

**KA8512 CHARACTERISTIC GRAPH**

**98. 9. 30**

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**ANALOG**  

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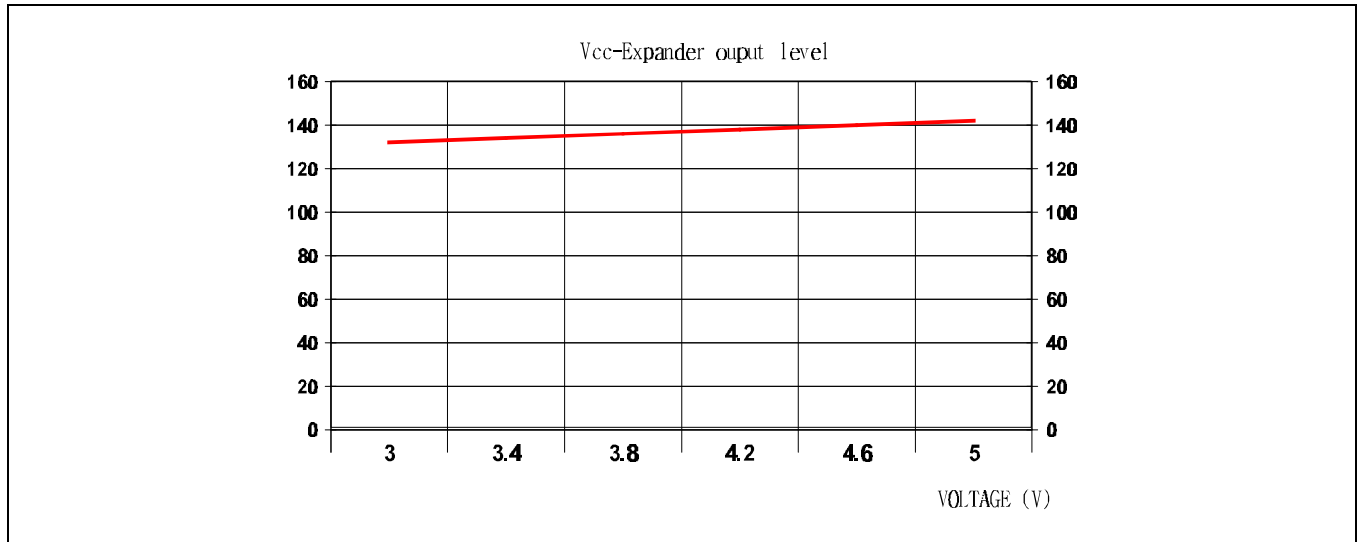
**LSI DIVISION**

< Vcc variable - Expander output level >

Test condition : Vcc = variable, f = 1kHz, Vin = 180mVrms (0dB)

Signal source / Test equipment : ROHDE & SCHWARZ

Radio communication tester : CMT-84

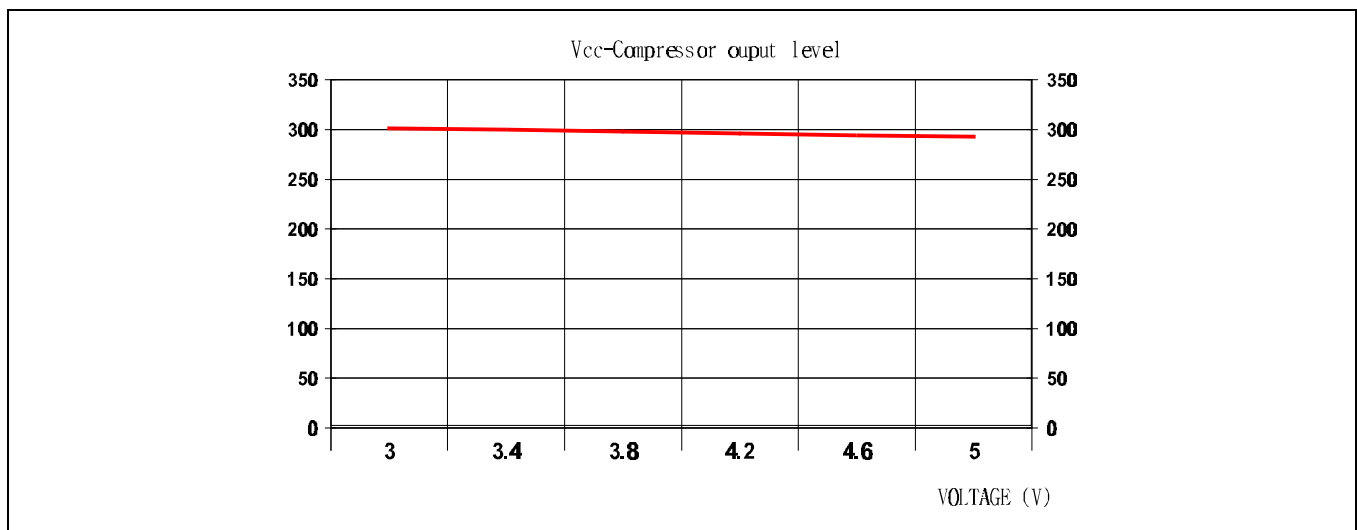


< Vcc variable - Compressor output level >

Test condition : Vcc = variable, f = 1kHz, Vin = 13mVrms (0dB),  
Mic amp gain : R = 9.1K, C = 0.47uF

