

CM1443-08CP

8-C EMI F A ESD P

Features

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- -
- *OptiGuard*[™]
- -

Applications

- R = 100 Ω
- A8) 8.5 pF 8.5 pF FILTERn*
(Pins C1–C8)
- C

GND
(Pins B1–B4)

1 of 8 EMI/RFI + ESD Channels

*See Package/Pinout Diagrams for expanded pin information.

| Device | Package | Shipping |
|--------|---------|----------|
| | | |

s C

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PACKAGE / PINOUT DIAGRAMS

Top View
(Bumps Down View)



Bottom View
(Bumps Up View)

D

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Table 4. ELECTRICAL OPERATING CHARACTERISTICS (Note 1)

| Symbol | Parameter | Conditions | Min | Typ | Max | Units |
|--------------------|--|-------------|-----|------|-----|-------------------|
| R | Resistance | | 80 | 100 | 120 | Ω |
| C _T | Total Capacitance | At 2.5 V DC | 14 | 17 | 21 | pF |
| C _S | Single Capacitor | At 2.5 V DC | | 8.5 | | pF |
| TCR | Temperature Coefficient of Resistance | | | 1200 | | ppm/ $^{\circ}$ C |
| TCC | Temperature Coefficient of Capacitance | At 2.5 V DC | | -300 | | ppm/ $^{\circ}$ C |
| V _{DIODE} | Diode Voltage (reverse bias) | | | | | |

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PERFORMANCE INFORMATION (Cont'd)

Typical Filter Performance ($T_A = 25^\circ\text{C}$, DC Bias = 0 V, 50 Ω Environment)

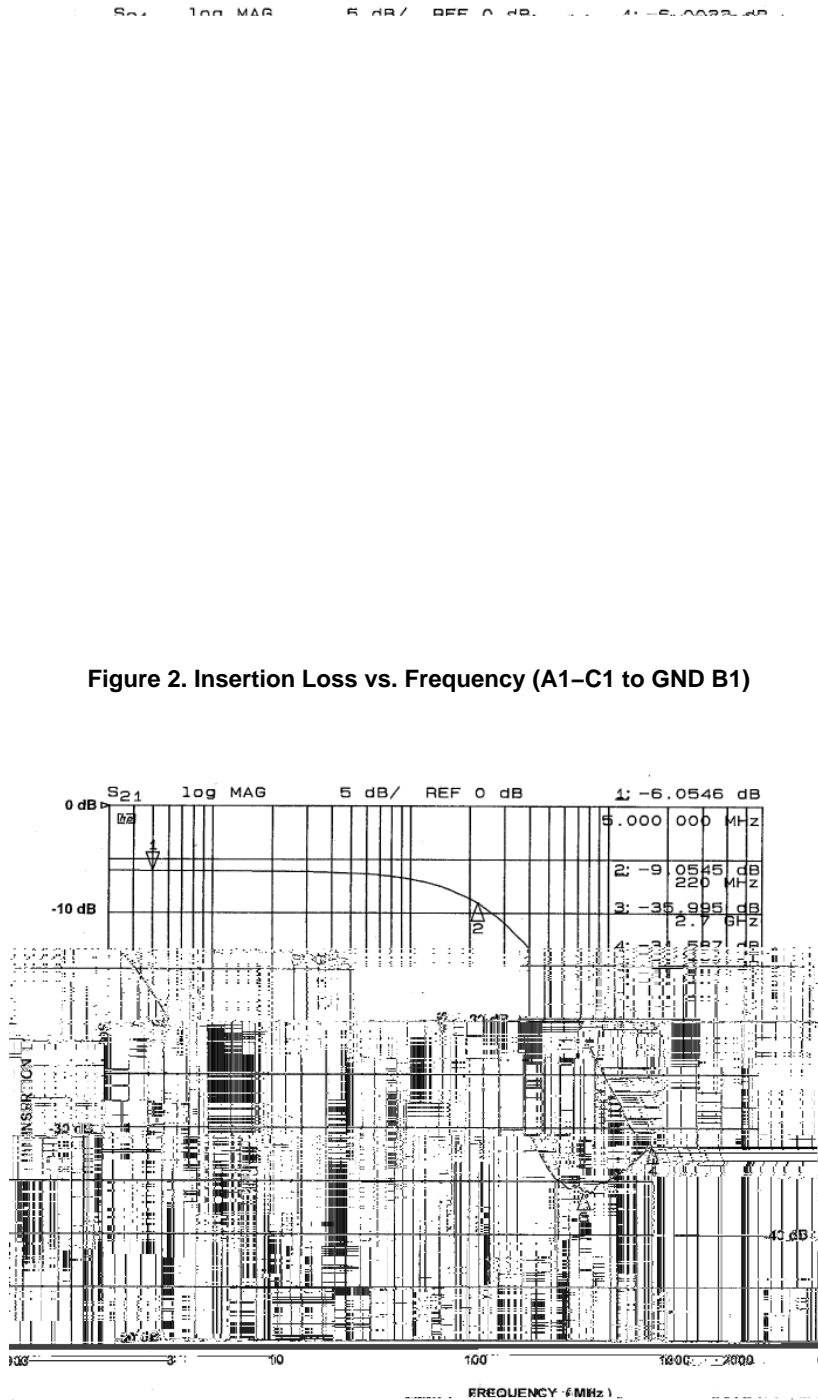


Figure 2. Insertion Loss vs. Frequency (A1-C1 to GND B1)

