

TEST DATA OF NAP-10-□□□

Noise Filter

Apr. 22. 2005

Approved by : Toshio Watanabe Toshio Watanabe Design Manager

Prepared by : Tadayuki Noda
Tadayuki Noda Design Engineer

COSEL CO.,LTD.

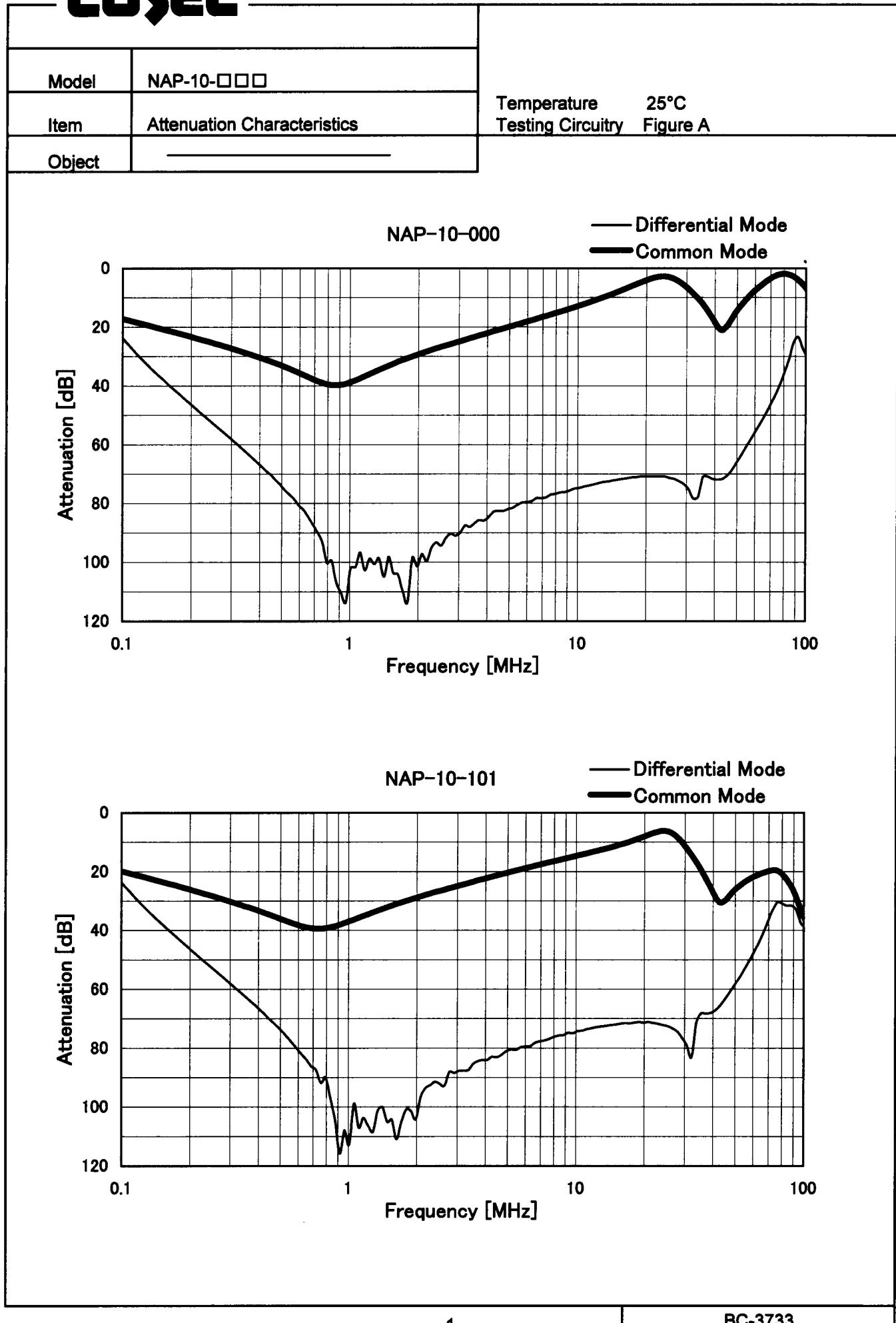


