

1 Electrical characteristics

Table 1. Absolute maximum ratings ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{PP}	ESD IEC 61000-4-2, input and output pins - air discharge	15	kV
	ESD IEC 61000-4-2, in put and output pins - contact discharge	8	
T_j	Junction temperature	125	$^{\circ}\text{C}$
T_{op}	Operating temperature range	-40 to +85	$^{\circ}\text{C}$
T_{stg}	Storage temperature range	-55 to +150	$^{\circ}\text{C}$

Table 2. Electrical characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Symbol	Parameter				
V_{BR}	Breakdown voltage				
I_{RM}	Leakage current @ V_{RM}				
V_{RM}	Stand-off voltage				
V_{CL}	Clamping voltage				
R_d	Dynamic impedance				
I_{PP}	Peak pulse current				
I_R	Reverse current				
Symbol	Test condition	Min	Typ	Max	Unit
V_{BR}	$I_R = 1\text{ mA per line}$	14		18	V
I_{RM}	$V_{RM} = 3\text{ V per line}$			0.5	μA
C1, C2, C3 C4, C5, C6	$V_{LINE} = 0\text{ V}, V_{OSC} = 30\text{ mV}, F = 1\text{ MHz}$	0.8	1.0	1.2	nF
R1, R2	Tolerance $\pm 5\%$		50		Ω
R3, R4	Tolerance $\pm 5\%$		1.00		k Ω
R5, R6	Tolerance $\pm 5\%$		2.20		k Ω

Figure 3. Filter response

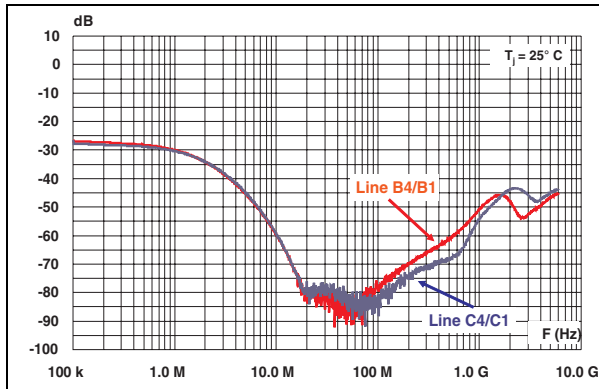


Figure 4. Analog crosstalk

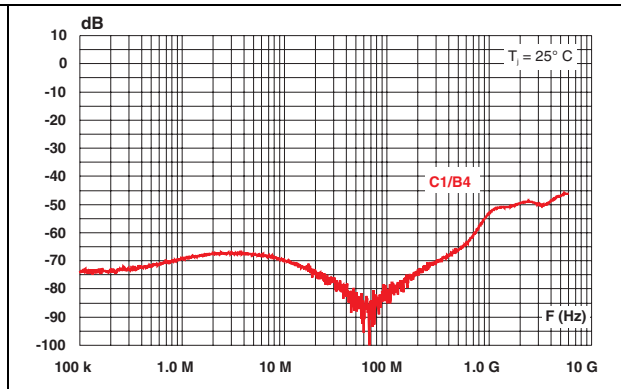


Figure 5. ESD response to IEC 61000-4-2 (+15 kV air discharge) on output (V_{OUT})

