MA Plastic Box Single-Phase Filters

Overview

The KEMET MA compact plastic PCB mount filters cover single-phase requirements with a wide variety of characteristics. These filters are optimized for both common and normal mode noise.

Applications

- Industrial equipment
- Electronic equipment

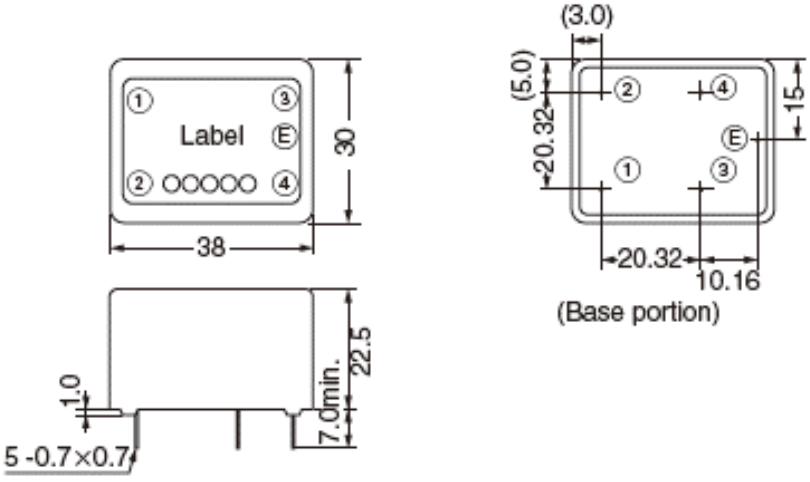
Benefits

- Single-phase
- Operating temperature range from −25°C to +55°C
- UL, CSA and TÜV approved
- RoHS compliant

Part Number System

MA-	2	01	3
Series	Phase	Rated Current (A)	Specification
MA	2 = Single-phase	0x = 0x A	3 = Standard

Dimensions – Millimeters



Environmental Compliance

All KEMET EMI-RFI Filters are RoHS compliant.

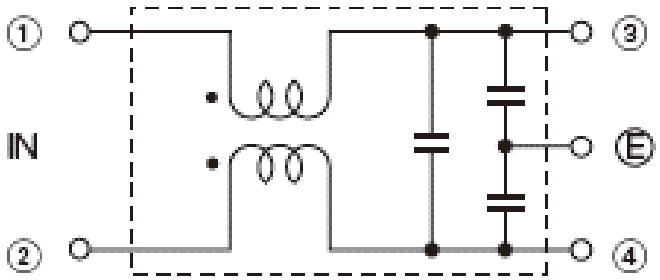
Performance Characteristics

Item	Performance Characteristics
Rated Voltage	250 V
Rated Current Range	1 – 5 A
Withstanding Voltage	1,500 VAC (1 minute, line to ground)
Insulation Resistance	300 MΩ minimum at 500 VDC (1 minute, line to ground)
Leakage Current	0.75 mA at 250 V/60 Hz maximum
Input/Output Terminal Type	PCB mount
Operating Temperature Range	–25°C to +55°C (not including self temperature rise)

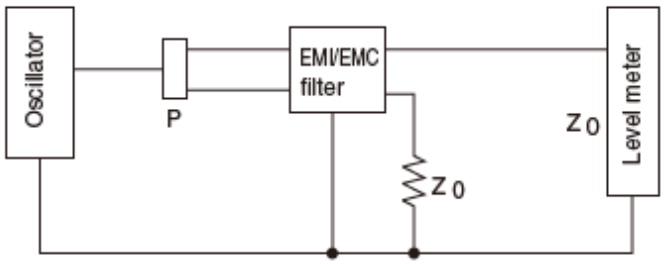
Table 1 – Ratings & Part Number Reference