Signal source / Test equipment : ROHDE & SCHWARZ

Radio communication tester : CMT-84

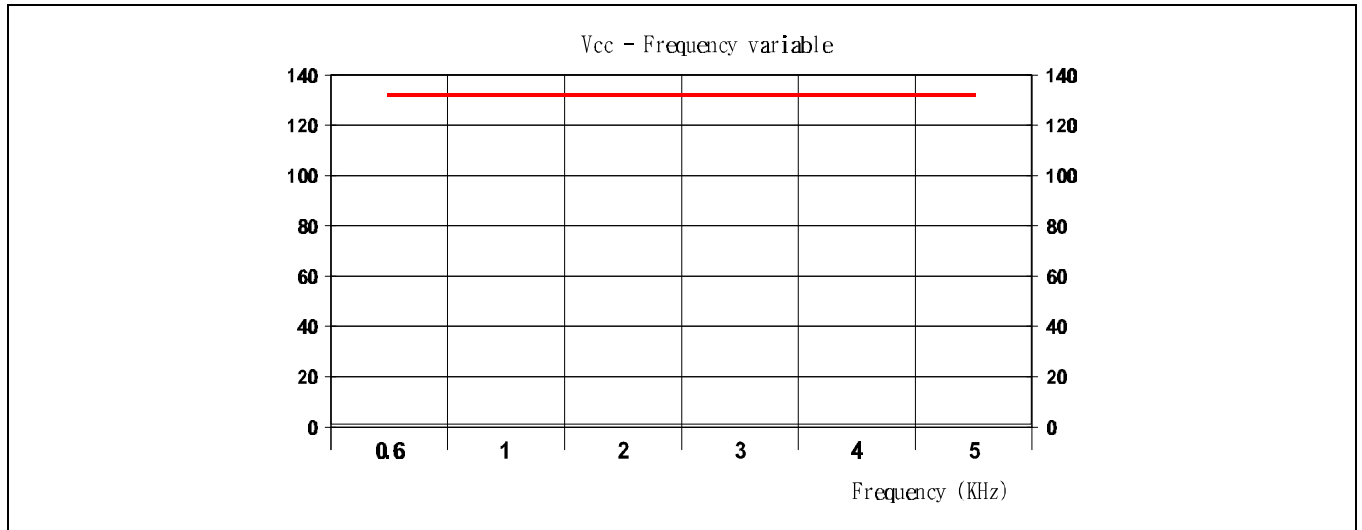


< Vcc - Frequency variable expander characteristics >

Test condition : Vcc = 3V/5V, f = Variable, Vin = 180mVrms (0dB)

Signal source / Test equipment : ROHDE & SCHWARZ

Radio communication tester : CMT-84

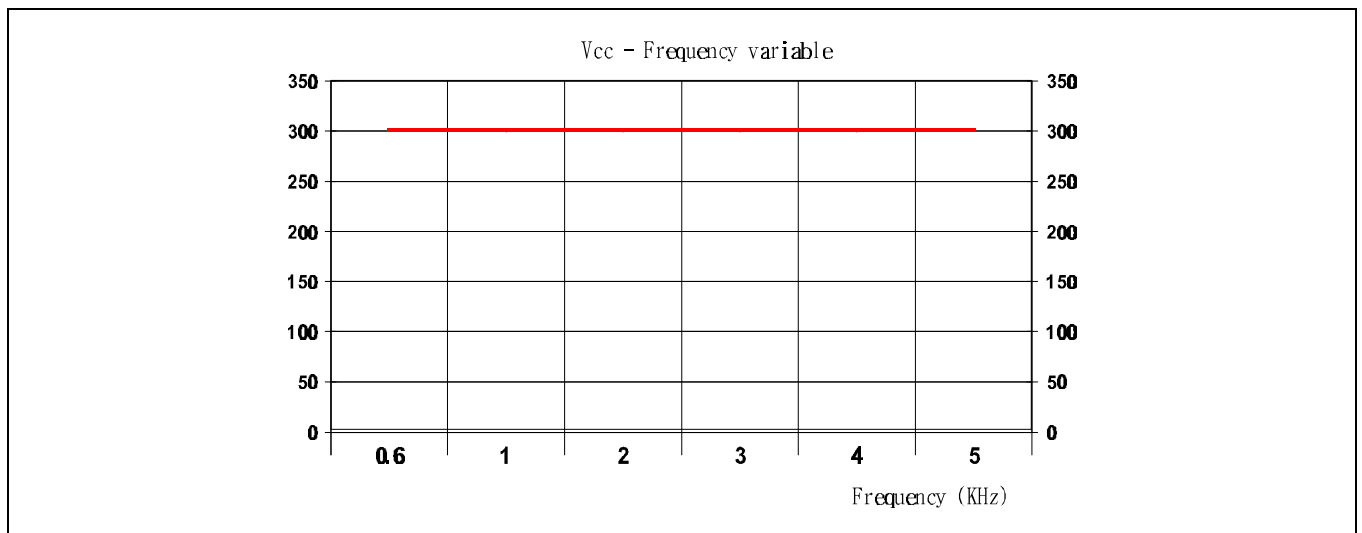


< Vcc - Frequency variable Compressor characteristics >

Test condition : Vcc = 3V/5V, f = Variable, Vin = 13mVrms (0dB)