Figure 3. Insertion Loss vs. Frequency (A2-C2 to GND B1)

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PERFORMANCE INFORMATION (Cont'd)

Typical Filter Performance ($T_A = 25^\circ\text{C}$, DC Bias = 0 V, 50 Ω Environment)

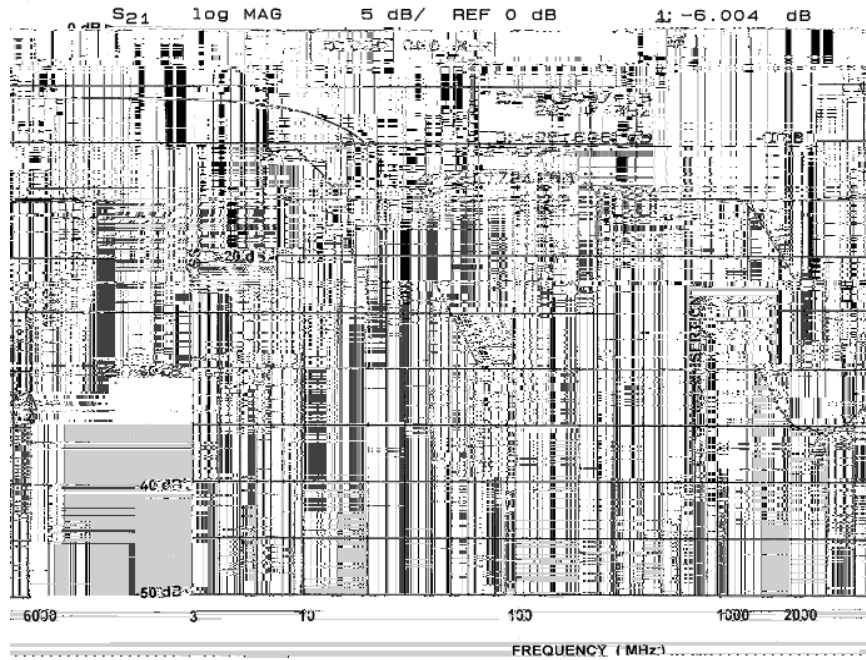


Figure 4. Insertion Loss vs. Frequency (A3-C3 to GND B2)

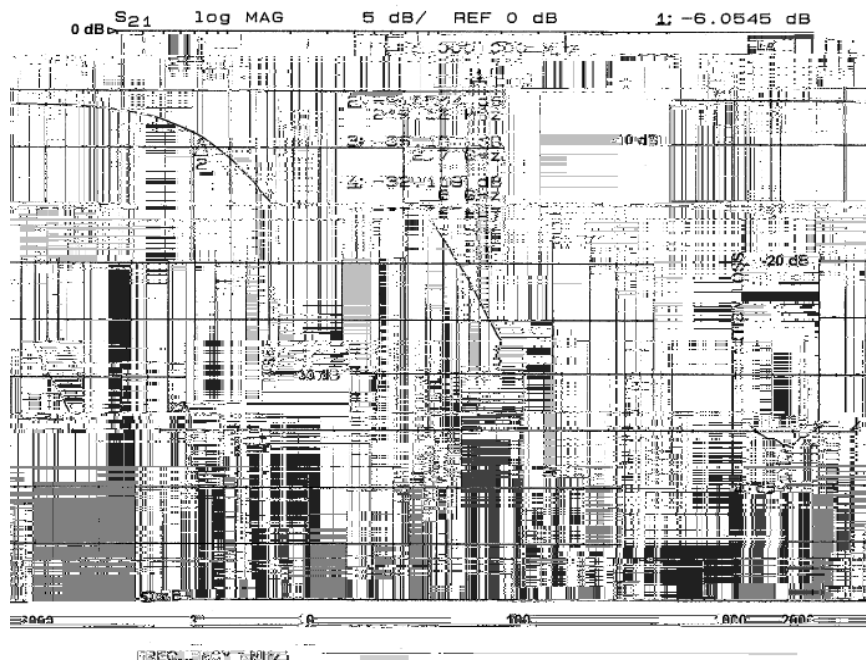


Figure 5. Insertion Loss vs. Frequency (A4-C4 to GND B2)

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PERFORMANCE INFORMATION (Cont'd)

Typical Filter Performance ($T_A = 25^\circ\text{C}$, DC Bias = 0 V, 50 Ω Environment)

S21 100 MAG 5 dB/ REF 0 dB 1: -6.0342 dB

Figure 8. Insertion Loss vs. Frequency (A7-C7 to GND B4)

