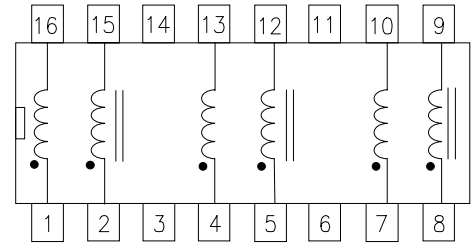


High Frequency Data Line Filter

3 Coils 6 Data Lines

Schematic Diagram



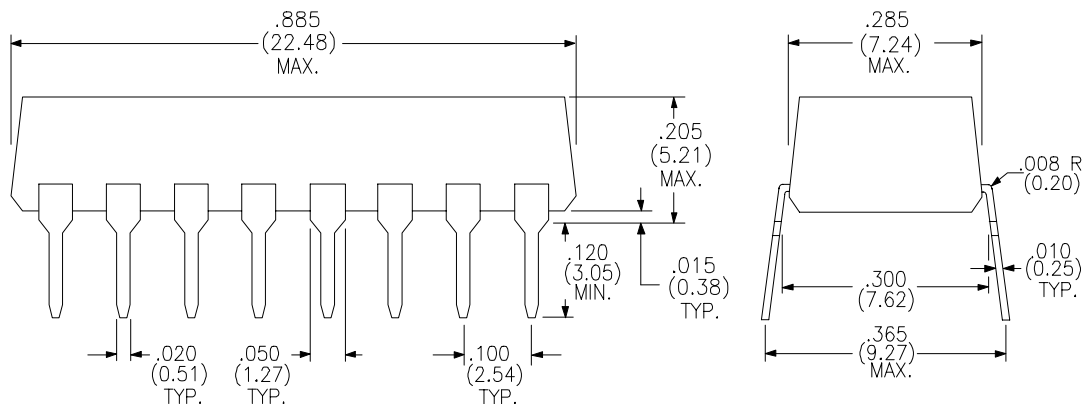
| PARAMETER | | UNITS |
|---|------------|------------------|
| (1) Inductance | 85.0 Min. | μ H |
| (1) Leakage Inductance | 0.25 Max. | μ H |
| (1) Interwinding Capacitance | 12 Max. | pF |
| Primary DC Resistance | 0.30 Max. | Ω |
| Isolation (HI-POT) | 500 Min. | V _{RMS} |
| SRF (Ref.) | 20 | MHz |
| Insulation Resistance | 10k Min. | M Ω |
| Power Rating | 250 | mW |
| Crosstalk 60 dB @ 5 MHz Nominal 50 dB @ 10 MHz Nominal | | |
| Longitudinal Conversion Loss | | |
| 0 - 300KHz | 56 dB Min. | |
| 300 KHz - 500KHz | 52 db Min. | |
| 500 KHz - 1MHz | 46 dB Min. | |
| 1MHz - 5 MHz | 36 db Min. | |
| Operating Temperature Range -40°C TO +85°C | | |
| Storage Temperature Range -55°C TO +125°C | | |

Turns ratio 1:1 + 0%
Current Rating: 100mA

¹Tested at 100KHz and 500 mV_{RMS}

Operating temperature Range
-45°C to +85°C

Physical Dimensions in inches (mm)



RHOMBUS P/N: F-129

CUST P/N:

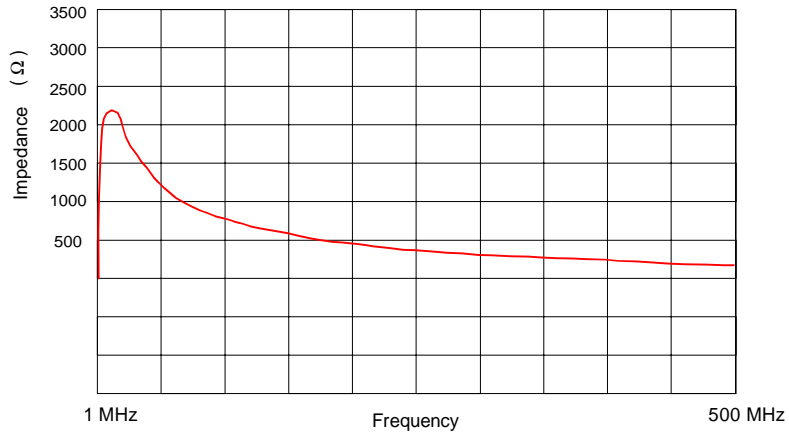
NAME:

DATE: 1/25/01

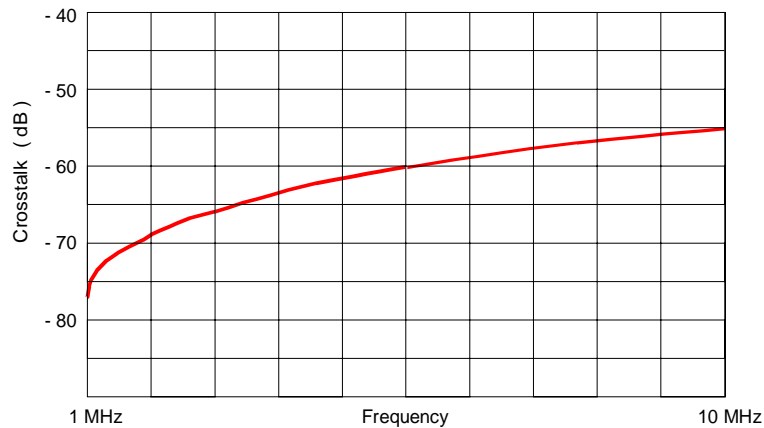
SHEET:

High Frequency Data Line Filter: P/N F-129

Impedance



Crosstalk



RHOMBUS P/N: **F-129**

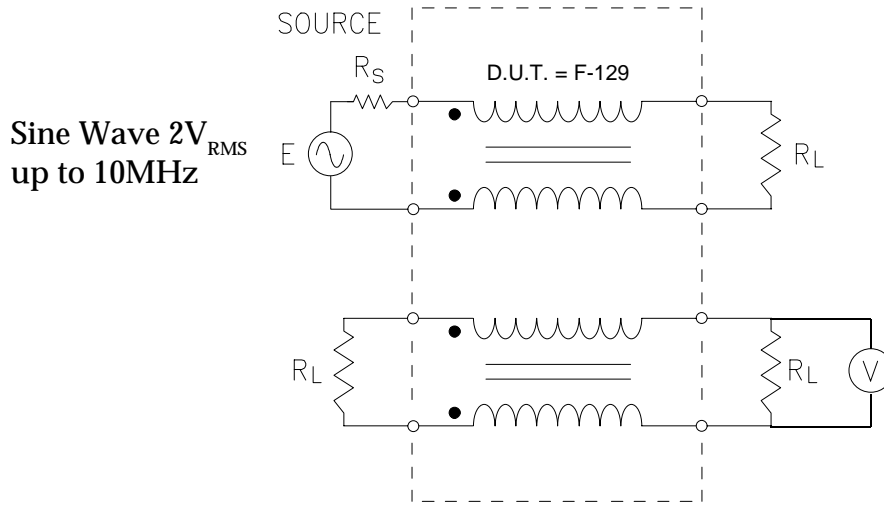
CUST P/N:

NAME:

DATE: **1/25/01**

SHEET:

Crosstalk

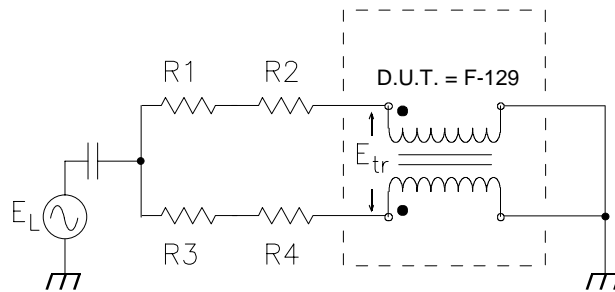


$$R_s = 50 \Omega$$

$$R_L = 135 \Omega$$

$$20 \text{ Log } V/E$$

Longitudinal Conversion Loss



Resistors Matched to within 0.03%

$$R1 + R2 = 67.5 \Omega$$

$$R3 + R4 = 67.5 \Omega$$

$$20 \text{ Log } E_L/E_{Tr}$$

| | |
|---------------------------|--------|
| RHOMBUS P/N: F-129 | |
| CUST P/N: | NAME: |
| DATE: 1/25/01 | SHEET: |