

# **SPECIFICATION**

## **AFS-150-R10-D**

(Sintered Ferrite Sheet)

<b>Revision</b>	<b>Contents</b>	<b>Date</b>
<b>0</b>	<b>New</b>	<b>2011. 09. 19</b>

**September 19, 2011**

**AMOTECH Co., LTD.**

### **Notes**

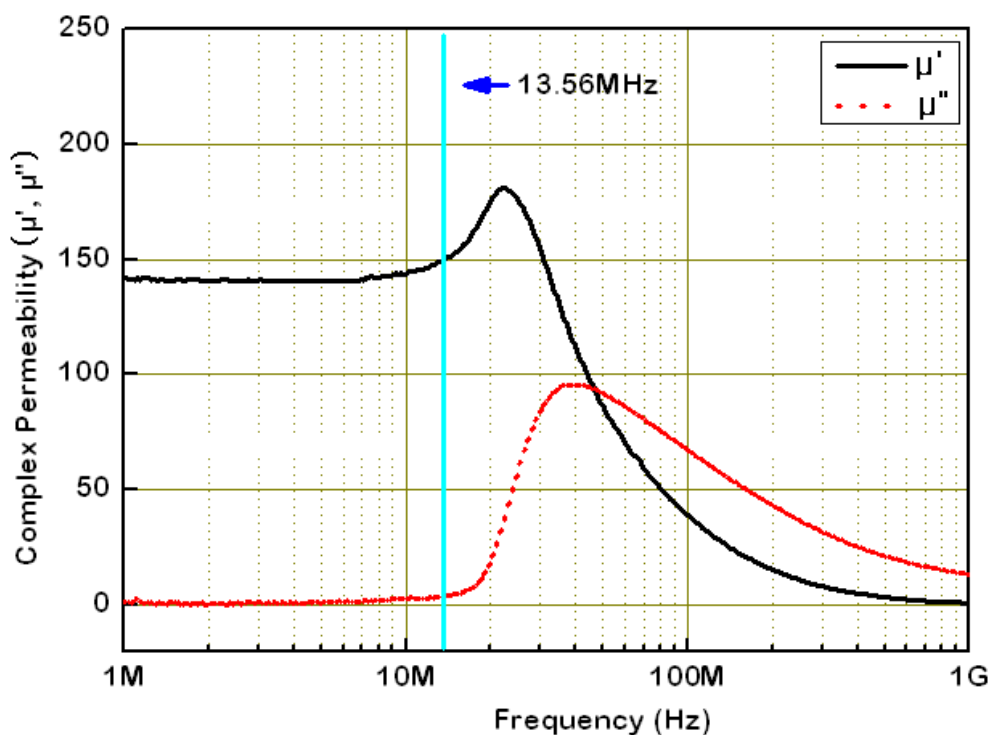
The contents of this data sheet are subject to change without notice.  
Please confirm the specifications and delivery conditions when placing your order.

## 1. SPECIFICATIONS

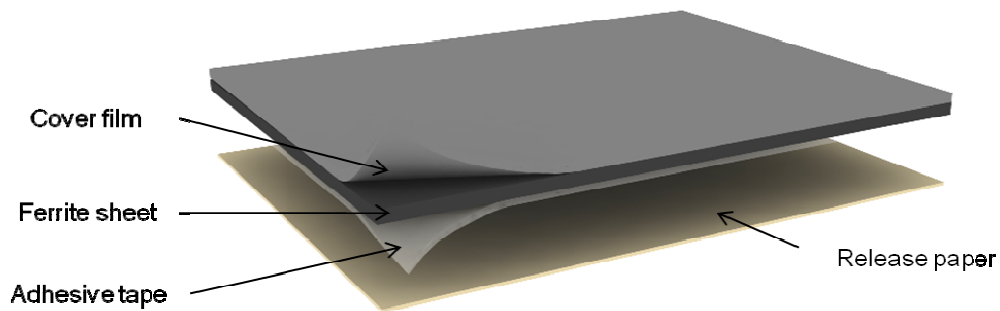
### 1.1. Physical, Frequency Specifications

Features	Value	
Type	Ferrite Sheet	
Structure	Single layer	
Effective carrier frequency	13.56MHz and below	
Operating temperature (°C)	-40 to +85	
Thickness (mm)	0.100	
Dimensions (mm)	125 X 125	
Permeability (@ 13.56MHz)	$\mu'$	150 $\pm$ 20%
	$\mu''$	3 $\pm$ 20%