Signal source / Test equipment : ROHDE & SCHWARZ

Radio communication tester : CMT-84

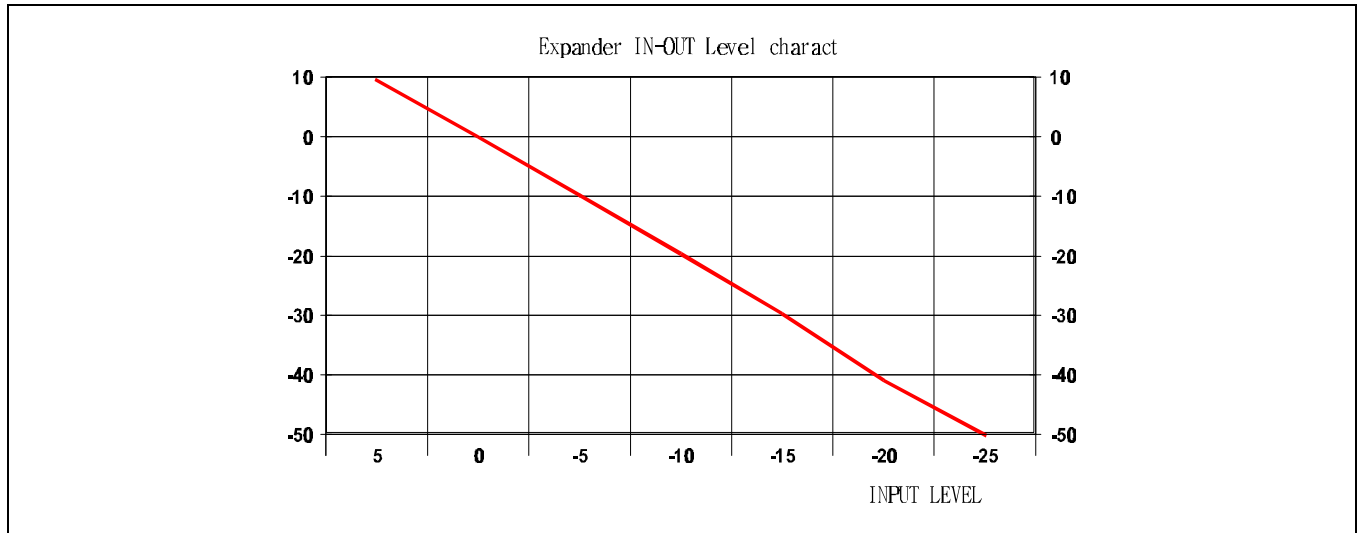


< Expander INPUT - OUTPUT level, Vcc = 3V >

Test condition : Vcc = 3V, f = 1kHz, Vine = 180mVrms (0dB), Voute=130mVrms (0dB)

