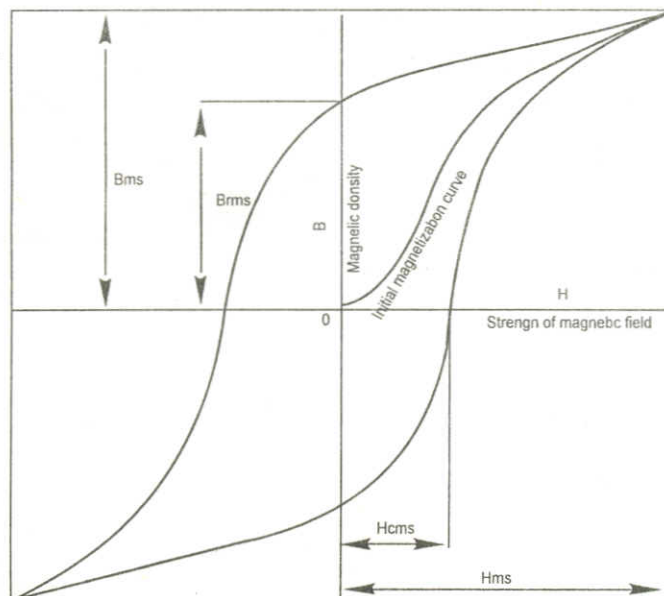


PROPERTIES OF TAK MATERIALS

Ni-Zn Ferrite Series (For High Frequency)

CHARACTERISTICS	UNIT	V4F1	V2F1	M5E1	M11A	M9D1	M9A	M8B1	M8C1	M61	MG2
μ_{iac}	---	8	30	15	20	50	50	60	60	100	300
APPLICABLE FREQUENCY	MHz	10-250	3-70	10-120	3-80	1-50	0.5-30	0.5-15	0.5-15	0.5-10	0.1-2
B _m	Gauss	2100	3100	3000	2700	3700	3400	3200	3000	3500	2400
B _r	Gauss	1300	1700	1600	1800	2300	1900	1800	750	2100	1300
H _c	Oersted	38	8	15	10	4	5.5	6	4	2.5	0.8
T _c	°C	300	300	300	300	300	300	300	300	250	150
$\alpha \mu r$	$\frac{-6}{\times 10/^\circ C}$	10	70	110	80	80	60	15	10	38	9
Tan δ / μ_{iac}	$\frac{-6}{\times 10}$	600(10) 4000(250)	80(3.0) 400(70)	500(10) 800(120)	100(3.0) 500(80)	200(21) 600(500)	100(0.5) 300(30)	130(0.5) 350(15)	100(0.5) 1500(15)	100(0.5) 1509(10)	20(0.1) 100(2.0)
ρ	Ωcm	10^6	10^6	10^6	10^6	10^6	10^6	10^6	10^6	10^6	10^6



 **TAK Ferrite**

SHi Long, Industrial Area Yuan Shan Town
Lian Ping He Yuan Guang Dong P.R.CHINA
TEL:(86-762)-4329901 FAX:(86-762)4329002

SPECIFICATION

規格號碼
DRAWING NO.

顧客
CUSTOMER

品名
ITEM

關連規格號碼
CUSTOMER DRAWING NO.

M9A MATERIAL

材質
MAT'L

圖法
METHOD

單位
UNIT

尺度
SCALE

制定
DESIGN

承認
APPVD

確認
CHKD

立案
DWN

M/M

年
YEAR

月
MONTH

日
DAY

修訂
REVISION

1.

年
YEAR

月
MONTH

日
DAY

2.

年
YEAR

月
MONTH

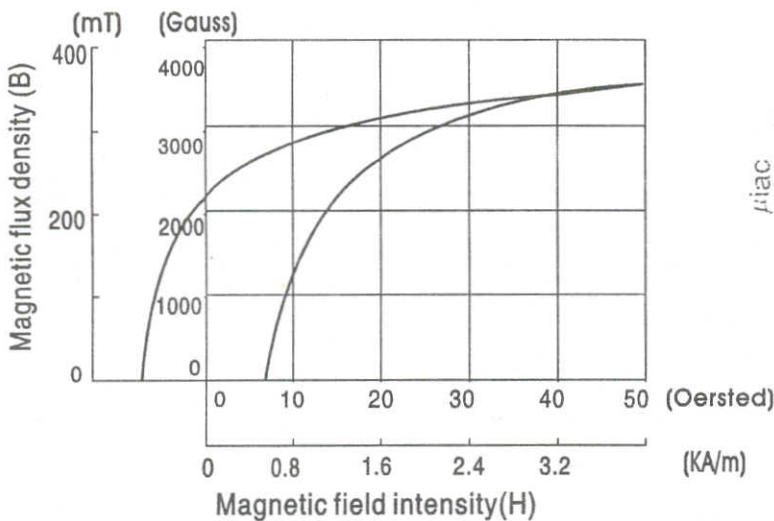
日
DAY

3.