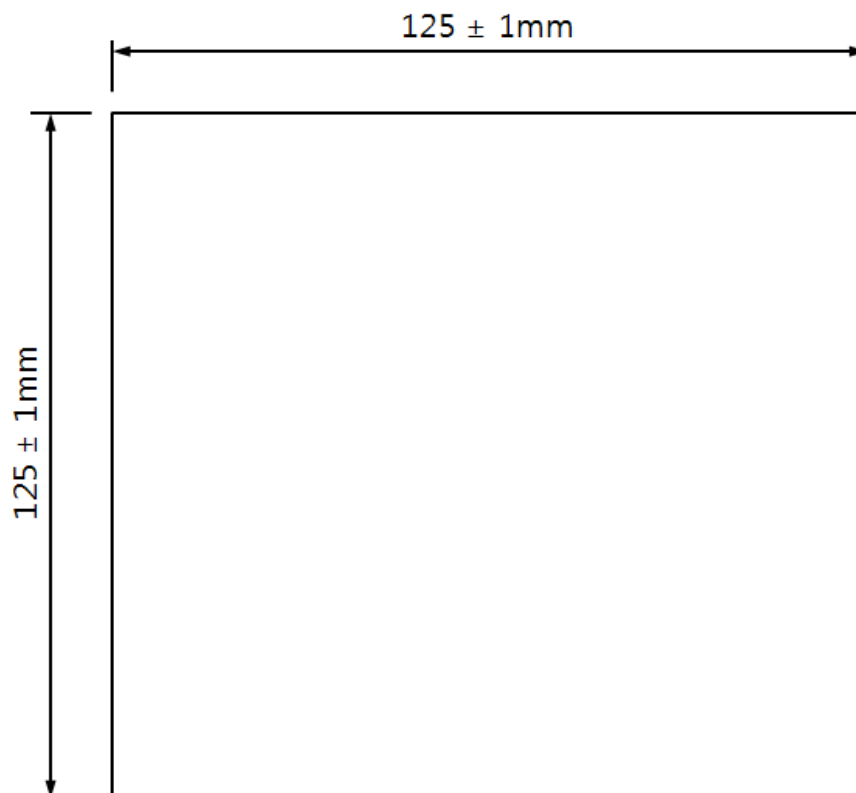
### 1.2. Permeability characteristic



## 1.3. Mechanical Specification (Structure and Dimension)



Structure	Thickness (mm)
Cover film	0.030
Ferrite sheet	$0.100 \pm 0.01$
Adhesive tape	0.020
Total	$0.150 \pm 0.02$



## 2. Part number

**AFS - 150 - R10 - D**  
(1) (2) (3) (4)

- (1) : Amotech Ferrite Sheet  
(2) : Permeability ( $\mu'$ =150)  
(3) : Ferrite sheet thickness : R10 (0.100mm)  
(4) : Size: A(64\*125mm), B(42\*125mm), D(125\*125mm), S (special)

## 3. Environment

AFS series are RoHS compliant products.

## 4. Reliability Test

No	ITEM	TEST CONDITION	TEST REQUIREMENTS
1	Thermal Shock (Temperature Cycle)	1. -40℃/60min $\leftrightarrow$ +85℃/60min 2. Number of cycle : 30 3. Measure after left for 60 min. at room temperature	1. No visual damage 2. Permeability change $\pm$ within 15%
2	High Temperature Resistance	1. Temperature : +85 $\pm$ 5℃ 2. Time : 96 hrs 3. Measure after left for 60 min. at room temperature	1. No visual damage 2. Permeability change $\pm$ within 15%
3	Low Temperature Resistance	1. Temperature : -40 $\pm$ 5℃ 2. Time : 96 hrs 3. Measure after left for 60 min. at room temperature	1. No visual damage 2. Permeability change $\pm$ within 15%
4	Humidity (Steady Condition)	1. Humidity : 80 % RH 2. Temperature : +80 $\pm$ 3℃ 3. Time : 120 hrs 4. Measure after left for 60 min. at room temperature	1. No visual damage 2. Permeability change $\pm$ within 15%

## 5. Caution and Warranty

At warehouse:

The temperature should be within 0 ~ 30℃ and humidity should be less than 75% RH.

The product should be used within 6 months from the time of delivery.