



# PROPERTIES OF TAK MATERIALS (TAK 材質表)

Ni-Zn Ferrite Series (For High  $\mu$  MATERIALS) 鎳-鋅氧化磁鐵粉系列(高頻使用)

CHARACTERISTICS(特性)	UNIT(單位)	DL2	DL3	DL4	DL5	DL6
$\mu_{iac}$ (初透磁率)	----	300	350	600	400	300
APPLICABLE 適用 FREQUENCY 頻率	MHz(百萬赫茲)	0.1-2	0.1-2	0.1-2	0.1-2	0.1-2
Bm(飽和磁束密度)	Gauss(高斯)	2600	3500	3500	4000	4300
Br(殘留磁束密度)	Gauss(高斯)	1500	1600	2000	2400	2400
Hc(保持力)	Oersted(奧斯特)	0.9	0.7	0.5	0.3	0.3
Tc(居禮溫度)	$^{\circ}\text{C}$ (攝氏)	180	200	180	200	220
$\alpha \mu r$ (溫度係數)	$\times 10^{-6}/^{\circ}\text{C}$ (攝氏)	10	25	30	25	25
Tan $\delta / \mu_{iac}$ (相對損失因子)	$\times 10^{-6}$	20(0.1) 100(2.0)	15(0.1) 80(2.0)	12(0.1) 80(2.0)	15(0.1) 80(2.0)	20(0.1) 90(2.0)
d(密度)	$\text{g}/\text{cm}^3$ (公克/立方公分)	4.8	4.8	4.9	4.9	4.8
$\rho$ (表面阻抗)	$\Omega \text{ cm}$ (歐姆)	$10^7$	$10^7$	$10^7$	$10^7$	$10^7$



# SPECIFICATION

規格號碼  
DRAWING NO.

顧主  
CUSTOMER

品名  
ITEM

關連規格號碼  
CUSTOMER DRAWING NO.

## DL3 MATERIAL

材質  
MATL

圖法  
METHOD

單位  
UNIT

尺度  
SCALE

制定  
DESIGN

承認  
APPVD

確認  
CHKD

立案  
DWN

M/M

1997 年 07 月 04 日  
YEAR MONTH DAY

杨惠民 刘哲男 刘时晔

修訂  
REVISION

1.

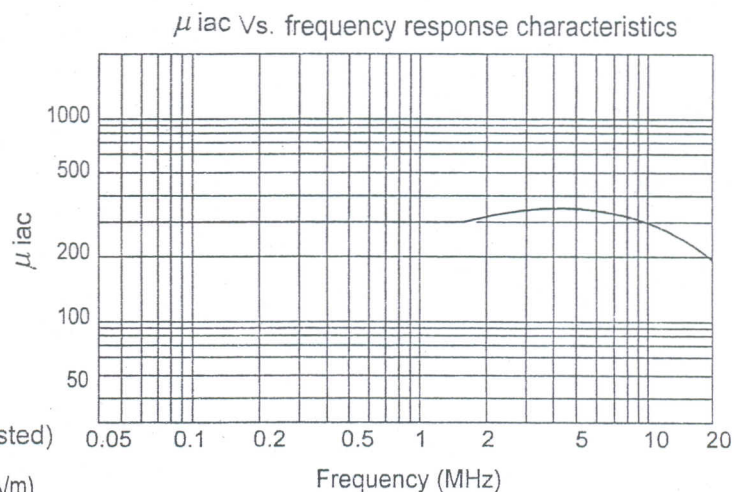
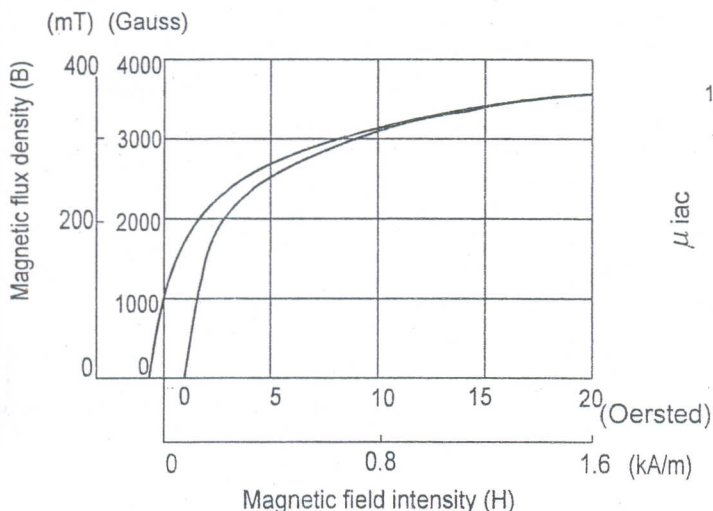
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YEAR MONTH DAY