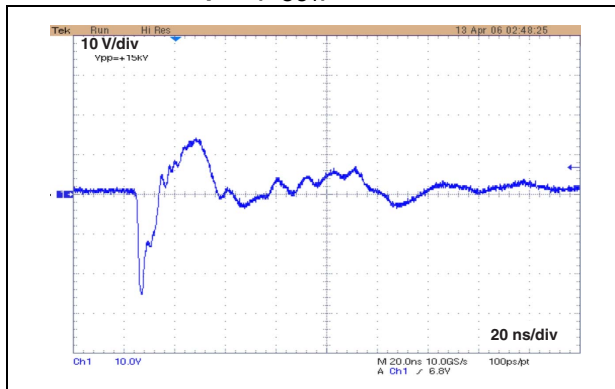
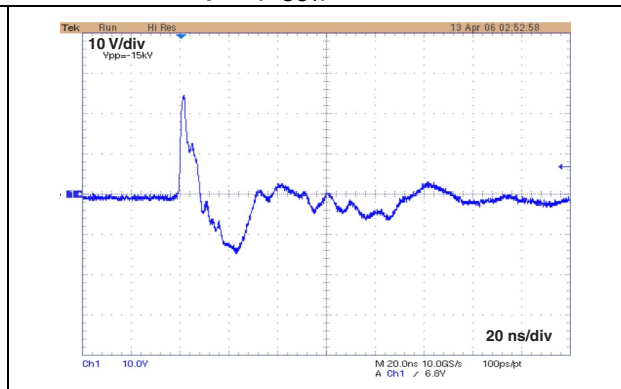
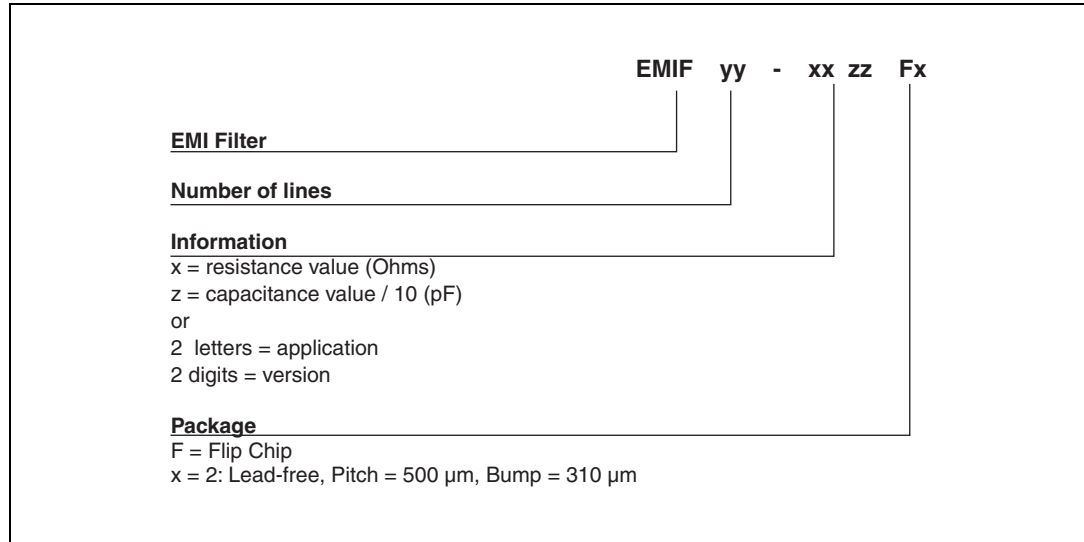


Figure 6. ESD response to IEC 61000-4-2 (-15 kV air discharge) on output (V_{OUT})



2 Ordering information scheme

Figure 7. Ordering information scheme



3 Package information

In order to meet environmental requirements, ST offers these devices in ECOPACK[®] packages. These packages have a lead-free second level interconnect. The category of second level interconnect is marked on the inner box label, in compliance with JEDEC Standard JESD97. The maximum ratings related to soldering conditions are also marked on the inner box label. ECOPACK is an ST trademark. ECOPACK specifications are available at www.st.com.