CONTENTS

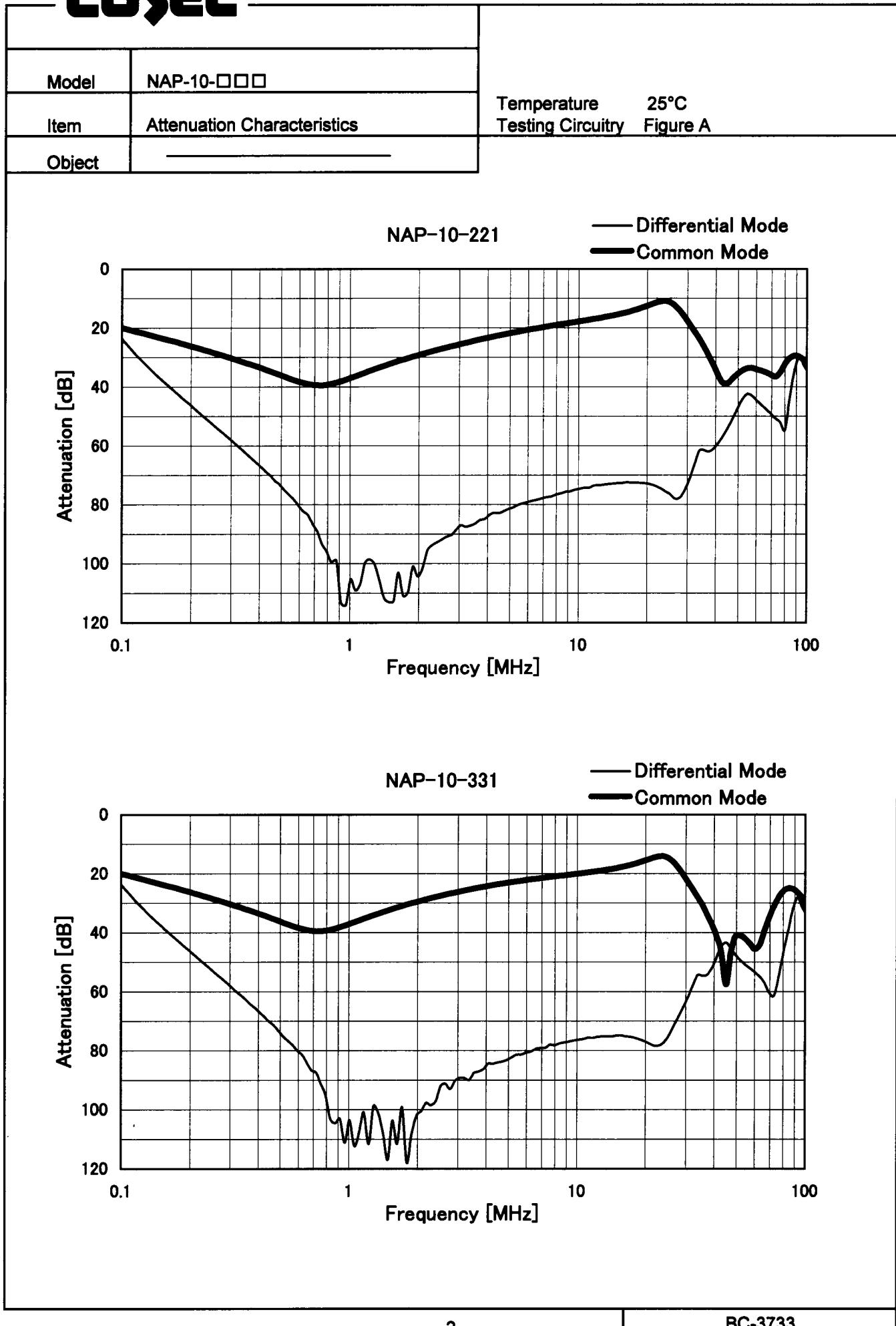
| | |
|---|----|
| 1.Attenuation Characteristics | 1 |
| 2.Pulse Attenuation Characteristics | 6 |
| 3.Leakage Current | 9 |
| 4.Figure of Testing Circuitry | 10 |

(Final Page 11)

