EMI Suppressors Impregnated Paper

PMZ2074 EMI Capacitors, 2xX2 with One Common Terminal, 275VAC

Construction

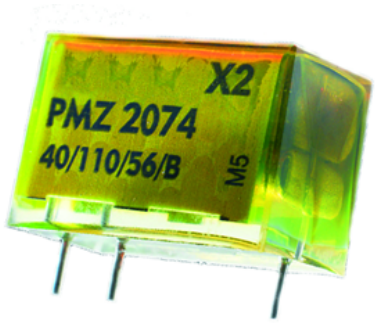
Multilayer metallized paper encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94V-0.

Benefits

- Approvals: ENEC
- Rated Voltage: 275VAC 50/60Hz
- Capacitance: 150nF + 33nF, 150nF + 47nF, 150nF + 68nF, 220nF + 82nF, 220nF + 100nF
- Pitch: 20.3 mm
- Capacitance Tolerance: ± 20%, ± 10%
- Climatic Category: 40/110/56/B, IEC 60068-1
- Tape and reel packaging in accordance with IEC 60286-2
- RoHS compliance and lead-free terminations
- Operating temperature range of -40˚C to +110˚C
- 100% screening factory test at 2150VDC
- Highest possible safety regarding active and passive flammability
- Excellent self-healing properties ensure long life even when subjected to frequent overvoltages
- Good resistance to ionization due to impregnated paper dielectric
- High dU/dt capability
- Impregnated paper ensures excellent stability and reliability properties, particularly in applications with continuous operation

Applications

For worldwide use as an electromagnetic interference suppressor in all X2, across-the-line applications or other demanding applications where two capacitors are utilized in series.



Ordering Information

PMZ2074	M	C	615	K	533	M	R30
Series	Rated Voltage	Pitch	Capacitance Code (pF)	Capacitance Tolerance	Capacitance Code (pF)		Packing Option & Leadform
Double Capacitor X2, Metallized Paper	M = 275VAC	C = 20.3	Digits 2-3 indicate the first three digits of the C_1 capacitance value. First digit indicates the total number of digits in the capacitance value.	K = ±10% M = ±20%	Digits 2-3 indicate the first three digits of the C_2 capacitance value. First digit indicates the total number of digits in the capacitance value.	M = ±20%	see Table 1

Ordering Options Table

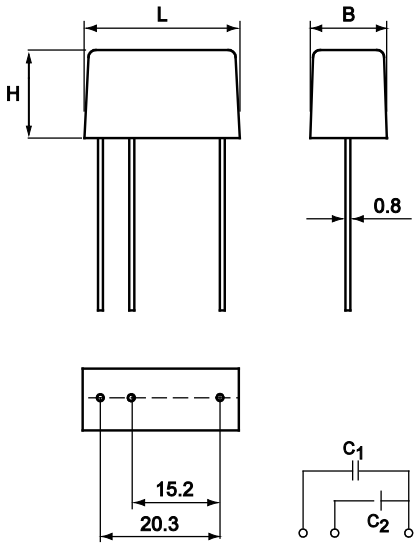
Standard Packaging Style	Lead Length (mm)	Ordering Code
Loose, long leads	30^{+5}	R30
Other options available on request		

Dimension Table

Pitch	Outer Dimension		
	B	H	L
20.3	12.5	16.0	24.0
20.3	14	18	24.0

Leadspacing Table

p	d	std l	max l
20.3 ± 0.4	0.8	30	30



Technical Data

Rated Voltage	275VAC 50/60Hz	
Capacitance Range	150nF + 33nF, 150nF + 47nF, 150nF + 68nF, 220nF + 82nF, 220nF + 100nF	
Capacitance Tolerance	± 20%, ± 10%, -5/+15%	
Temperature Range	-40 to +110°C	
Climatic Category	40/110/56/B	
Approvals	ENEC	
Dissipation Factor	Maximum Values at +23°C	
	1 kHz	1.3%
Test Voltage Between Terminals	The 100% screening factory test is carried out at 2150 VDC. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test. This test may not be repeated due to potential capacitor damage. KEMET is not liable in such case for any failures.	
Insulation Resistance	12,000MΩ	
In DC applications	Recommended Voltage ≤ 630VDC	

Environmental Test Data

Test	IEC Publication	Procedure
Vibration	IEC 60068–2–6 Test Fc	3 directions at 2 hours each, 10Hz-500Hz at 0.75 mm or 98 m/s2
Bump	IEC 60068-2-29 Test Eb	4000 bumps at 390 m/s^2
Solderability	IEC 60068-2-20 Test Ta	Solder globule method Wetting time for d >0.8 < 1.5s
Active Flammability	IEC 60384-14	UR + 20 surge pulses at 2.5kV (pulse every 5s)
Passive Flammability	IEC 60384-14	IEC 60384-1, IEC 60695-11-5 Needle Flame Test
Humidity	IEC 60068-2-3 Test Ca	+40°C and 90-95% R.H., 56 days

