TIF™900-15S Heat conducting absorption materials

TIF™900-15S Series is a kind of composite material made by adding ceramic powder, soft magnetic particle and corresponding auxiliary agent with high polymer silicon glue as the substrate. It can achieve low interface thermal resistance performance and electromagnetic absorbing performance under low pressure, and can fill gaps to complete the heat transfer and electromagnetic noise absorption between the heating part and the heat dissipation part. At the same time also plays the role of insulation, shock absorption, sealing, etc., to meet the equipment miniaturization and ultra-thin design requirements

Features：

• soft and fragile, lightweight, easy to process and cut, easy to use, can be installed in a small space
• the product is an insulating material, which needs to be bonded or pressed on the metal base plate to achieve a good absorbing effect
• products can correspond to a variety of sizes and shapes
• flame retardant, high temperature resistance, good flexibility
• halogen free, lead free, meet RoHs instruction

Typical Properties of TIF™900-15S Series

Property	Value	Test method
Color	DarkGray	Visual
Construction	Ferrite filled silicone rubber	******
Thickness range	0.020"(0.5mm)～0.200" (5.0mm)	ASTM D374
Hardness（Shore 00）	45±5	ASTM 2240
Density（g/cm^3）	3.5	ASTM D792
Operating Temp	-40~160℃	******
Frequency	100MHz～10GHz	PNA-X N5247A
Permeabilyty（GHz）	4.1	ASTM D2520
Volume Resistivity	≥1.0X10^{12} Ohm-cm	ASTM D257
Thermal Conductivity（W/mK）	1.5	ASTM D5470
	1.5	ISO22007-2

Thermal market：

• business newsletter:
Antenna, base station, optical module, router, switch, etc
• millimeter wave application:
5G communications, millimeter wave radar
• industrial electronics:
Automotive electronics, drones, etc
• instrument measurement:
Amplifier, filter, test system
• security and defense:
Radar systems, aerospace, etc

Application：

• reduced free space reflection: when applied to metal surfaces, absorbing materials will greatly reduce the reflection of electromagnetic waves caused by metal objects or structures.
• suppress cavity resonance: the absorbing material attached to the conductive cavity can effectively suppress the resonance of high order harmonics and ensure the normal operation of the circuit.
• reduced surface traveling wave: for the crawling wave along the transmission line or the equivalent transmission line and the conductor surface, the absorbing material can effectively absorb.

Product Thicknesses: 0.020-inch to 0.200-inch (0.5mm to 5.0mm) **Product Sizes：** 8" x 16"(203mm x406mm)
Individual die cut shapesand and custom thickness can be supplied. Please contact us for confirming
Safe disposal method does not require special protection. The storage condition is low temperature and dry, away from open fire and away from direct sunlight. For detailed method, please refer to the product material safety data sheet.

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10.30.2020