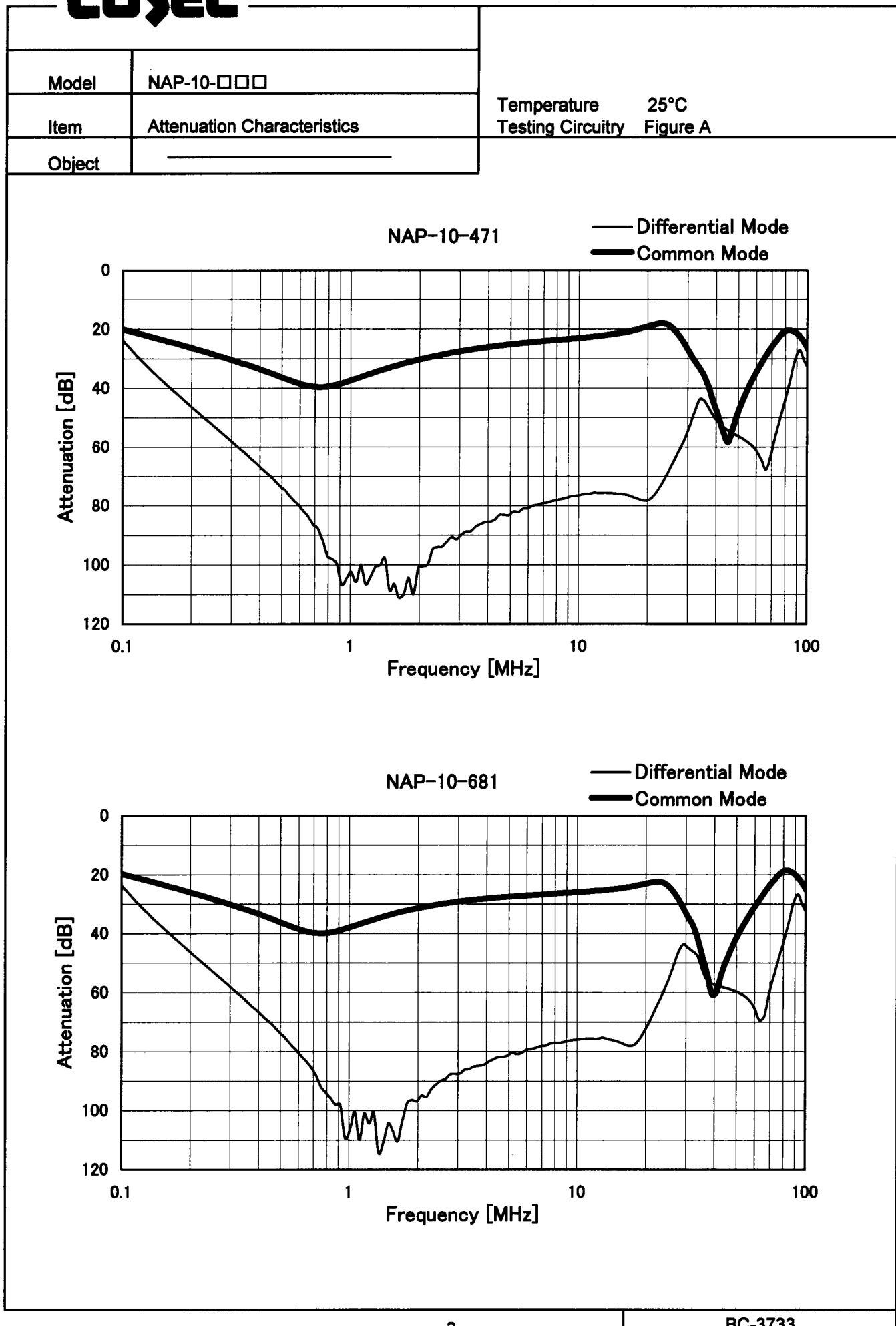
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