Signal source / Test equipment : ROHDE & SCHWARZ

Radio communication tester : CMT-84

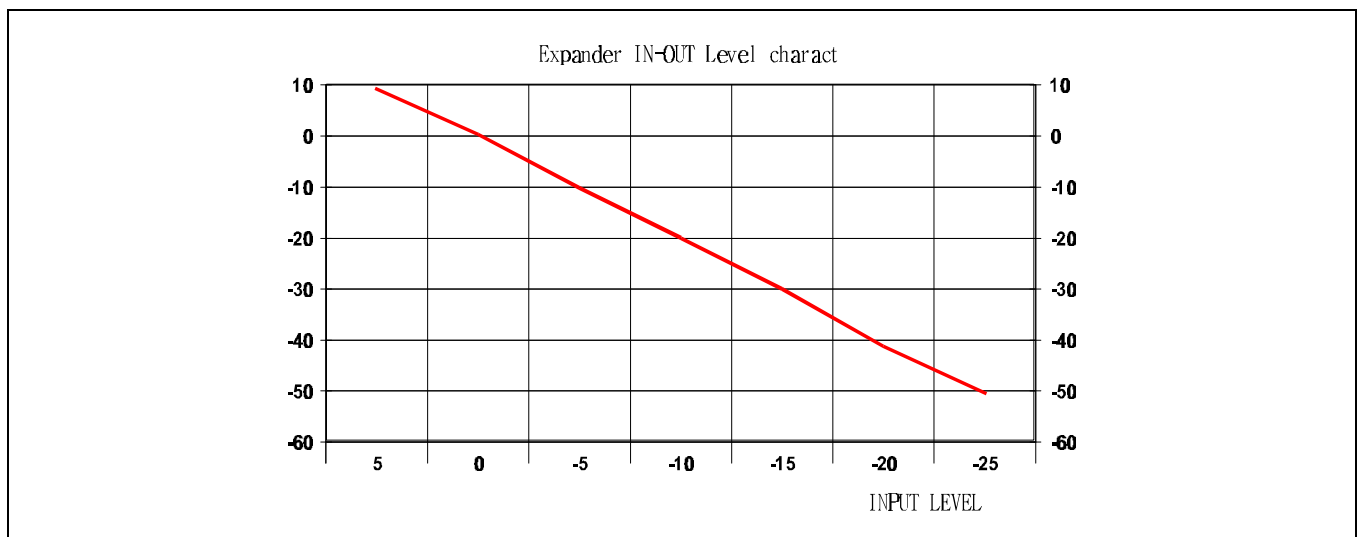


< Expander INPUT - OUTPUT level, Vcc = 5V >

Test condition : Vcc = 5V, f = 1kHz, Vine = 180mVrms (0dB), Voute = 130mVrms(0dB)

Signal source / Test equipment : ROHDE & SCHWARZ

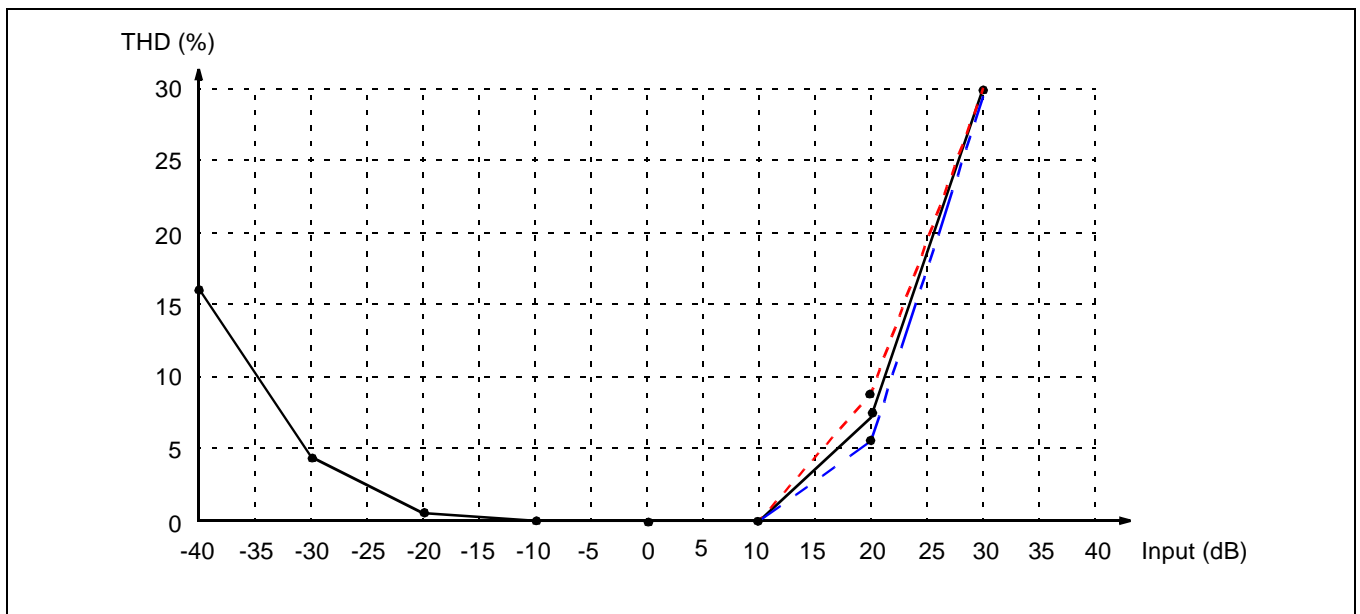
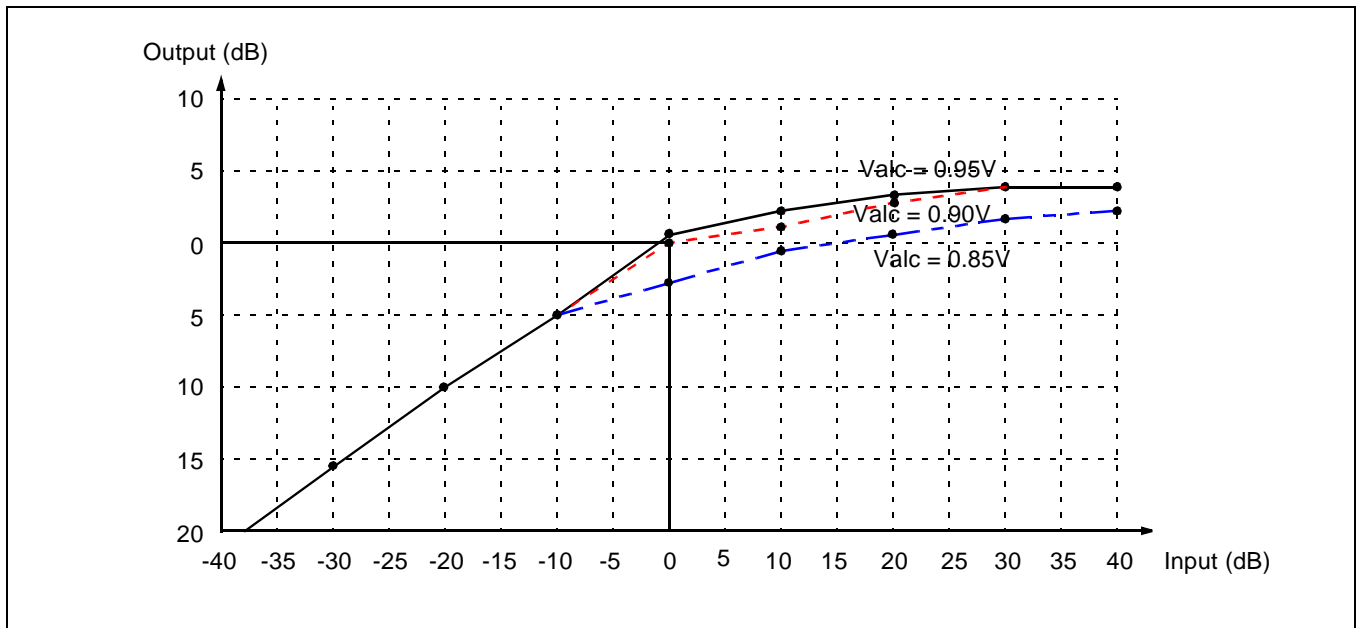
Radio communication tester : CMT-84