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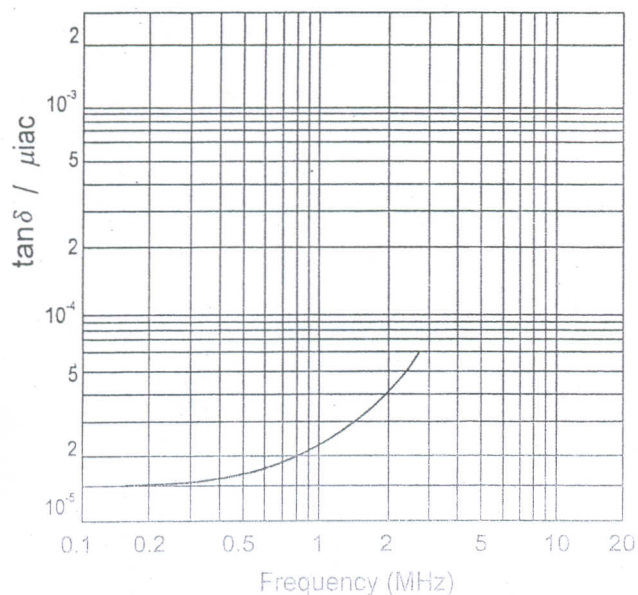
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YEAR MONTH DAY

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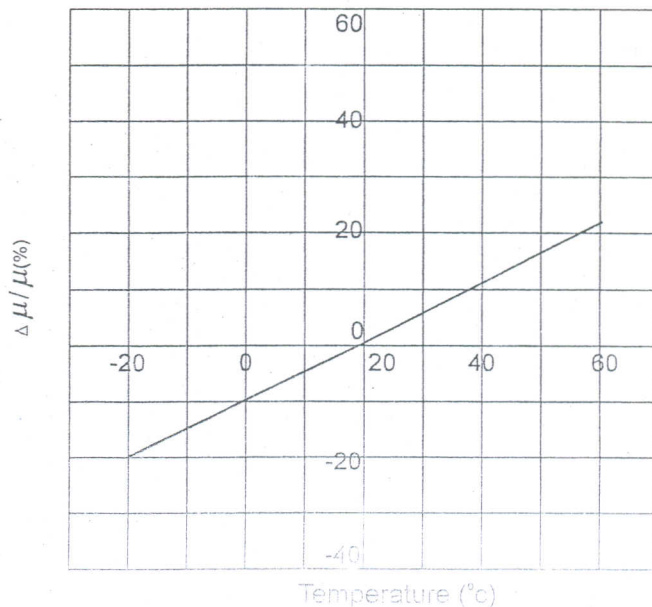
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$\tan \delta / \mu_{iac}$  Vs. frequency response characteristics (D-series materials)



$\Delta \mu / \mu$  Vs. temperature curve (D-series materials)





Test Report

No. CANEC0800556115

Date: 05 Mar 2008

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TAK TECHNOLOGY CO.,LTD  
NO.3RD INDUSTRIAL AREA JUZHOU SHIJIE TOWN DONGGUAN CITY GUANGDONG PROVINCE  
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as :  
DL3 MATERIAL FERRITE CORE

SGS Job No. : 10870088 - SZ  
SGS Internal Reference No. : 18.15  
Date of Sample Received : 29 Feb 2008  
Testing Period : 29 Feb 2008 - 04 Mar 2008

Test Requested : Selected test(s) as requested by client.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Signed for and on behalf of  
SGS-CSTC Ltd.