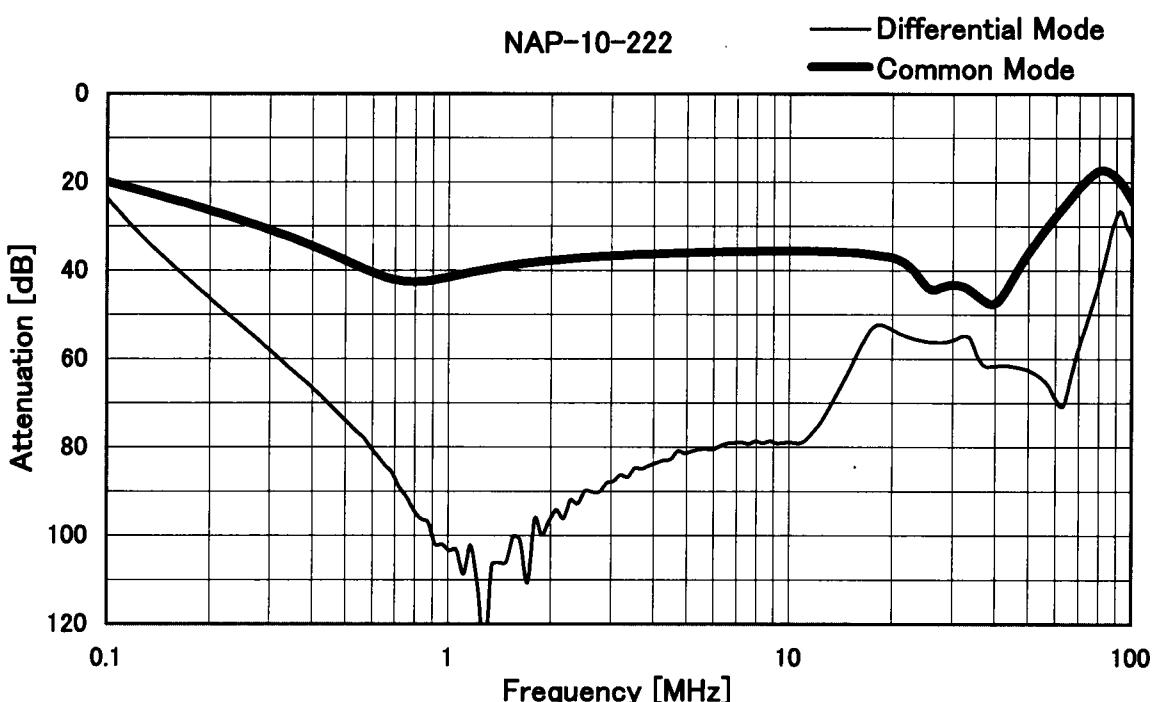
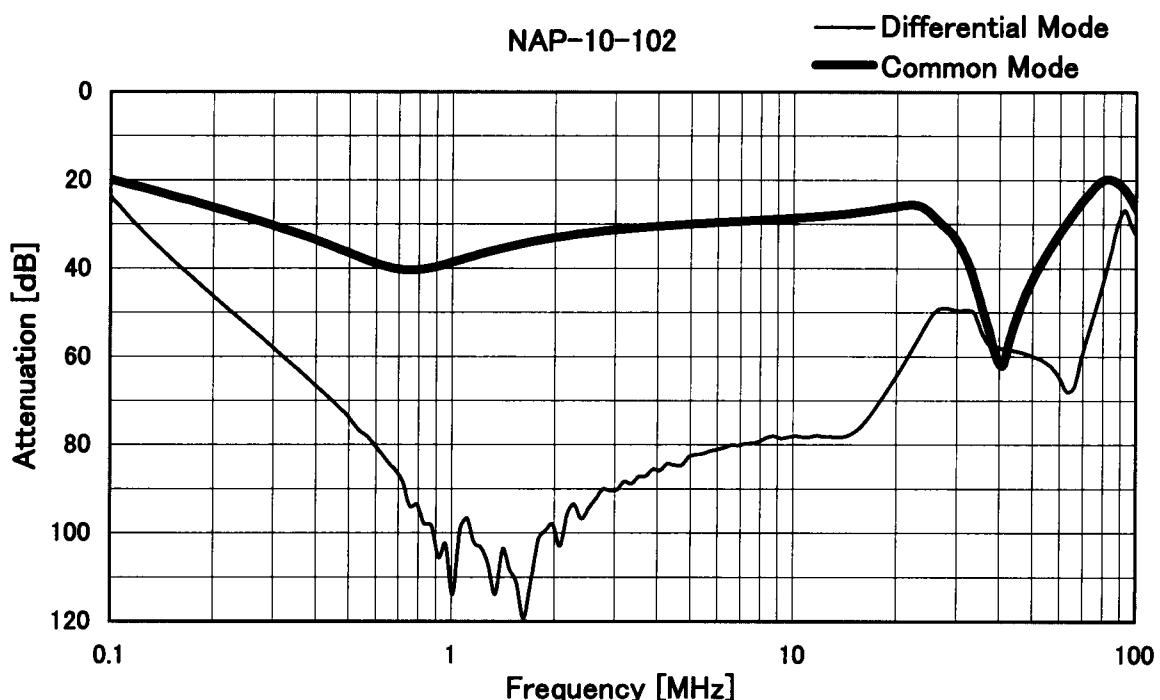


