07-16

File NO:JS-S120716077

1. SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE
Capacitance	4.7 μ F
Capacitance Tolerance	K= \pm 10%
Rated Voltage (UR)	275VAC (50/60Hz)
Climate Catalogue	40/100/21(GMF)
Dissipation Factor	\leq 0.1% (pp) (at 20 $^{\circ}$ C 1KHz)
Voltage Proof	4.3*UR VDC (1 minute at 20 $^{\circ}$ C and RH<65%)
Coating	Encapsulated in reinforced flame retardant plastic case sealed with epoxy resin meeting the requirement of UL94V-0
Dielectric	Polypropylene film
Leads	Radial leads of tinned wire or flexile wire
Reference Standard	IEC 384-14(3nd, 2005), UL1283, UL1414
Insulation Resistance	$C \leq 0.33\mu$ F IR \geq 15,000M Ω $C > 0.33\mu$ F IR*C \geq 5,000S (1 minute at 20 $^{\circ}$ C and RH65%)
Endurance	The test voltage 125% shall be applied for 1000 hours in the 85 $^{\circ}$ C chamber. During this period, 1000VAC 60Hz for 0.1sec be applied once each hour. After the test: $\Delta C/C \leq 10\%$ $\Delta DF \leq 0.8\%$ (C \leq 1 μ F) $\Delta DF \leq 0.5\%$ (C > 1 μ F) IR \geq 50% of the specified value; (at 20 $^{\circ}$ C 1KHz)

2.CONSTRUCTION:

- Description: Low-inductive wound coil of metallized polypropylene (pp) film, potted with epoxy resin in a flame-retardant case.
- Connection: Metal spray layer (Zn & Zn/Sn Alloy);
- Lead: Solder-coated copper plate steel wire.

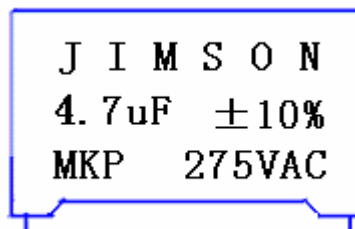
3.FEATURE:

- High stability of capacitance and DF versus wide temperature and frequency range ;
- High transient endurance and high dielectric strength ;
- Real long-term stability;
- Withstanding over-voltage stressing.

4.APPLICATION:

- Line-by-pass;
- Antenna coupling;
- Across- the-line, Spark killer;
- FMI filter;
- Switching power supply.

5.THE MARKING:



印字格式
print

Those marking include:

- Manufacturer: JIMSON
- Manufacturer's type designation: MKP
- Rated capacitance in uF, such as 4.7μF
- Tolerance on rated capacitance: K=±10%
- Rated voltage (AC), such as 275V
- Safety approvals: Products will be marked with all approvals which have been achieved. (shown in 2.)
- Reference standard: IEC384-14.

ENEC Approved Country 、 Certification Bodies and ENEC Codes

No	Country	Certification Body	No.	Country	Certification Body
01	Spain	AENOR	13	Switzerland	SEV
02	Belgium	CEBEC	14	Sweden	SEMKO
03	Italy	IMQ	15	Denmark	DEMKO
04	Portugal	CERTIF	16	Finland	FIMKO
05	Holland	KEMA	17	Norway	NEMKO
06	Ireland	NSAI	18	Hungary	MEEI
07	Luxembourg	SEE	19	England	BEAB
08	France	LCIE	20	England	ASTA
09	Greece	ELOT	21	Czech Republic	EZU
10	Germany	VDE	22	Slovenia	SIQ
11	Austria	OVE	24	Germany	TUV Rheinland
12	England	BSI	25	Korea	EK

6.HOW TO DESCRIBE JIMSON CAPACITOR

MKP 475 K 275VAC X R
 Type capacitance tolerance rated voltage pitch lead

■ **TYPE:** MKP

■ **CAPACITANCE:**

The rated capacitance value of the product is indicated with three digits. The first two digits indicate the two most significant digits of capacitance value, and the third digit gives the number of following zeroes. This gives the capacitance value expressed in Pico farad.

For example:

$10^2 = 10 \times 10^2 \text{pF} = 1000 \text{pF} = 1 \text{nF} = 0.001 \mu\text{F}$
 $15^3 = 15 \times 10^3 \text{pF} = 15000 \text{pF} = 15 \text{nF} = 0.015 \mu\text{F}$
 $22^4 = 22 \times 10^4 \text{pF} = 220000 \text{pF} = 220 \text{nF} = 0.22 \mu\text{F}$
 $33^5 = 33 \times 10^5 \text{pF} = 3300000 \text{pF} = 3300 \text{nF} = 3.3 \mu\text{F}$

■ CAPACITANCE UNIT:

$1\text{F} = 1,000\text{mF} = 1,000,000\mu\text{F} = 1,000,000,000\text{nF} = 1,000,000,000,000\text{pF}$

■ SYMBOL OF CAPACITOR TOLERANCE

SYMBOL	B	C	D	F	G	H	I	J	K	M	N	V	Z
TOLERANCE PERCENTAGE %	± 0.1	± 0.2	± 0.5	± 1.0	± 2.0	± 2.5	± 3.0	± 5.0	± 10	± 20	± 30	20 -10	+80 -20

■ SYMBOL OF RATED VOLTAGE

	A	B	C	D	E	F	G	H	J	K
1								50	63	80
2	100	125	160	200	250	315	400	500	630	800
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000

For example:

$1\text{J} = 63\text{V}; 2\text{E} = 250\text{V}; 3\text{D} = 2000\text{V}$

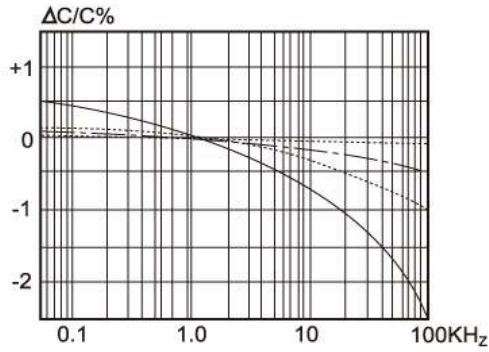
■ PITCH

E	J	N	R	S	T	V	W	X
5.0	7.5	10.0	15.0	17.5	20.0	22.5	27.5	Others

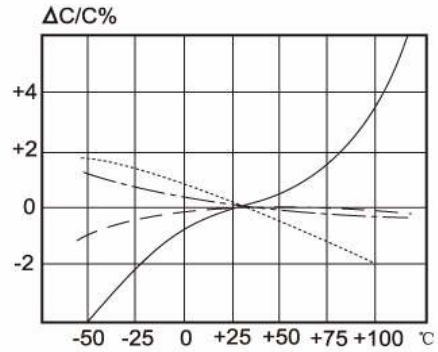
■ LEAD

R	F	C	B	O
Rigid	Flexible	Cut	Crimped	Others

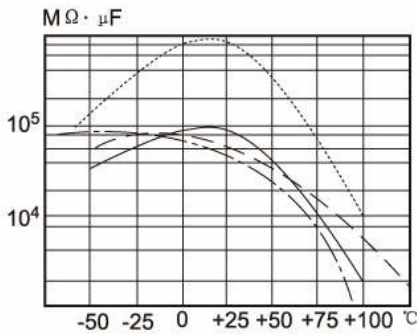
7. PROPERTIES OF CAPACITOR AND THE DIELECTRICS:



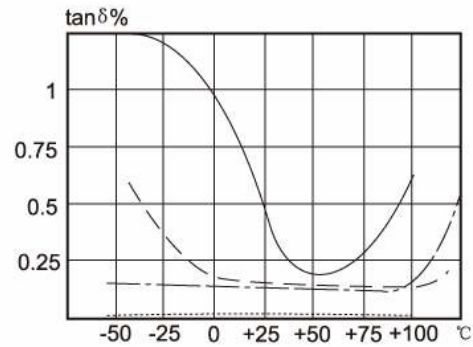
Capacitance vs.Frequency
容量与频率



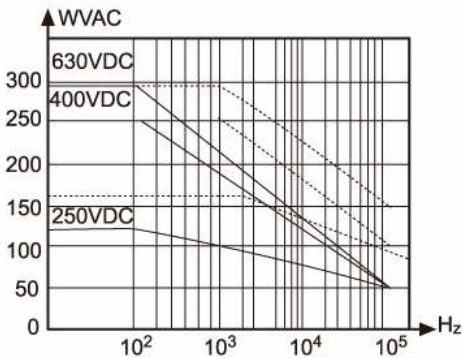
Capacitance vs.Temperature
容量与温度



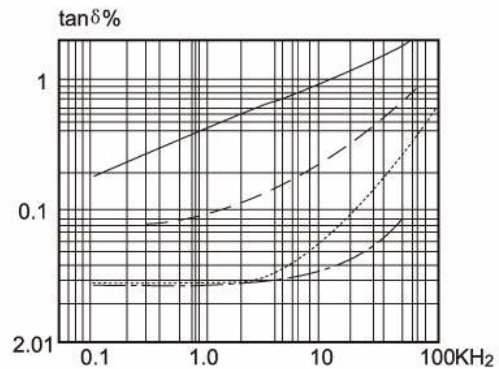
Insulation resistance vs.Temperature
绝缘电阻与温度



Dissipation factor vs.Temperature
损耗与温度



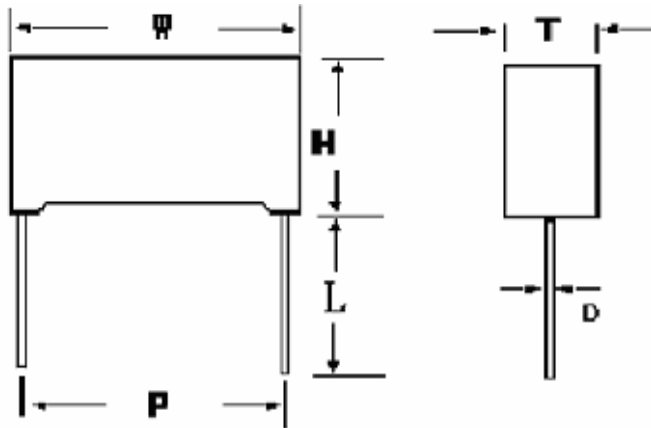
Working Voltage DC&AC vs.Frequency
工作电压直流交流与频率



Dissipation factor vs.Frequency
损耗与频率

—————	聚酯	Polyester
.....	聚丙烯	Polypropylene
-----	聚碳酸脂	Polycarbonate
- - - - -	聚苯乙烯	Polystyrene

8. OUTLINE DRAWING:



10. DIMENSION:

Unit: mm

SYMBOL	CAP	COLOR	W ±0.5	H ±0.5	T ±0.5	P ±1.0	D ±0.05	L ±5
475K275VAC	4.7uF	Yellow	49.0	30.0	20.0	41.5	0.8	25.0

THE END

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