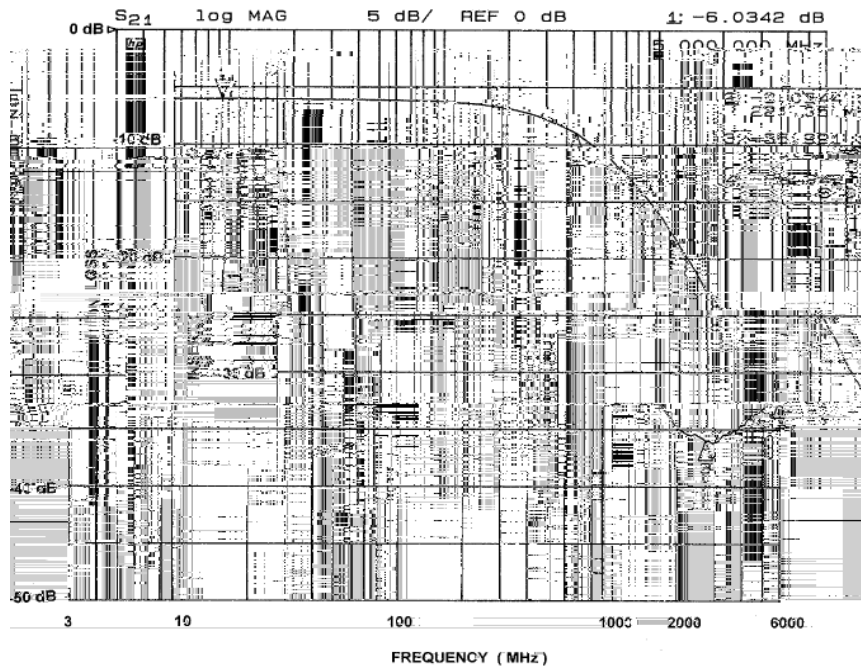


Figure 9. Insertion Loss vs. Frequency (A8-C8 to GND B4)

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PERFORMANCE INFORMATION (Cont'd)

Typical Filter Performance ($T_A = 25^\circ\text{C}$, DC Bias = 0 V, 50 Ω Environment)



Figure 10. Comparison of Filter Response Curves for CM1443 vs. DC Bias

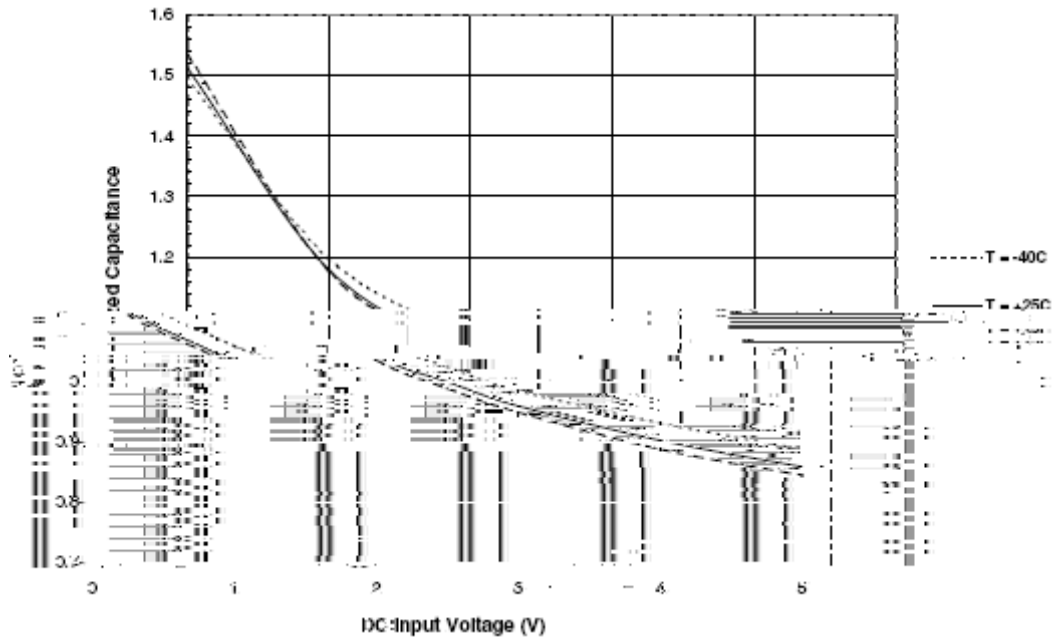


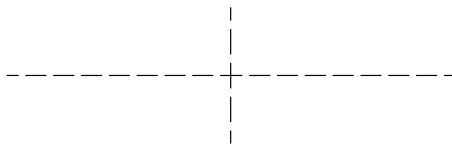
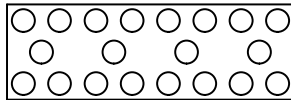
Figure 11. Filter Capacitance vs. Input Voltage over Temperature (normalized to capacitance at 2.5 VDC and 25°C)

CASE 567BU-01
ISSUE O

DATE 26 JUL 2010



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 2. CONTROLLING DIMENSION: MILLIMETERS.
 3. COPLANARITY APPLIES TO SPHERICAL



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