Figure 8. Flip Chip dimensions

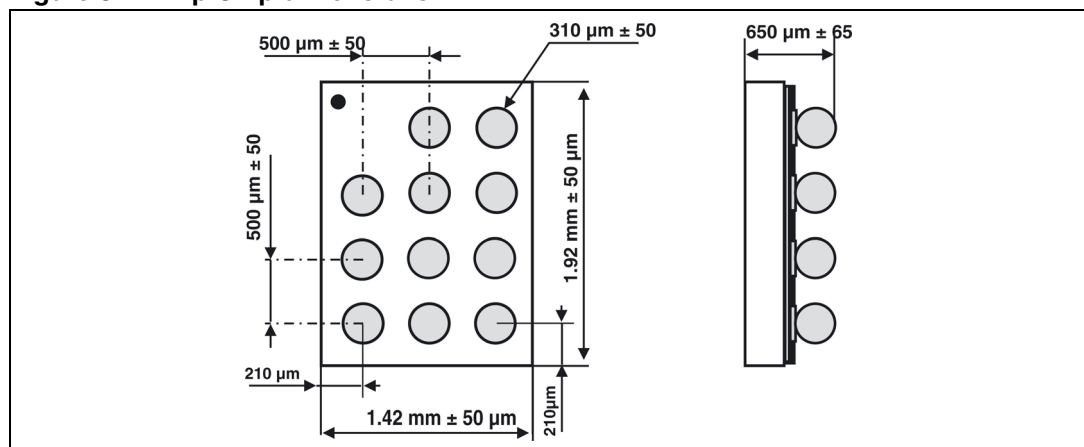


Figure 9. Footprint

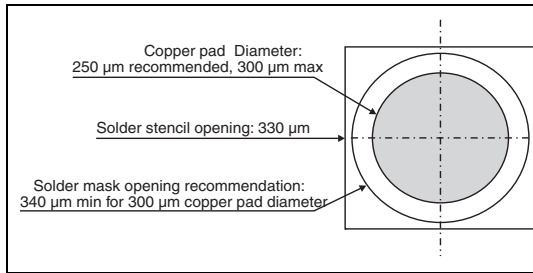


Figure 10. Marking

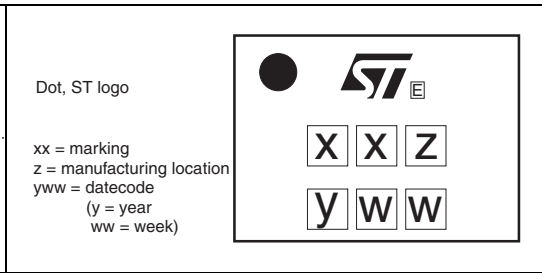
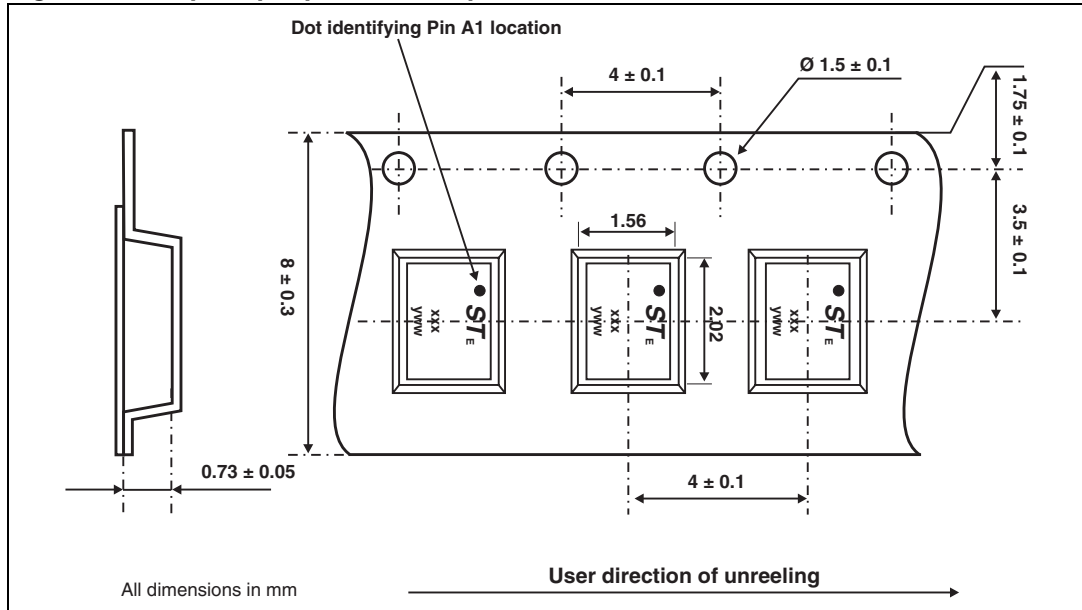


Figure 11. Flip Chip tape and reel specification



4 Ordering information

Table 3. Ordering information

Order code	Marking	Package	Weight	Base qty	Delivery mode
EMIF02-MIC01F2	GB	Flip Chip	3.8 mg	5000	Tape and reel (7")

Note: More packing information is available in the application notes:
 AN1235: "Flip Chip: package description and recommendations for use"
 AN 1751: "EMI filters: Recommendations and measurements"

5 Revision history

Table 4. Document revision history

Date	Revision	Changes
Sep-2004	3	Previous issue.
09-Feb-2006	4	Added ECOPACK statement. Updated graphics to current standards.
06-Oct-2006	5	Reformatted to current standards. Updated characteristic curves, removed Aplac information and updated tape and reel pocket dimensions.
17-Apr-2008	6	Updated ECOPACK statement. Updated Figure 7 , Figure 8 and Figure 11 . Reformatted to current standards.

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