< COMPRESSOR INPUT/OUTPUT CHARACTERISTICS >

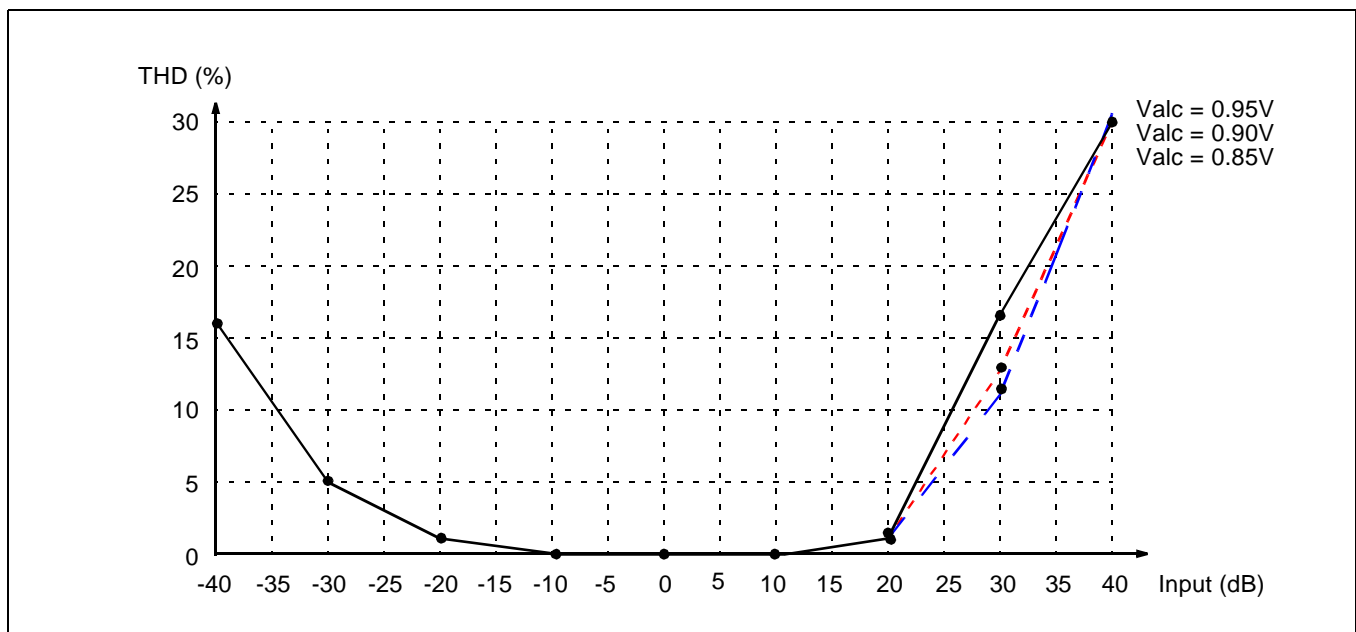
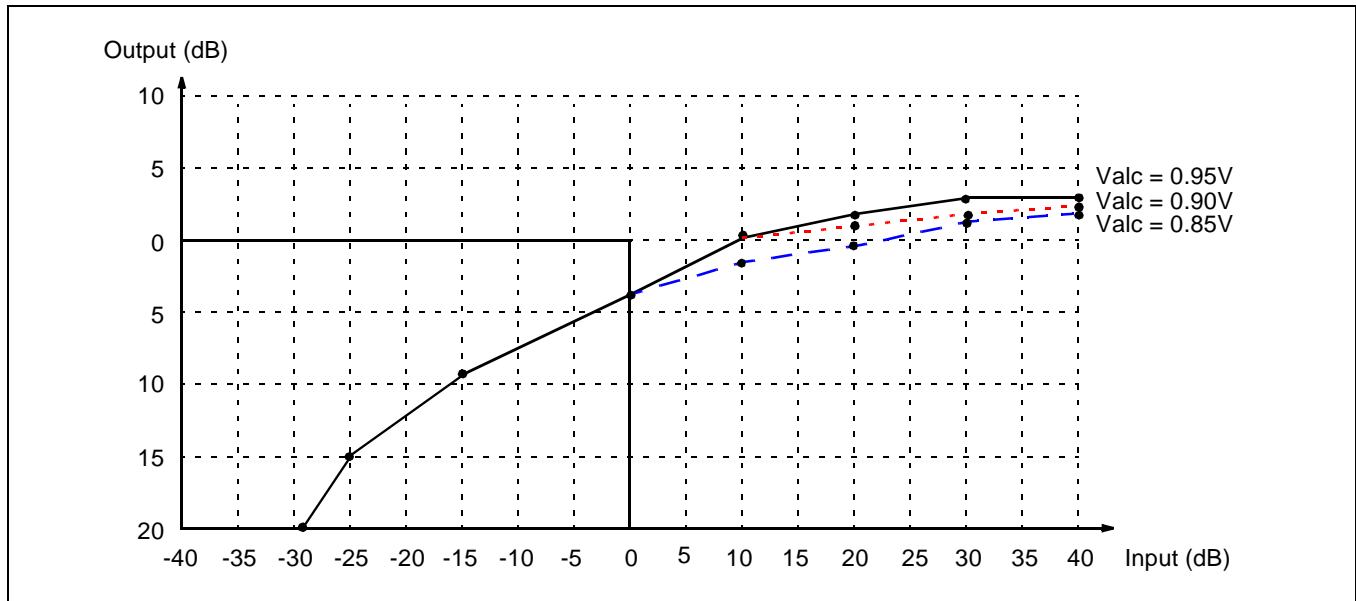
< CASE 1 >

