

EMC Absorber EA3008U type Reference Specification

1.Scope

This reference specification applies to EMC Absorber EA3008U type .

2.Part Numbering

(ex.) EA3008 U 025 M□□□□□□
 Type Tape type Sheet Thickness Product Dimensions
 (025:0.25mm) (M:mm/□□□□□□:Product Dimensions(XY)※)
 ※See the Individual Specification.

3. Part Number and Rating

- Operating Temperature : -40°C to +120°C
- Storage Temperature : -40°C to +120°C

Part Number	Applicable Frequency (Typ.) (GHz)	Sheet Number	Sheet Thickness (mm)	Adhesive tape Thickness (Typ.) (mm)
EA3008U025M□□□□□□	0.1~3.0	Konet108	0.25±0.05	0.155±0.05
EA3008U035M□□□□□□			0.35±0.05	
EA3008U050M□□□□□□			0.50±0.10	
EA3008U100M□□□□□□			1.00±0.10	
EA3008U250M□□□□□□			2.50±0.15	

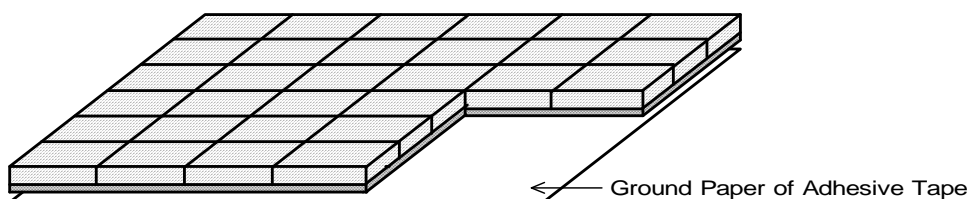
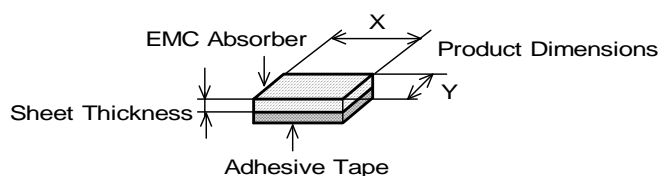
4.Standard Testing Conditions

《The standard condition (JIS K6250)》

Temperature : 23°C ± 2°C

Humidity : 45%RH~ 55%RH

5.Style and Dimensions



Construction	Material	Mtl Dsg	Flame Class	UL File No.	Maker	Remark
EMC Absorber	Composite magnetic material (Ethylene-vinyl acetate copolymer + ferrite powder)	konet108	UL94V-0	E62753	TAKECHI Co.,LTD.	Non-halogene
Adhesive tape	Double-sided adhesive tape (Acrylate type Adhesive)	DIC#8810NR	UL94VTM-0	E130059	DAIIPPON INK AND CHEMICALS, INCORPORATED	Non-halogene

6. Electrical Performance

No.	Item	Specification	Test Method
6.1	Magnetic Permeability - Reluctance	0.6GHz	S-Parameter Method (Fig.1)
		2.0GHz	
6.2	Volume resistivity($\Omega \cdot \text{cm}$)	1.0×10^5 min.	Fig.2
6.3	Surface resistivity(Ω)	1.0×10^5 min.	Fig.2
6.4	Heat thermal Resistance	1.5°C/W max.	Transistor : 2SB863 (Manufactured by TOSHIBA) equivalent. Radiator : 40H132L80 Measuring Equipment : T type thermocouple Power : 20W Torque : 10kgf·cm Time : 5 min Sam ple thickness : 0.35mm

7. Mechanical Performance

No.	Item	Specification	Test Method
7.1	Tensile Strength(MPa)	4 min.	JIS K6251
7.2	Hardness(DUROMETER type D)	35±10	JIS K6253
7.3	Specific Gravity	3.5±0.2	JIS Z8807
7.4	Tape Adhesive Strength(N/cm)	2.0 min.	JIS Z1528(Fig.3)

8. Environmental Performance

No.	Item	Specification	Test Method
8.1	Heat Resistance	Meet Table 1.	Temperature : 120°C±1°C Time : 96h(+2h,-0h)
8.2	Cold Resistance		Temperature : -40°C±1°C Time : 96h(+2h,-0h)
8.3	Humidity		Temperature : 60°C±1°C Humidity : 90%RH to 95%RH Time : 96h(+2h,-0h)
8.4	Temperature Cycle		1 cycle: 1 step: -40°C±1 °C/ 60min(+6min,-0min) 2 step: +120°C±1 °C/ 60min(+6min,-0min) Total of 20 cycles

Table 1

Item	Specification
Magnetic Permeability - Reluctance	0.6GHz
	2.0GHz
Volume resistivity($\Omega \cdot \text{cm}$)	1.0×10^5 min.
Surface resistivity(Ω)	1.0×10^5 min.
Tensile Strength(MPa)	1 min.
Hardness(DUROMETER type D)	40±10
Specific Gravity	3.5±0.2
Tape Adhesive Strength(N/cm)	1.0 min.

9. Packaging Style

(1) Packaging Style

Plastic bag(include products) is packed in the box.

(2) Marking for Plastic Bag

The following items shall be marked on a label and the label is stuck on the plastic bag.