Environmental Compliance

All KEMET EMI capacitors are RoHS compliant

RoHS Compliant

Approvals

Mark	Specification	File Number
	EN/IEC 60384-14	

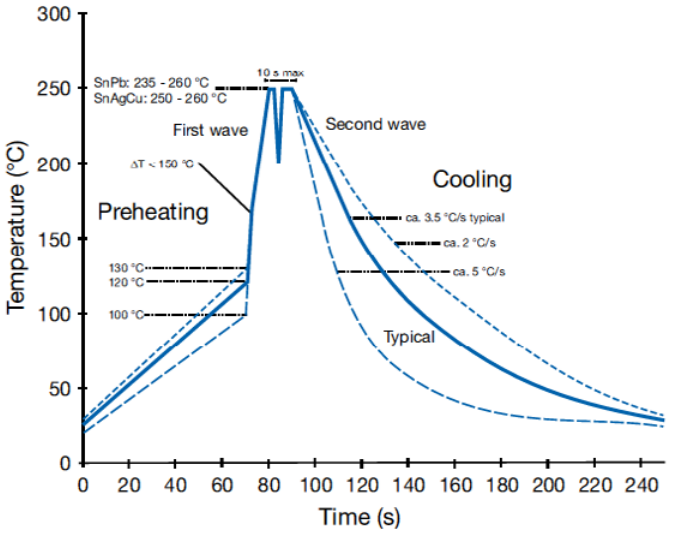
Table 1 – Ratings & Part Number Reference

Lead Space	Cap Value X (µF)	Cap Value Y (pF)	B (mm)	H (mm)	L (mm)	dV/dt (V/µsec) X	dV/dt (V/µsec) Y	F Article Code	Part Number
20.3	0.15	0.033	12.5	16.0	24.0	600	1200	P374CL154M275AC333	PMZ2074MC615K533MR30
20.3	0.15	0.047	12.5	16.0	24.0	600	1200	P374CL154M275AC473	PMZ2074MC615K547MR30
20.3	0.15	0.068	12.5	16.0	24.0	600	1200	P374CL154M275AC683	PMZ2074MC615K568MR30
20.3	0.22	0.082	14.0	18.0	24.0	600	1200	P374CR224M275AC823	PMZ2074MC622K582MR30
20.3	0.22	0.10	14.0	18.0	24.0	600	1200	P374CR224M275AC104	PMZ2074MC622K610MR30
Lead Space	**Cap Value X (µF)**	**Cap Value Y (pF)**	**B (mm)**	**H (mm)**	**L (mm)**	**dV/dt (V/µsec) X**	**dV/dt (V/µsec) Y**	**F Article Code**	**Part Number**

Roll Over for Order Info.

Soldering Process

The implementation of RoHS Directive has forced to select SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217–221ºC for the new alloys. This means that the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. The Polypropylene Capacitors are especially sensitive to heat (melting point of Polypropylene is 160–170ºC). The wave soldering can be destructive especially for mechanically small Polypropylene Capacitors (lead spacings 5-10 mm), and great care has to be taken when soldering them. The recommended solder profiles from KEMET should be used. In case of doubt, KEMET should be consulted. In general the wave soldering curve from IEC Publication 61760-1 edition 2 gives a good guideline for successful soldering.



Marking

- Manufacturer's logo
- Article series
- Rated capacitance
- Rated voltage
- Capacitor class
- Approval marks
- Manufacturing date code
- IEC climatic category
- Passive flammability class

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Paris, France
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Sasso Marconi, Italy
Tel: 39-051-939111

Milan, Italy
Tel: 39-02-57518176

Rome, Italy
Tel: 39-06-23231718

Madrid, Spain
Tel: 34-91-804-4303

Central Europe
Landsberg, Germany
Tel: 49-8191-3350800

Dortmund, Germany
Tel: 49-2307-3619672

Kwidzyn, Poland
Tel: 48-55-279-7025

Northern Europe
Bishop's Stortford, United Kingdom
Tel: 44-1279-757201

Weymouth, United Kingdom
Tel: 44-1305-830747

Coatbridge, Scotland
Tel: 44-1236-434455

Färjestaden, Sweden
Tel: 46-485-563934

Espoo, Finland
Tel: 358-9-5406-5000

Asia

Northeast Asia
Hong Kong
Tel: 852-2305-1168

Shenzhen, China
Tel: 86-755-2518-1306

Beijing, China
Tel: 86-10-5829-1711

Shanghai, China
Tel: 86-21-6447-0707

Taipei, Taiwan
Tel: 886-2-27528585

Southeast Asia
Singapore
Tel: 65-6586-1900

Penang, Malaysia
Tel: 60-4-6430200

Bangalore, India
Tel: 91-806-53-76817

Other KEMET Resources

Tools	
Resource	Location
Configure A Part: CapEdge	http://capacitoredge.kemet.com
SPICE & FIT Software	http://www.kemet.com/spice
Search Our FAQs: KnowledgeEdge	http://www.kemet.com/keask

Product Information	
Resource	Location
Products	http://www.kemet.com/products
Technical Resources (Including Soldering Techniques)	http://www.kemet.com/technicalpapers
RoHS Statement	http://www.kemet.com/rohs
Quality Documents	http://www.kemet.com/qualitydocuments

Product Request	
Resource	Location
Sample Request	http://www.kemet.com/sample
Engineering Kit Request	http://www.kemet.com/kits

Contact	
Resource	Location
Website	www.kemet.com
Contact Us	http://www.kemet.com/contact
Investor Relations	http://www.kemet.com/ir
Call Us	1-877-MyKEMET
Twitter	http://twitter.com/kemetcapacitors

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Although we design and manufacture our products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.