- Test condition:  $V_{cc} = 3.0V$ ,  $V_{in} = \text{pin } 8$ ,  $V_{out} = \text{pin } 12$   
Mic amp gain:  $R = 9.1K$ ,  $C = 0.47\mu F$
- Signal source/ Test equipment: POHDE & SCHWARZ  
Radio communication tester, CMT-84
- 0dB point: input(0dB): 13 mVrms, output (0dB): 300mVrms



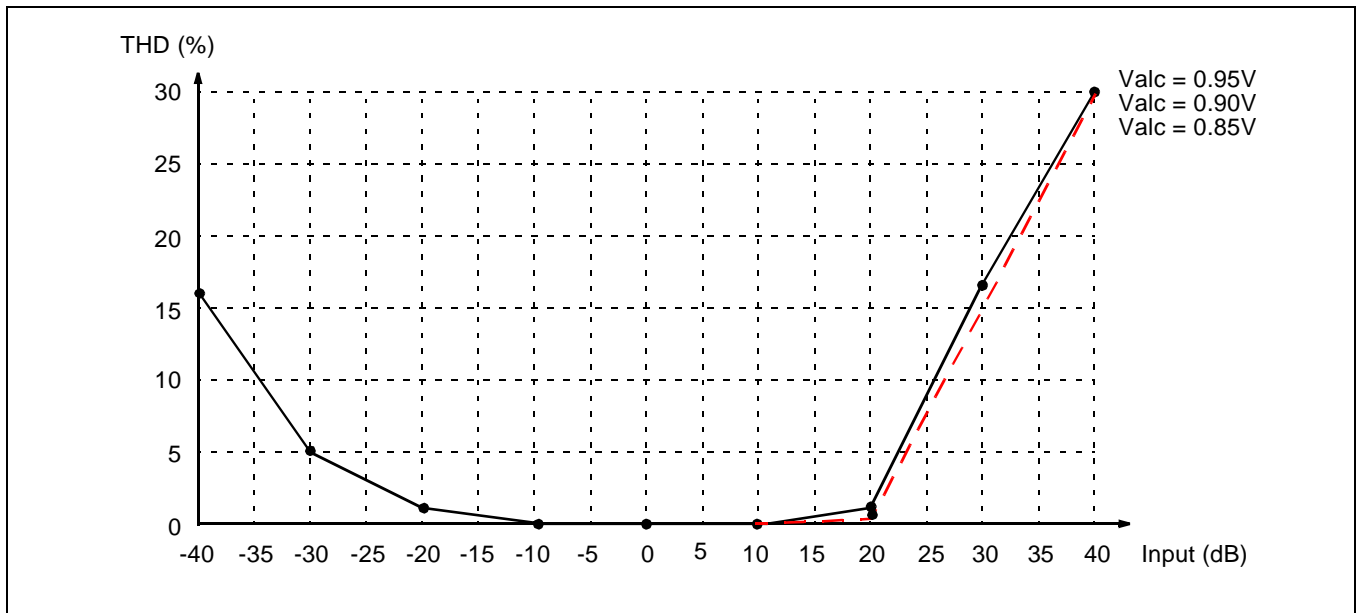
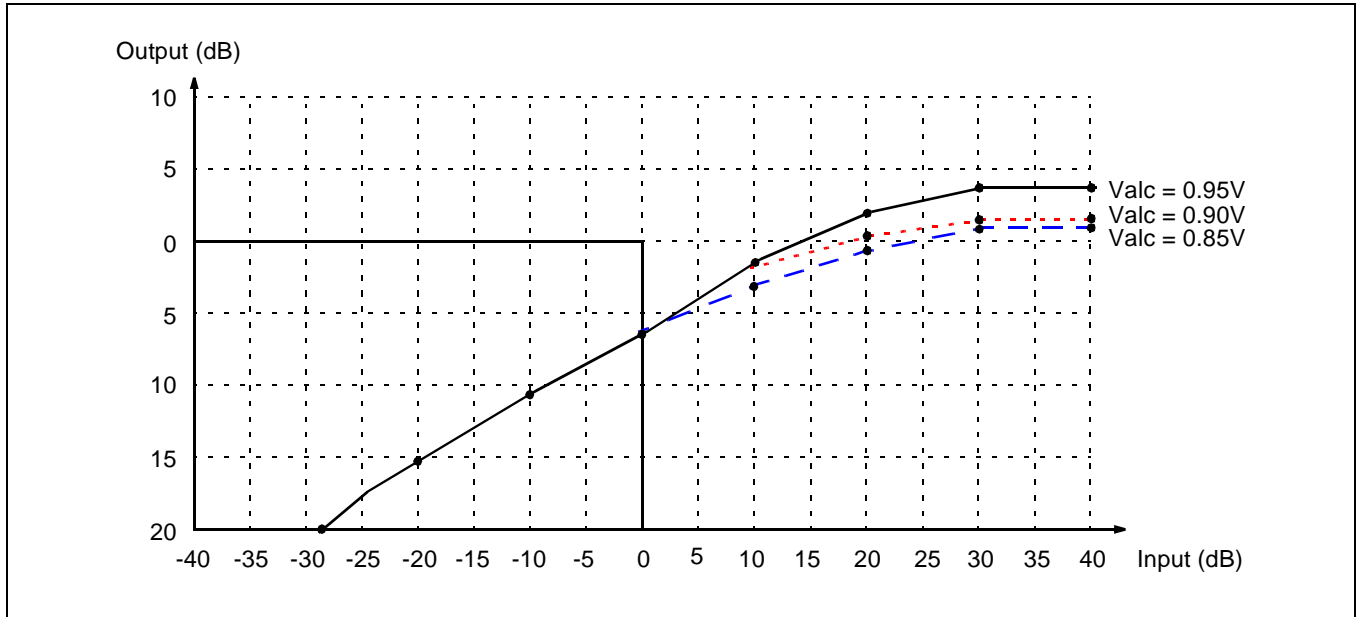
<CASE 2>

- Test condition:  $V_{cc} = 3.0V$ ,  $V_{in} = \text{pin } 8$ ,  $V_{out} = \text{pin } 12$   
Mic amp gain:  $R = 68K$ ,  $C = 0.47\mu F$
- Signal source/Test equipment: ROHDE & SCHWARZ  
Radio communication tester, CMT-84
- 0dB in gap: input (0dB): 13mVrms, output (0dB): 300mVrms