Part Number	Phase	Rated Voltage AC/DC (V)	Rated Current AC/DC (A)	Leakage Current at 250 V/60 Hz (mA) Maximum	Temperature Rise (K) Maximum	Operating Temperature Range	Terminal Type	Approval	Weight (g)
MA-2013	Single-phase	250	1	0.75	30	–25°C to +55°C	PCB mount	UL, CSA, and TÜV	30
MA-2023	Single-phase	250	2	0.75	30	–25°C to +55°C	PCB mount	UL, CSA, and TÜV	30
MA-2033	Single-phase	250	3	0.75	30	–25°C to +55°C	PCB mount	UL, CSA, and TÜV	30
MA-2043	Single-phase	250	4	0.75	30	–25°C to +55°C	PCB mount	UL, CSA, and TÜV	30
MA-2053	Single-phase	250	5	0.75	30	–25°C to +55°C	PCB mount	UL, CSA, and TÜV	30

Circuit Diagram

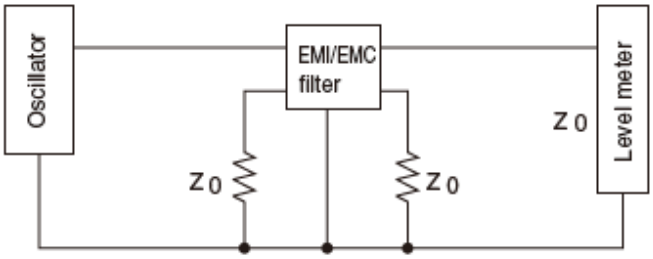


Measuring Circuit - Common Mode



P: Power divider Z 0 : 50Ω

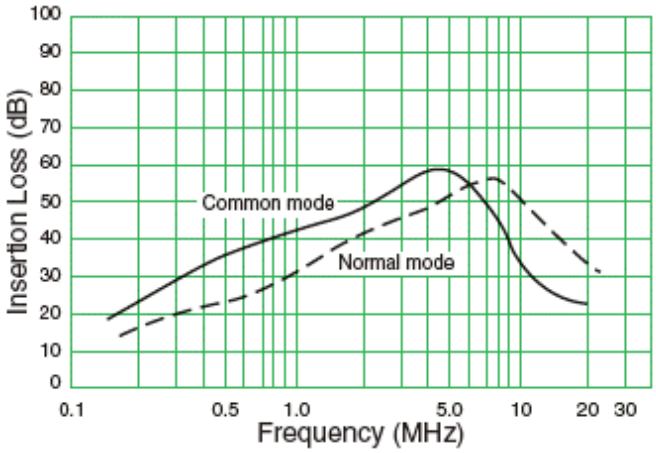
Measuring Circuit - Normal Mode



Z 0 : 50Ω

Attenuation (Static Characteristics)

MA-2043



TÜV Rheinland Japan Ltd. Certification Numbers

Part Number	File Number
MA-2013	N° R50015843
MA-2023	N° R50015843
MA-2033	N° R50015843
MA-2043	N° R50015843
MA-2053	N° R50015843

Packaging

Part Type	Packaging Type	Pieces per Box
MA-2013	Tray	100
MA-2023		
MA-2033		50
MA-2043		
MA-2053		

Handling Precautions

Precautions for product storage
EMI-RFI Filters should be stored in normal working environments. While the filters themselves are quite robust in other environments, solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long term storage.

KEMET recommends that maximum storage temperature not exceed 40°C and maximum storage humidity not exceed 70% relative humidity and atmospheres should be free of chlorine and sulfur bearing compounds. Temperature fluctuations should be minimized to avoid condensation on the parts. Also, avoid storage near strong magnetic fields as this might magnetize the product.

For optimized solderability, EMI-RFI Filters' stock should be used promptly, preferably within 6 months of receipt.

Export Control

For customers in Japan
For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

For customers outside Japan
EMI-RFI Filters should not be used or sold for use in the development, production, stockpiling, or utilization of any conventional weapons or mass-destructive weapons (nuclear weapons, chemical or biological weapons, or missiles), or any other weapons.

KEMET Electronics Corporation Sales Offices

For a complete list of our global sales offices, please visit www.kemet.com/sales.

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Although KEMET designs and manufactures its 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 indicted or that other measures may not be required.

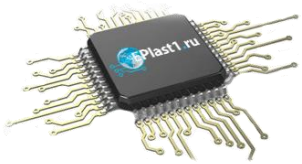
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.