Huang Fang, Sunny  
Sr. Engineer

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GZCM 1934115



Test Report

No. CANEC0800556115

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Test Results:

ID for specimen 1 : CAN08-005561.015

Description for specimen 1 : Dk-gray core

Heavy metal(s)

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Cadmium (Cd)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2
Lead (Pb)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	485	2
Mercury (Hg)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2
Hexavalent Chromium (CrVI) by alkaline extraction	mg/kg	IEC 62321/2nd CDV (111/95/CDV), UV-Vis	N.D.	2

Note:

- 1. mg/kg = ppm
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit

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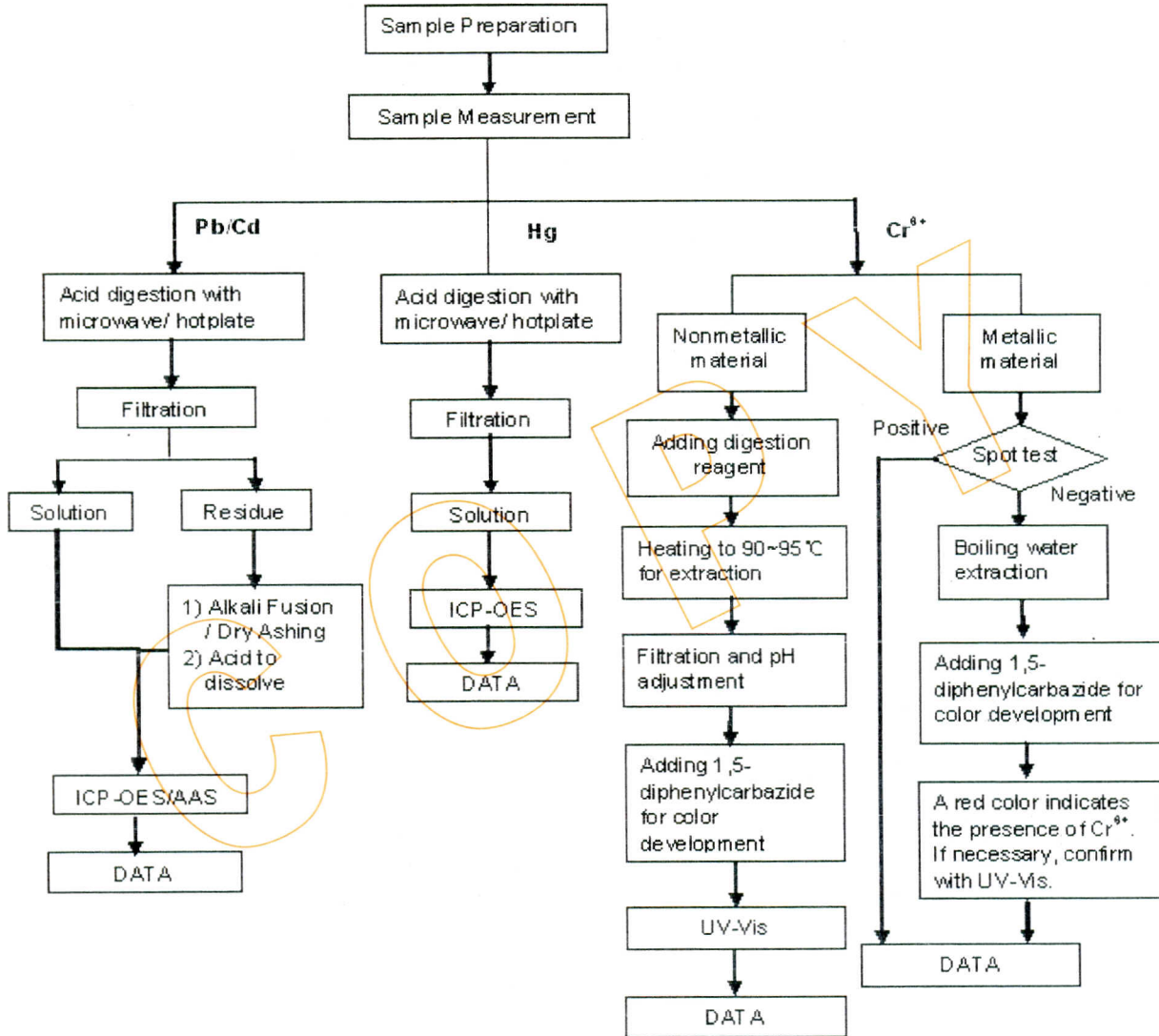
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GZCM 0034116

ATTACHMENTS

Testing Flow Chart

- 1) Name of the person who made measurement: David Shen
- 2) Name of the person in charge of measurement: Emily Feng



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Sample photo:



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\*\*\* End of Report \*\*\*

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