(Customer part number, MURATA part number, Inspection number(*1), RoHS discrimination(*2), Quantity, etc)

*1) « Expression of Inspection No. »

$\square\square$ $\underline{0000}$ $\underline{\times\times\times}$
 (1) (2) (3)

(1) Factory Code

(2) Date

First digit : Year / Last digit of year

Second digit : Month / Jan. to Sep. → 1 to 9, Oct. to Dec. → O,N,D

Third, Fourth digit : Day

(3) Serial No.

*2) « Expression of RoHS discrimination » ROHS – \underline{Y} ($\underline{\Delta}$)

(1) (2)

(1) RoHS regulation conformity parts.

(2) MURATA classification number

(3) Marking for Outer package

The following items shall be marked on a label and the label is stuck on the box.

(Customer name, Purchasing Order Number, Customer Part Number, MURATA part number, RoHS discrimination(*2) , Quantity , etc)

10. ⚠ Caution

10.1 Limitation of Applications

Please contact us before using our products for the applications listed below which require especially high Reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

(1) Aircraft equipment

(7) Traffic signal equipment

(2) Aerospace equipment

(8) Transportation equipment (vehicles, trains, ships, etc.)

(3) Undersea equipment

(9) Data-processing equipment

(4) Power plant control equipment

(10) Applications of similar complexity and /or reliability requirements to the applications listed in the above

(5) Medical equipment

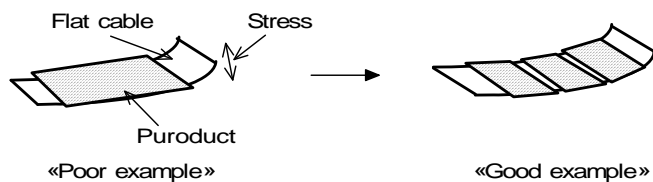
(6) Disaster prevention / crime prevention equipment

11. Notice

11.1 Adhesive Tape Stress

This product is designed for using the adhesive tape to hold itself to the object.

And please avoid suffering any mechanical stress cause by the bending or variation of the object.



Products shall be located in the sideways direction to the mechanical stress.

11.2 Cleaning

Avoid cleaning product.

11.3 Handling of the product

Adhesive tape must be clean to keep the quality of tape.

And please wipe off any dirt, dust and any kind of oil from the surface of the object, before use it.

11.4 Storage Requirements

(1) Storage period

Products which inspected in MURATA over 6 months ago should be examined and used, which can be confirmed with inspection No. marked on the container.

Adhesiveness should be checked if this period is exceeded.

(2) Storage conditions

·Products should be storage in the warehouse on the following conditions.

Temperature : -10°C to 40°C

Humidity : 30% to 70% relative humidity

No rapid change on temperature and humidity

·Products should be stored in the warehouse without heat shock, vibration, direct sunlight and so on.

12. Manufacturer

This product is produces by following manufacturer.

Manufacturer : TAKECHI Co.,LTD.

13. Note

(1) Please make sure that your product has been evaluated in view of your specifications with our product being mounted to your product.

(2) You are requested not to use our product deviating from the reference specifications.

(3) The contents of this reference specification are subject to change without advance notice. Please approve our product specifications or transact the approval sheet for product specifications before ordering.

Fig.1 S-Parameter Method

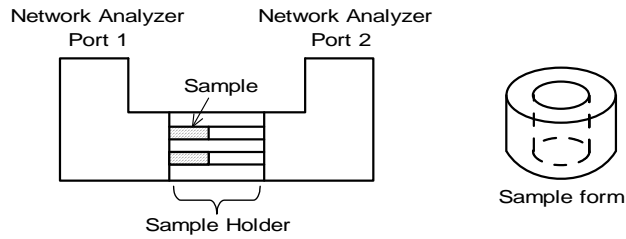


Fig.2 Measuring Method of Resistivity

- (1) Set the sample in the test equipment, and measure the Resistance.
- (2) Expression of Resistivity rate
 Volume Resistivity(ρ) = $\pi \cdot d^2 / (4t) \times R_v$
 Surface Resistivity(ρ) = $\pi (d+D) / (D-d) \times R_s$
 R_v : Measured Volume Resistance
 R_s : Measured Surface Resistance
 T : Thickness of Sample

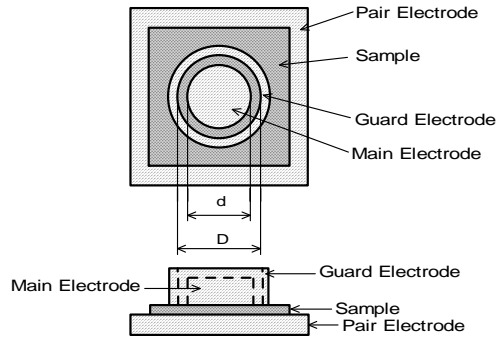


Fig.3 Measurement of Tape Adhesive Strength

- (1) Size of sample: 10×50mm (10×20mm: Adhesive Tape portion, 10×30mm: Grip portion for test)
- (2) Put the PET film to the EMC Absorber in order to reinforce it
- (3) Using Aluminium Plate, Tape Adhesive Strength is measured by following conditions:
 Speed: 100mm/min Angle: 90°
- (4) For other detail for the testing, please refer to the standard JIS Z 0237 (for Adhesive Tape and Sheet test method), and JIS Z 1528 (90° Tape Adhesive Strength Tape measurement method).