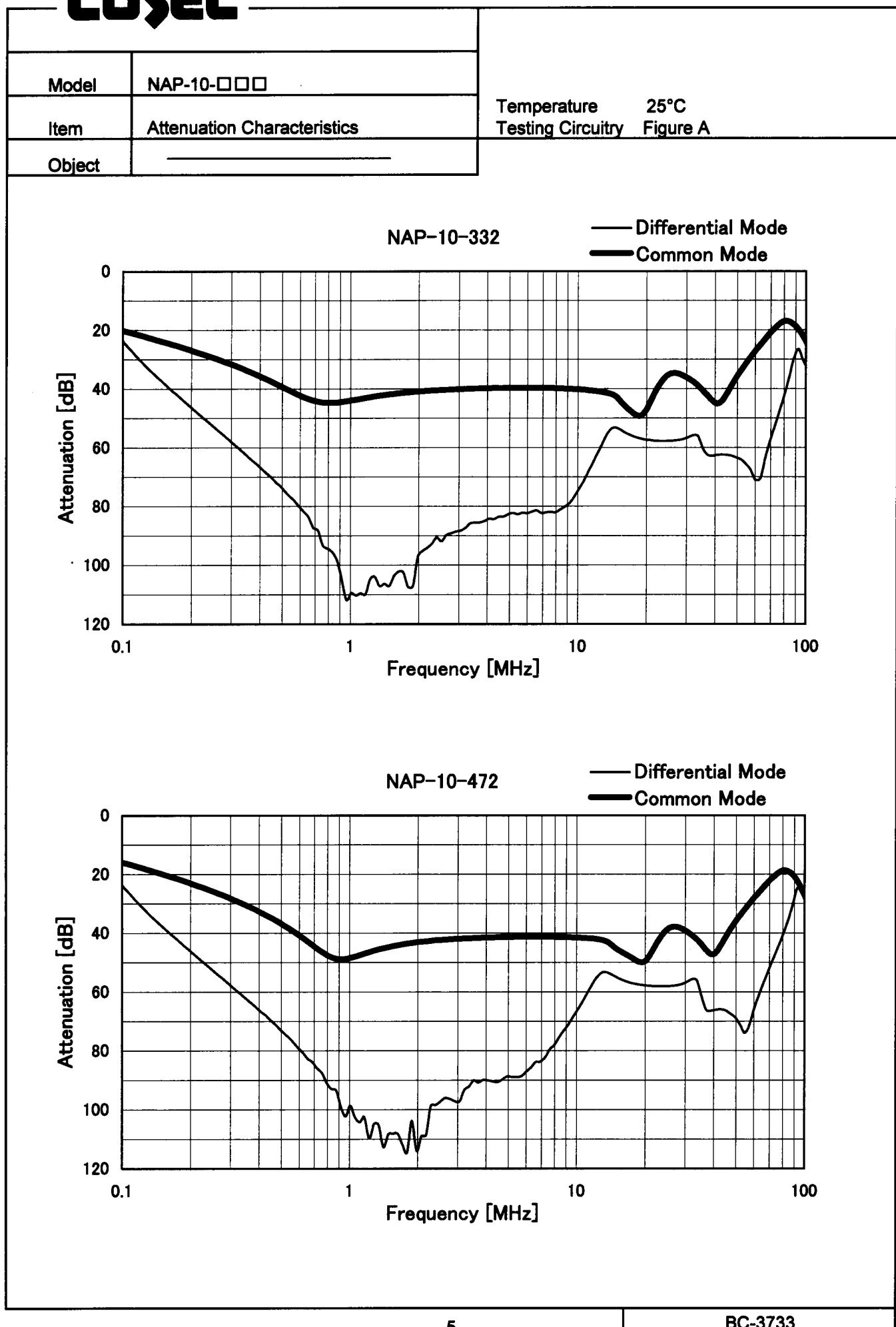
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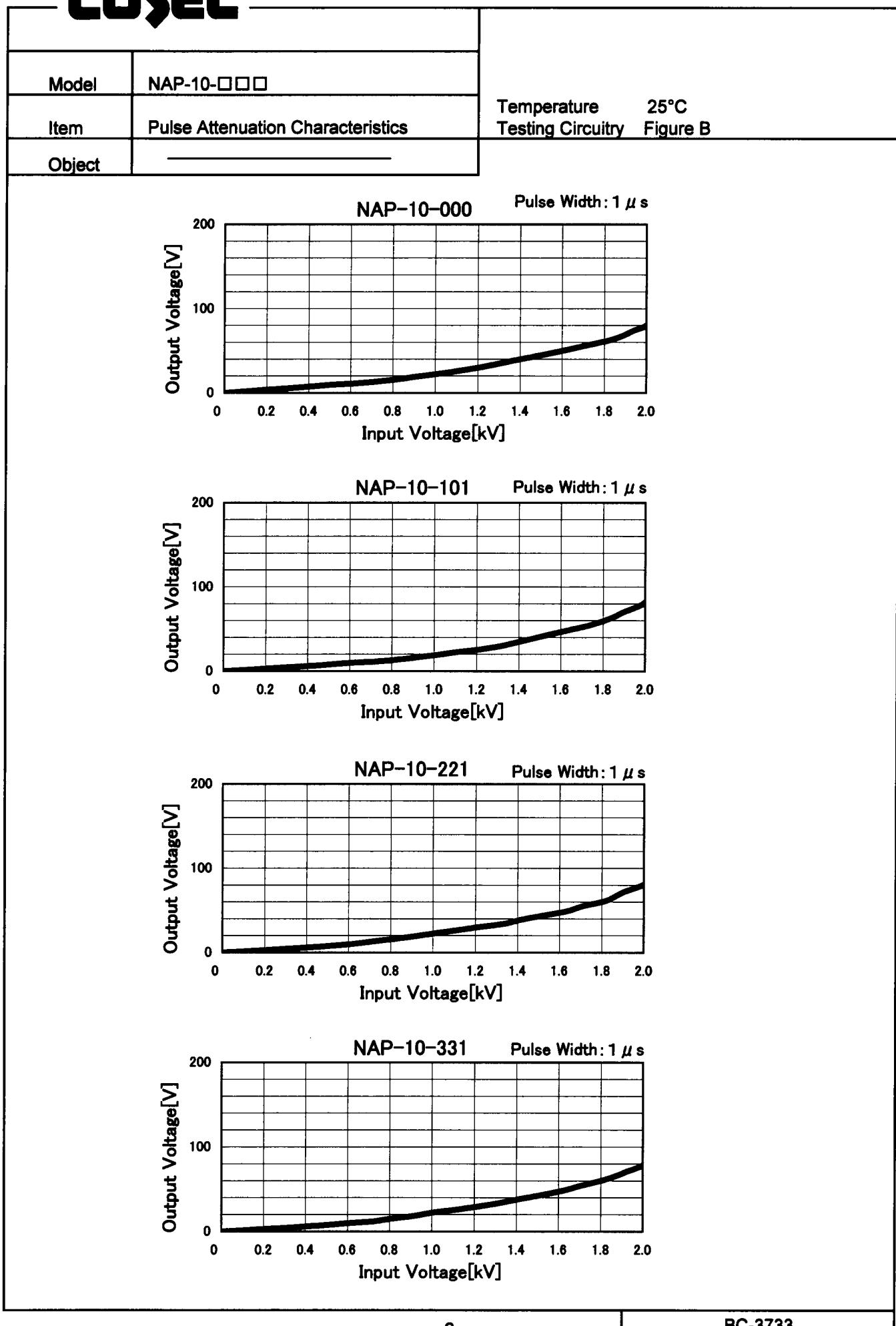
Model NAP-10-□□□

