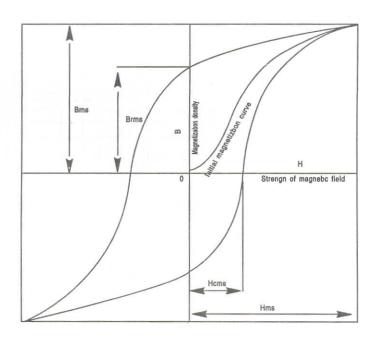
# PROPERTIES OF TAK MATERIALS

Ni-Zn Ferrite Series (For High Frequercyuse)

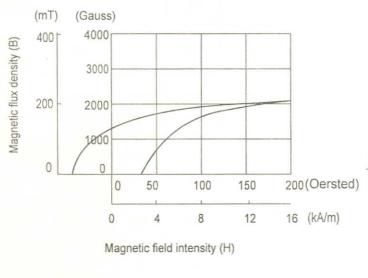
CHRACTERISTICS	UNIT	V4F1	V2F1	M5E1	M11A	M9D1	M9A	M8B1	M8C1	M61	MG2
μ iac		8	30	15	20	50	50	60	60	100	300
APPLICABLE FREQUENCY	MHz	10-250	3–70	10-120	3–80	1–50	0.5-30	0.5–15	0.5–15	0.5-10	0.1-2
Bm	Gauss	2100	3100	3000	2700	3700	3400	3200	3000	3500	2400
Br	Gauss	1300	1700	1600	1800	2300	1900	1800	750	2100	1300
Hc	Oersted	38	8	15	10	4	5.5	6	4	2.5	0.8
Тс	°C	300	300	300	300	300	300	300	300	250	150
аμг	−6 ×10/°C	10	70	110	80	80	60	15	10	38	9
Tan δ/μ iac	-6 ×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)
ρ	$\Omega$ cm	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>



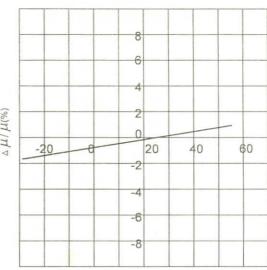


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# MATERIAL V4F1 CHARACTERISTICS

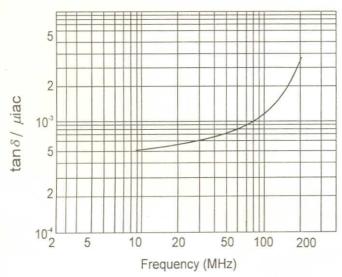


 $\Delta \mu / \mu Vs.$  temperature curve (V-series materials)



Temperature (°c)

 $\tan\delta$  /  $\mu$  iac Vs. frequency response characteristics (V-series materials)





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**Test Report** 

No. CANEC0803512705

Date: 07 Jul 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 : V4F1 MATERIAL FERRITE CORE

SGS Job No.

11133899 - SZ

SGS Internal Reference No. :

10.5

Date of Sample Received

02 Jul 2008

**Testing Period** 

02 Jul 2008 - 07 Jul 2008

Test Requested

02 001 2000 01 001 2000

\*\*\*

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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# Test Report

No. CANEC0803512705

Date: 07 Jul 2008

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Test Results:

ID for specimen 1

: CAN08-035127.005

Description for specimen 1

: Dk-gray core

## Heavy metal(s)

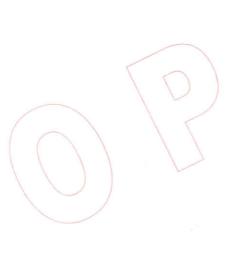
Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Cadmium (Cd)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2
Lead (Pb)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	22112	2
Mercury (Hg)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2
Hexavalent Chromium (CrVI) by	mg/kg	IEC 62321/2nd CDV (111/95/CDV), UV-Vis	N.D.	2
alkaline extraction				

#### Note:

1. mg/kg = ppm

2. N.D. = Not Detected (< MDL)

3. MDL = Method Detection Limit



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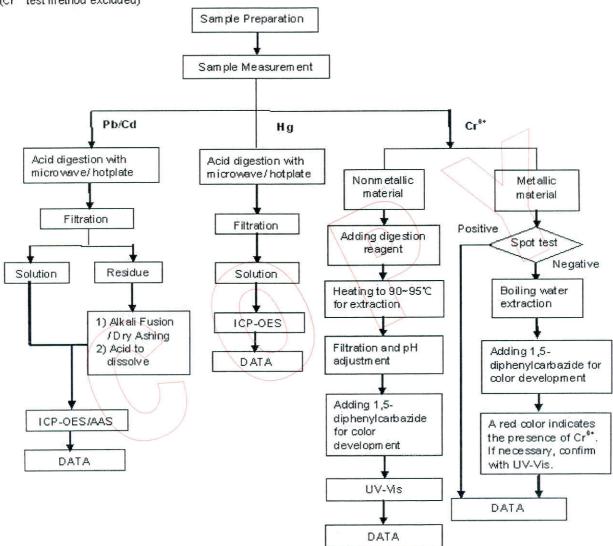
Date: 07 Jul 2008

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#### ATTACHMENTS

### **Testing Flow Chart**

- 1) Name of the person who made measurement: Bowen Chen
- 2) Name of the person in charge of measurement: Adams Yu
- These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr6+ test method excluded)



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Sample photo:



SGS authenticate the photo on original report only \*\*\* End of Report \*\*\*

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