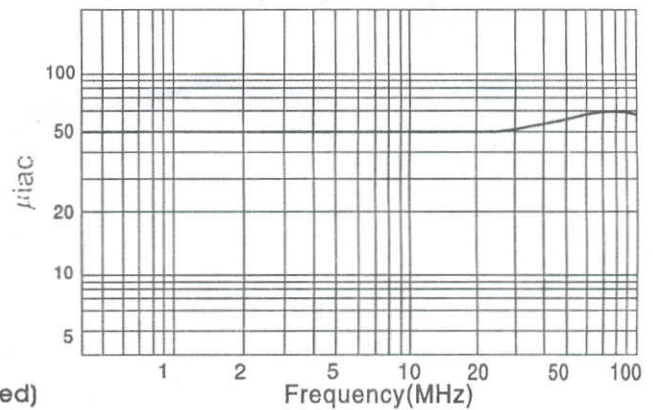
年
YEAR

月
MONTH

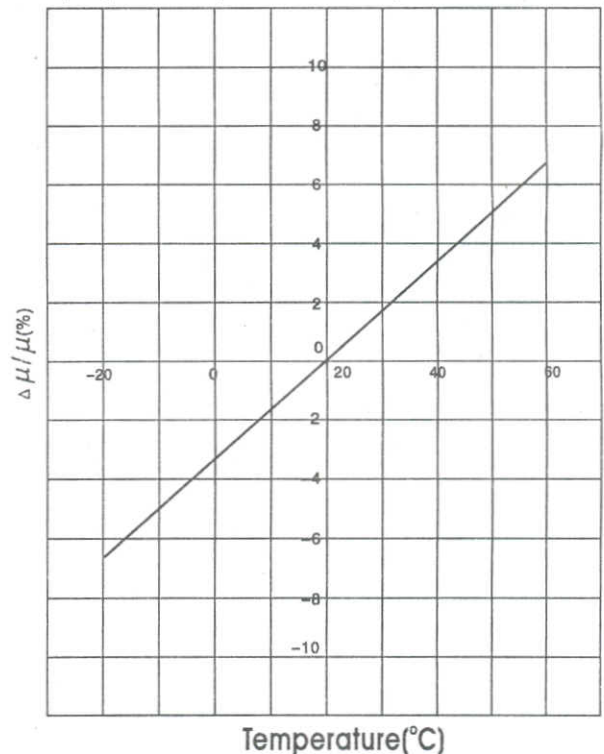
日
DAY



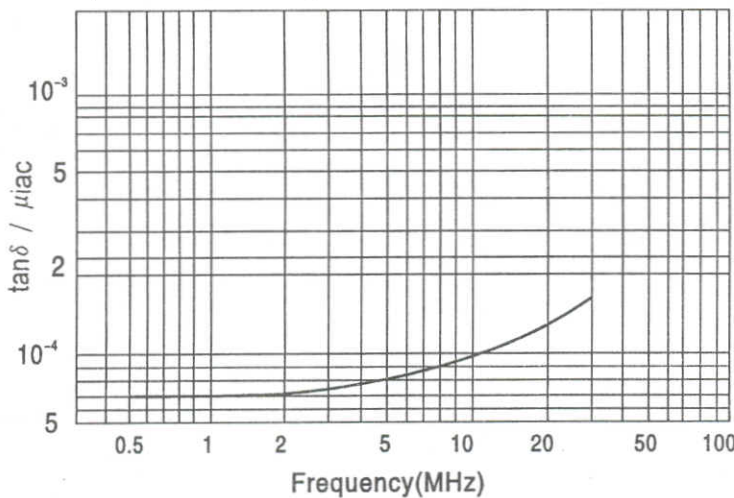
μ_{iac} Vs. frequency response characteristics