Item Attenuation Characteristics

Object

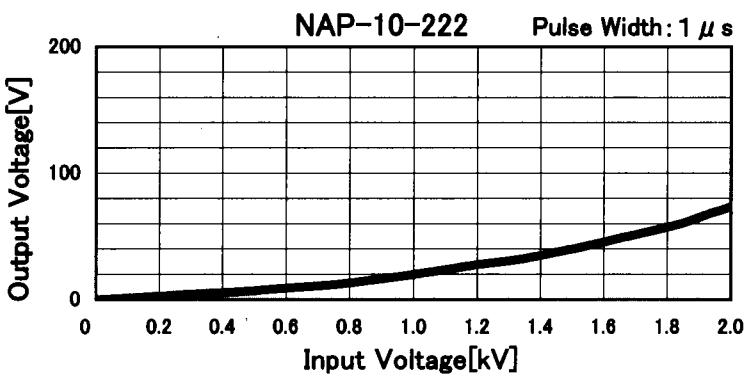
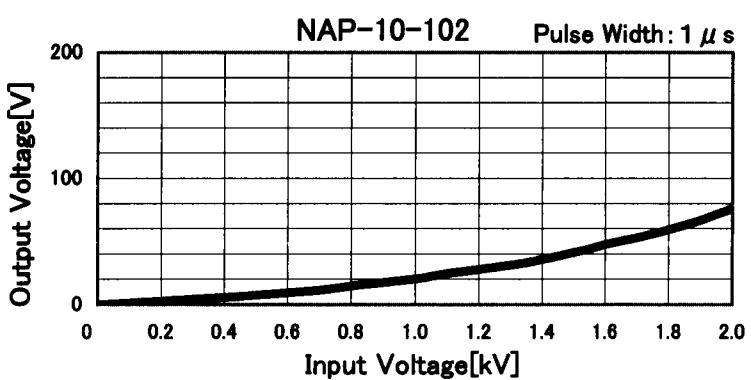
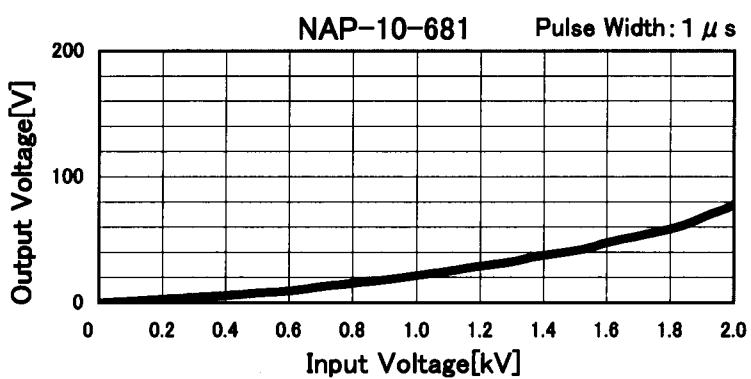
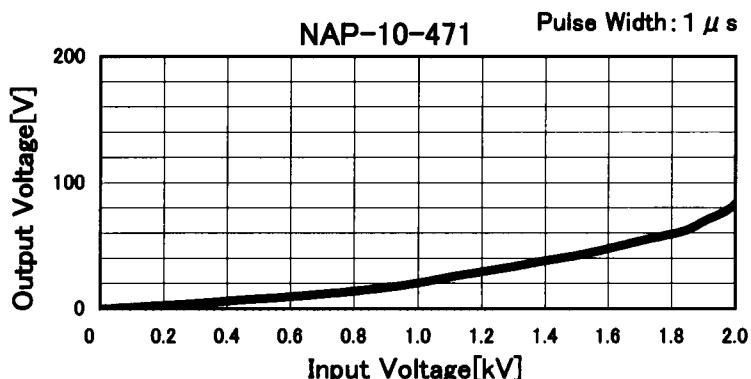
Temperature 25°C
Testing Circuitry Figure A