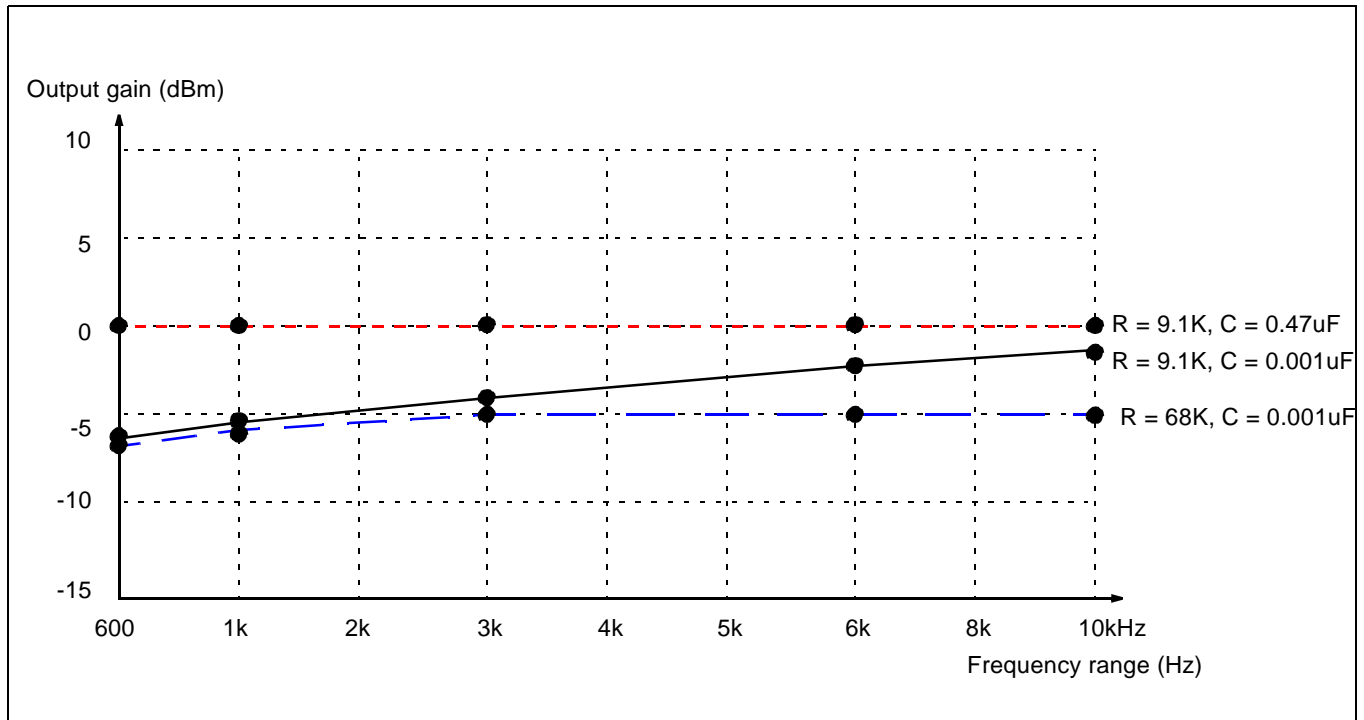
<CASE 3>

- Test condition:  $V_{cc} = 3.0V$ ,  $V_{in} = \text{Pin } 8$ ,  $V_{out} = \text{pin } 12$   
Mic amp gain:  $R = 9.1K$ ,  $C = 0.001\mu F$
- Signal source/Test equipment: ROHDE & SCHWARZ  
Radio communication tester, CMT-84
- 0dB in graph: input (0dB) : 13mVrms, output (0dB): 300mVrms



## &lt;PRE-EMPHASIS CHARACTERISTIC CURVE&gt;

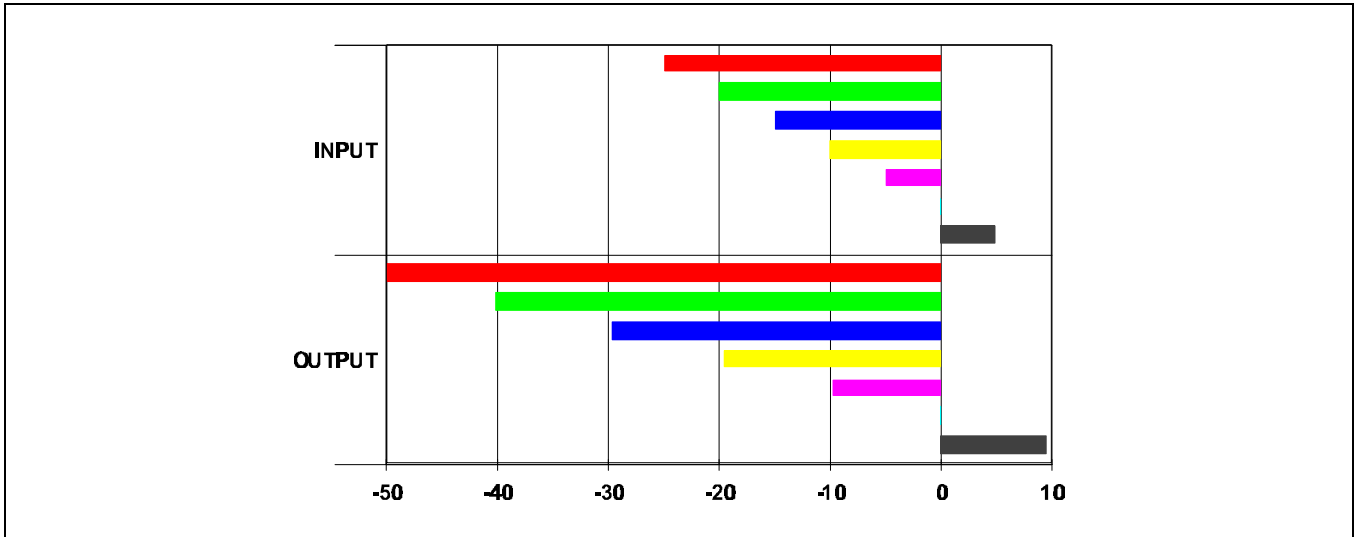
- Test condition:  $V_{cc} = 3.0V$ ,  $V_{in} = \text{pin } 8$ ,  $V_{out} = \text{pin } 12$   
Mic amp gain: Variables,  $V_{alc} = 0.9V$
- Signal source/Test equipment: POHDE & SCHWARZ  
Radio communication tester, CMT-84
- Reference point (0dB point): input (0dB): 13mVrms, output (0dB): 300mVrms





< EXPANDER INPUT/OUTPUT CHARACTERISTICS >

- Test condition :  $V_{cc} = 4V$
- Standard level :  $V_{in} = 180mV_{rms} (0dB)$ ,  $V_{out} = 130mV_{rms} (0dB)$



< ICC - VCC RACTERISTICS >

- Test condition:  $V_{cc} = 4 \sim 6V$

