Press release / 19th October 2021 / MTC Micro Tech Components GmbH / [www.mtc.de](http://www.mtc.de)

**MTC introduces innovative hybrid material for combined EMI attenuation and thermal management**

MTC Micro Tech Components GmbH is expanding its extensive portfolio of thermally conductive products with the new TCMWA series. The thermally conductive and simultaneously absorbent hybrid material ideally combines the properties of thermal conductive pads and microwave absorbers and can be used in a wide range of applications, including telecommunications, 5G and wireless infrastructure, IoT/Industry 4.0, aerospace, network and cloud applications, medical technology and mobile systems. Sheet material as well as customized die-cut or molded parts with material thicknesses from 0.5 to 12 mm are available.

**Innovative hybrid solution consisting of heat conductor and EMI absorber**

The soft material is used like a classic gap pad to transport heat between the heat source and the cooling element.

The TCMWA series includes three product variants with thermal conductivities of 2, 3 and 4 W/m\*K. At the same time, reliable absorption of electromagnetic radiation (EMI) and problem-causing frequencies in electronic components, such as ICs, CPUs, MOS and LED drivers, takes place. The hybrid material impresses with excellent attenuation performance, especially at high frequencies.

**Optimal cooling and EMI attenuation of electronic components**

To avoid an increase of the EMI radiating area, heat sinks should not be mounted directly on a radiating component. Here, the thermally conductive EMI absorber offers the ideal cooling and EMC solution as a multifunctional gap filler.

The optimized thermal management ensures long-term reliability and performance of heat-sensitive electronics while improving the electromagnetic compatibility of individual components or entire assemblies. This significantly minimizes sources of error, downtime and costs.

**Multifunctional material combination**

The soft material of the new TCMWA series consists of a special micture of silicone and metal-ceramic particles, which give the hybrid absorber both thermally conductive and electromagnetically attenuating properties. The TCMWA formulation is halogen-free, RoHS and REACH compliant, and is tested according to UL 94 V-0 (flammability and fire safety classification of plastics). The wide working temperature range of the high-quality material extends from -60 to +180°C.

**Easy handling and assembly**

The front and back of the naturally tacky TCMWA material is provided with a peelable protective film upon delivery. Due to this material property, the minimum component load during assembly is ensured. The different material thicknesses of the standard sheets from 0.5 to 12 mm enable the exact fit in the respective customer application.

**MTC Technical Engineering - from prototype to large-scale production**

MTC Micro Tech Components GmbH has been a producer and solution provider for components in the field of EMC (electromagnetic compatibility) and TCP (thermally conductive products for thermal management) for over 25 years. For the successful implementation of demanding applications, customers and system developers benefit from comprehensive services, many years of experience and professional know-how. From design-in consulting and development support for standard products to the complete implementation of customized product solutions, customers worldwide value the personal commitment and expertise of the MTC team. With in-house development and testing capacities as well as production and sales locations in Germany, Hong Kong and South Korea, MTC Micro Tech Components GmbH convinces as a global supplier for almost all industrial sectors.

**Direct link to the product „Thermally conductive EMI absorber / TCMWA series“:**

<https://www.mtc.de/en/tcp-products/thermally-conductive-emi-absorbers>

**All features and product benefits at a glance:**

* Thermally conductive EMI absorber
* Multifunctional hybrid material
* Thermally conductive and at the same time EMI-absorbing properties
* Thermal conductivities of 2, 3 and 4 W/m\*K available
* Optimum thermal management of electronic components for long service life
* Excellent EMI attenuation performance at high frequencies
* Improved application safety and performance
* Reduced effort and cost for EMC compliance
* Operating temperature range -60 to +180°C
* Tested according to UL-94 V0
* Halogen-free, RoHS and REACH compliant
* Easy and flexible handling
* Soft and naturally tacky material
* Peelable protective film on front and back side
* Minimal component stress during assembly
* Available shapes: Standard sheets, custom die-cut parts, custom molded parts
* Available material thicknesses: 0.5 to 12 mm

**Image source verification:**

Product pictures © MTC Micro Tech Components GmbH

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**Company profile MTC Micro Tech Components GmbH:**

**Specialized full-range supplier**

Reliable protection against electromagnetic radiation and against overheating of components and machines - MTC Micro Tech Components GmbH, headquartered in Dillingen (Bavaria), is specialized in the production and sale of innovative components for electromagnetic compatibility (EMC) and thermal management.

Since its foundation in 1992, the company has experienced steady growth and now operates internationally as an accomplished full-range supplier of EMC shielding materials and thermal management products. Comprehensive customer support, short response and delivery times as well as the greatest possible flexibility through its own in-house logistics are among MTC's core competencies.

Since October 2011, MTC has been part of the globally operating discoverIE Group plc, a leading international supplier of customized electronics. MTC is an independent company within the group. Thanks to the synergies with the British group, MTC will continue to expand its international presence in the future.

**Customized individual solutions for the international market**

In addition to its headquarters in Dillingen a. d. Donau, MTC also maintains a sales office in Hong Kong and production facilities in South Korea and Dillingen.

The extensive MTC product portfolio includes both standard and customized products manufactured to high quality standards. MTC customers benefit from professional consulting services and first-class service and support.

MTC supplies companies worldwide in all sectors, such as automation, automotive, avionics, information technology, medical technology, telecommunications, consumer electronics and renewable energies. The innovative products reliably protect customers' equipment and machinery from malfunctions caused by electromagnetic interference and from overheating.

**Corporate principles and social commitment**

The company's success is guaranteed by an exceptionally high level of customer orientation and corporate planning based on healthy growth. That is why MTC attaches great importance to a trusting relationship with employees, customers and suppliers, characterized by reliability, loyalty and mutual respect.

Social responsibility also grows with success. With the production site in Dillingen in premises of the Regens-Wagner Foundation, MTC promotes the integration of disabled people into everyday working life.

MTC is certified according to ISO 9001 and ISO 14001 and meets all requirements for an environmentally friendly business.