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| | | | |
|--------|-----------------------------------|-------------------|----------|
| Model | NAP-10-□□□ | Temperature | 25°C |
| Item | Pulse Attenuation Characteristics | Testing Circuitry | Figure B |
| Object | <hr/> | | |



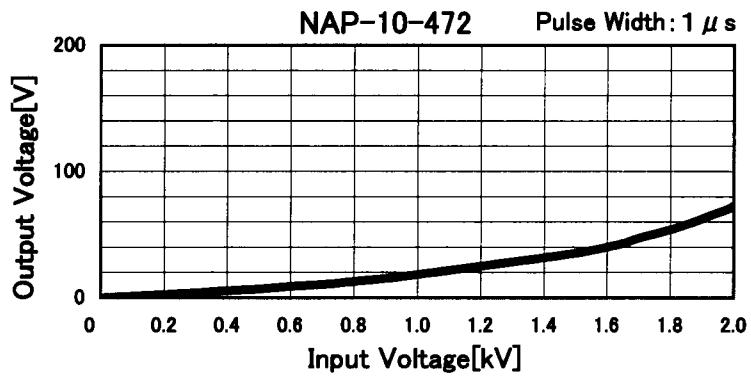
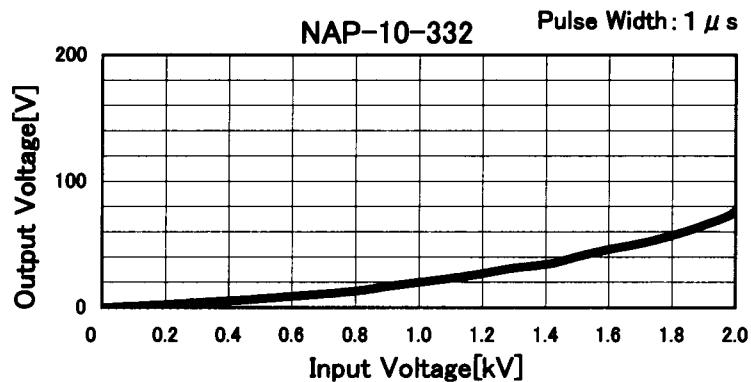
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Model NAP-10-□□□

Temperature 25°C
Testing Circuitry Figure B

Item Pulse Attenuation Characteristics

Object





| | | | |
|--------|-----------------|-------------------|----------|
| Model | NAP-10-□□□ | Temperature | 25°C |
| Item | Leakage Current | Testing Circuitry | Figure C |
| Object | _____ | | |

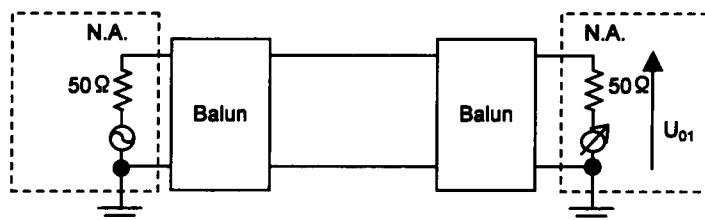
1. Results

[mA]

| Model | Standards | Input Volt. | | | | Note |
|------------|-----------|-------------|---------|---------|---------|------|
| | | 100 [V] | 125 [V] | 230 [V] | 250 [V] | |
| NAP-10-000 | UL1283 | 0.002 | 0.002 | 0.004 | 0.005 | |
| NAP-10-101 | UL1283 | 0.006 | 0.007 | 0.013 | 0.015 | |
| NAP-10-221 | UL1283 | 0.011 | 0.013 | 0.025 | 0.028 | |
| NAP-10-331 | UL1283 | 0.015 | 0.019 | 0.038 | 0.042 | |
| NAP-10-471 | UL1283 | 0.023 | 0.030 | 0.061 | 0.069 | |
| NAP-10-681 | UL1283 | 0.031 | 0.040 | 0.082 | 0.093 | |
| NAP-10-102 | UL1283 | 0.044 | 0.056 | 0.110 | 0.120 | |
| NAP-10-222 | UL1283 | 0.090 | 0.120 | 0.230 | 0.250 | |
| NAP-10-332 | UL1283 | 0.130 | 0.170 | 0.340 | 0.370 | |
| NAP-10-472 | UL1283 | 0.190 | 0.240 | 0.480 | 0.520 | |

2. Condition

Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.



