

8-channel LCD & Camera EMI Filter with ESD Protection Chip Scale Packaging (CSP)

PRODUCT DESCRIPTION

The UMD1422 is an 8-channel pi-style Capacitor-Resistor-Capacitor EMI/RFI Filter with integrated Diodes for electrostatic discharge (ESD) protection. This device offers greater than 30dB attenuation in the 800MHz to 3GHz. The diodes provide a 15kV contact-discharge ESD protection per IEC-61000 specifications.

The device is built in a 20-bump CSP format with 0.5mm pitch and is ideal for portable electronic systems.

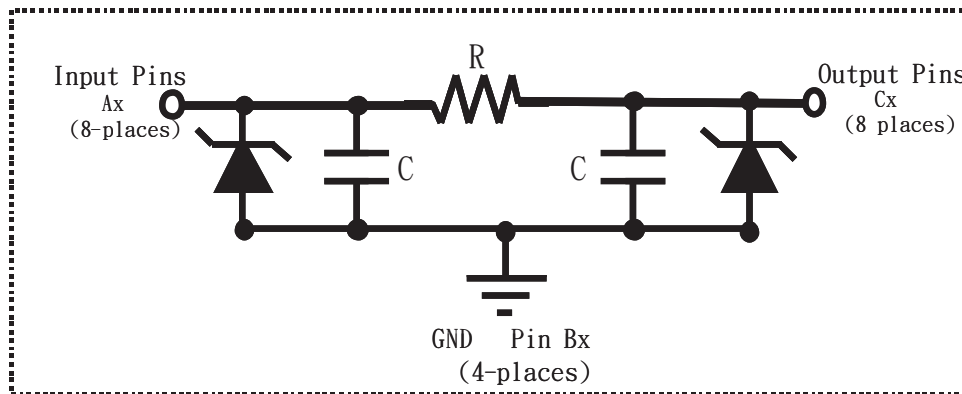
FEATURES

- ✧ Eight (8) Low pass EMI filters with excellent attenuation at high frequencies
- ✧ ESD protection at 15KV per IEC61000
- ✧ 20-bump CSP device (4.000mm x 1.458mm)
- ✧ Polymer back coating to improve mechanical strength
- ✧ RoHS Compliant in Lead-Free Versions
- ✧ Complies with the following standards:
 - IEC 61000-4-2 (ESD) Air-15kv, Contact-8kv
 - IEC 61000-4-4 (EFT) (5/50ns)
 - IEC 61000-4-5 (Surge) (8/20µs)

Applications

- ✧ Cellular Handsets
- ✧ PDA
- ✧ MP3 Players
- ✧ PC & Notebooks
- ✧ Smart Cards
- ✧ Digital Cameras

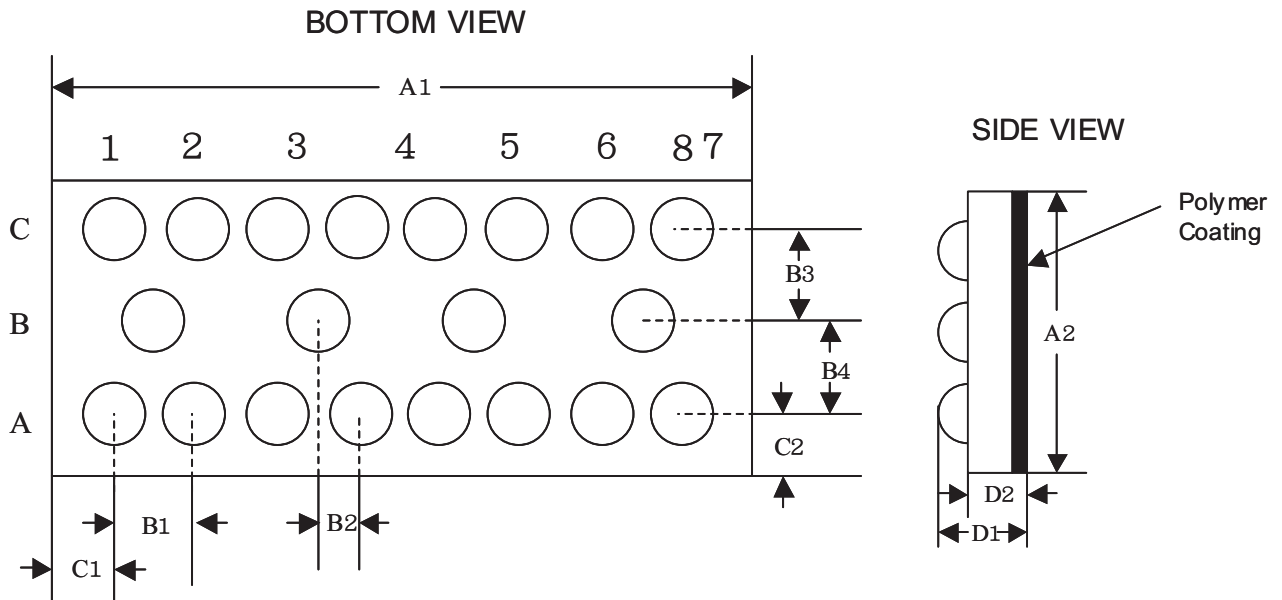
Schematic for Each Line



ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified								
PART NUMBER	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT	TYPICAL FORWARD VOLTAGE	MINIMUM ATTENUATION @ 800 to 3,000 MHz	CUT-OFF FREQUENCY 50-OHMS SOURCE & LOAD	RESISTANCE R +/-20%	CAPACITANCE C +/-20% (at 2.5V)
UMD1422	6 Volts	7 Volts	0.2 uA	0.8 Volts	-30dB	120 MHz	100-ohms	15-pF

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Mechanical Package Diagram



Package Dimensions						
Dimensions	Millimeters (mm)			Inches (")		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A1	3.955	4.000	4.045	0.1557	0.1575	0.1493
A2	1.413	1.458	1.503	0.0556	0.0574	0.0592
B1	0.495	0.500	0.505	0.0195	0.0197	0.0199
B2	0.245	0.250	0.255	0.0096	0.0098	0.0100
B3	0.430	0.435	0.440	0.0169	0.0171	0.0173
B4	0.430	0.435	0.440	0.0169	0.0171	0.0173
C1	0.200	0.250	0.300	0.0079	0.0098	0.0118
C2	0.244	0.296	0.344	0.0096	0.0116	0.0135
D1	0.575	0.644	0.714	0.0226	0.0254	0.0281
D2	0.368	0.419	0.470	0.0145	0.0165	0.0185
Parts/reel	3,500					
Controlling Dimension: mm						