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



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





Test Report

No.: GZ0702018761/CHEM

Date: FEB 09, 2007

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

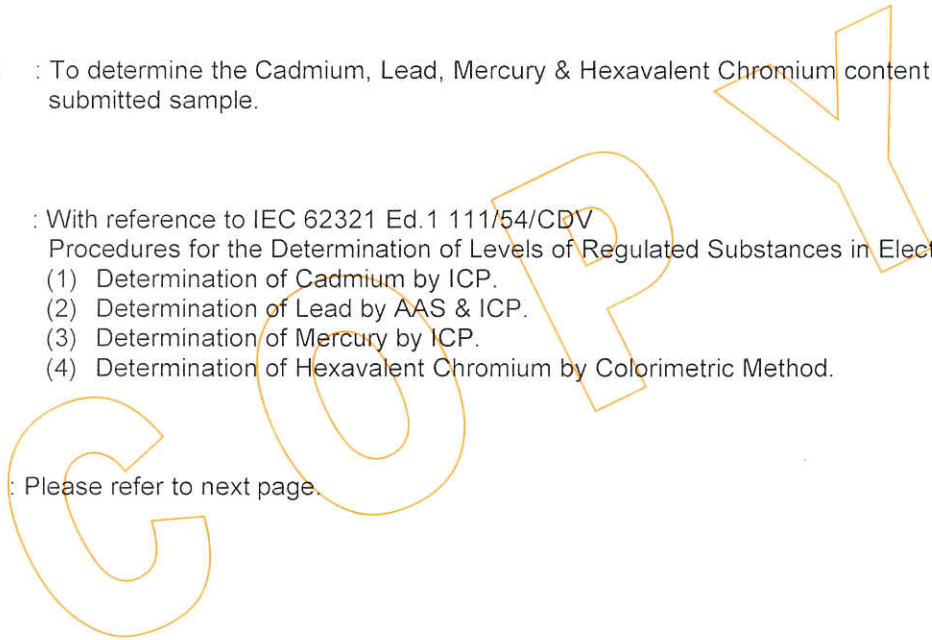
The following sample(s) was/were submitted and identified on behalf of the applicant as M9A MATERIAL FERRITE CORE

SGS Ref No. : SZ10256568-2.1
Sample Receiving Date : FEB 05, 2007
Testing Period : FEB 05, 2007 TO FEB 09, 2007

Test Requested : To determine the Cadmium, Lead, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : With reference to IEC 62321 Ed.1 111/54/CDV
Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products
(1) Determination of Cadmium by ICP.
(2) Determination of Lead by AAS & ICP.
(3) Determination of Mercury by ICP.
(4) Determination of Hexavalent Chromium by Colorimetric Method.

Test Results : Please refer to next page.



Signed for and on behalf of
SGS-CSTC Ltd.

Jiang YongPing, Terry
Sr. Engineer

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GZCM1190818



Test Report

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Date: FEB 09, 2007

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Test results by chemical method (Unit: mg/kg)

Test Item(s):	Method (refer to)	No.1	MDL
Cadmium(Cd)	(1)	N.D.	2
Lead (Pb)	(2)	237	2
Mercury (Hg)	(3)	N.D.	2
Hexavalent Chromium (CrVI) by alkaline extraction	(4)	N.D.	2

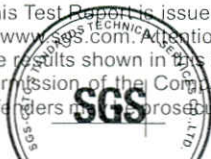
Test Part Description:

No.1 Dk-grey core

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

COPY

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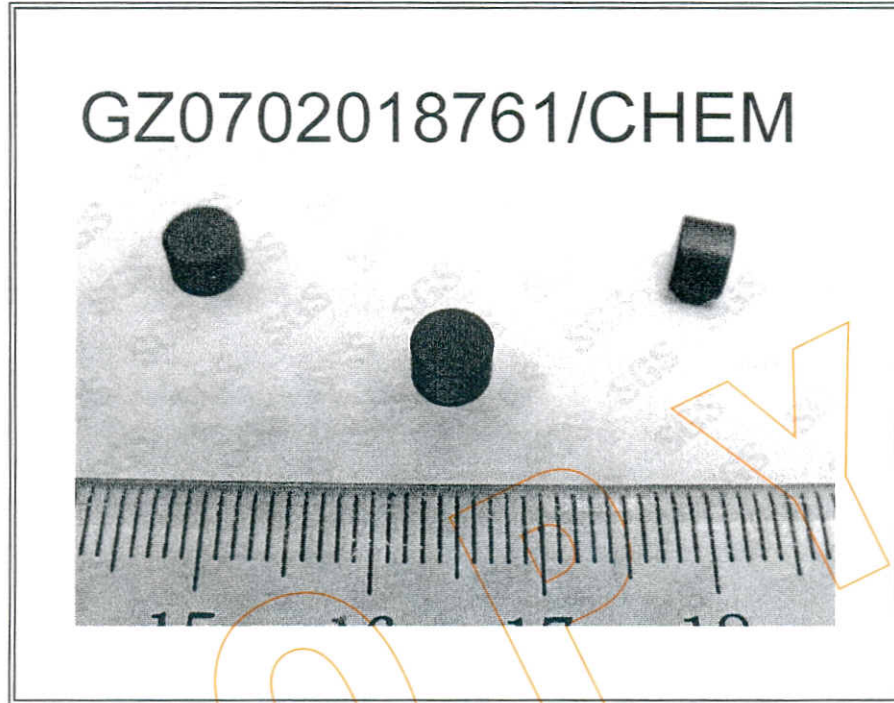
GZCM1190817

SGS-CS Standards Technical Services Co., Ltd.
 Guangzhou Branch Chemical Laboratory

198 Kezhu Road, SCIENTECH Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 f (86-20) 82075125 www.cn.sgs.com
 t (86-20) 82155555 f (86-20) 82075125 e sgs.china@sgs.com

Sample photo :



SGS authenticate the photo on original report only

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