Attenuation = $20\log(U_{01}/U_{02})$ [dB]
 U_{01} : Voltage in state without filters
 U_{02} : Voltage in state which added filters
N.A. : Network Analyzer

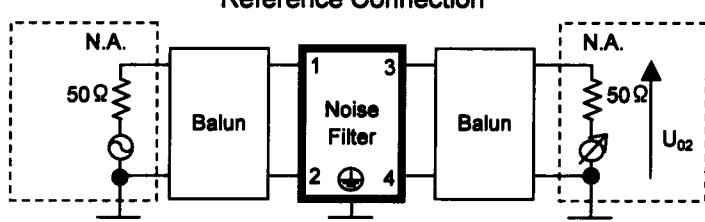
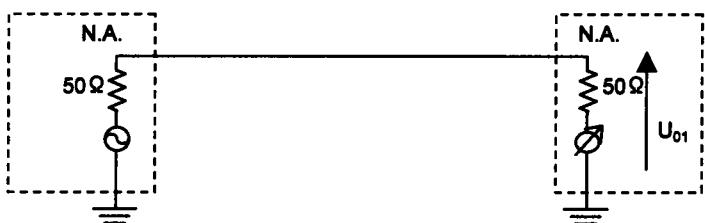


Figure A - 1 Differential mode attenuation measurement



Attenuation = $20\log(U_{01}/U_{02})$ [dB]
 U_{01} : Voltage in state without filters
 U_{02} : Voltage in state which added filters
N.A. : Network Analyzer

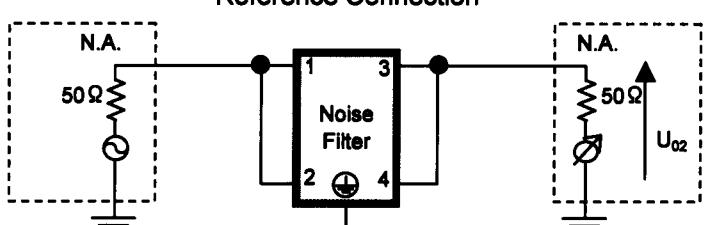
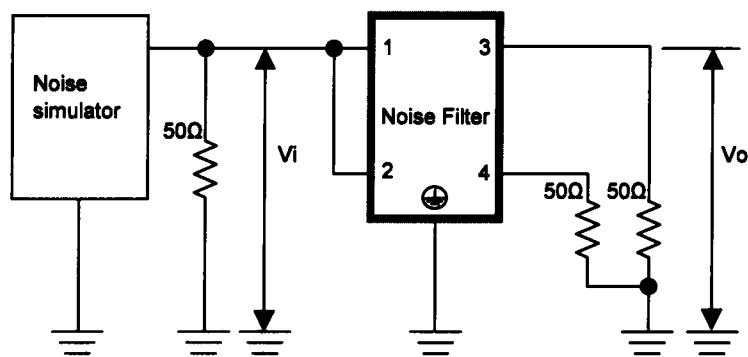


Figure A - 2 Common mode attenuation measurement

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Pulse attenuation measurement

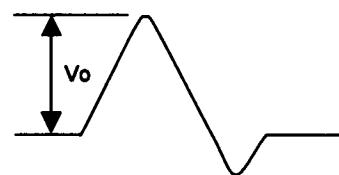
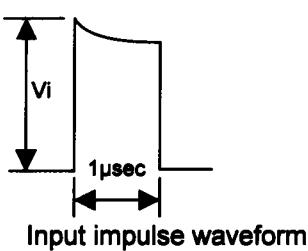


Figure B Pulse attenuation measurement

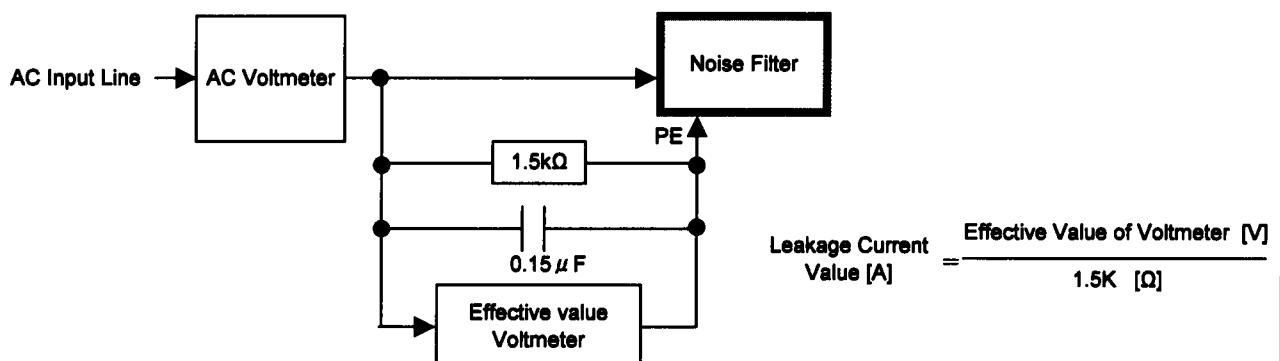


Figure C Leakage current measurement (UL1283)