

1 Characteristics

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

Symbol	Parameter	Value	Unit
V_{pp}	Internal pins (A1, C1)		
	ESD discharge IEC 61000-4-2, air discharge	2	
	ESD discharge IEC 61000-4-2, contact discharge	2	
	External pins (A2, C2)		
	ESD discharge IEC 61000-4-2, air discharge	15	
	ESD discharge IEC 61000-4-2, contact discharge	8	kV
T_j	Maximum junction temperature	125	°C
P_{TOT}	Total Power Dissipation	200	mW
T_{op}	Operating temperature range	- 40 to + 85	°C
T_{stg}	Storage temperature range	- 55 to 150	°C

Figure 3. Electrical characteristics (definitions)

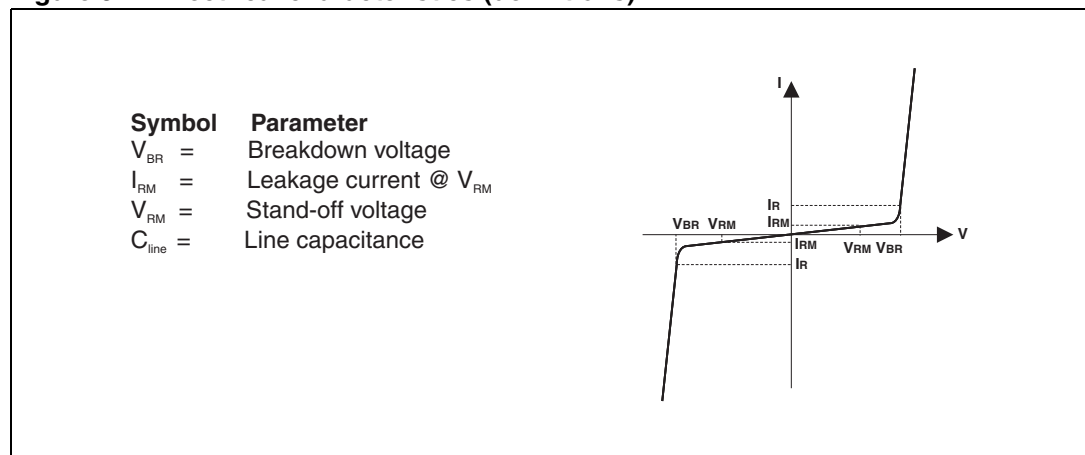


Table 2. Electrical characteristics (values, $T_{amb} = 25\text{ °C}$)

Symbol	Test conditions	Min.	Typ.	Max.	Unit
V_{BR}	$I_R = 1\text{ mA}$	14		18	V
I_{RM}	$V_{RM} = 3\text{ V per line}$			0.5	μA
$R_{I/O}$		12	15	18	Ω
C_{line}	$V_{line} = 0\text{ V}$, $V_{osc} = 30\text{ mV}$, $F = 100\text{ kHz}$	2.56	3.2	3.84	nF

Figure 4. Attenuation simulation with 1 k Ω input and 10 k Ω output

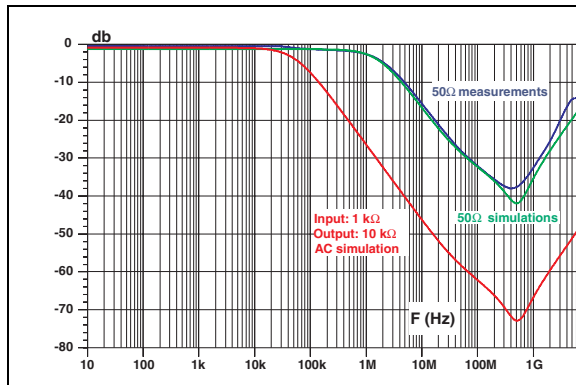


Figure 5. Analog crosstalk

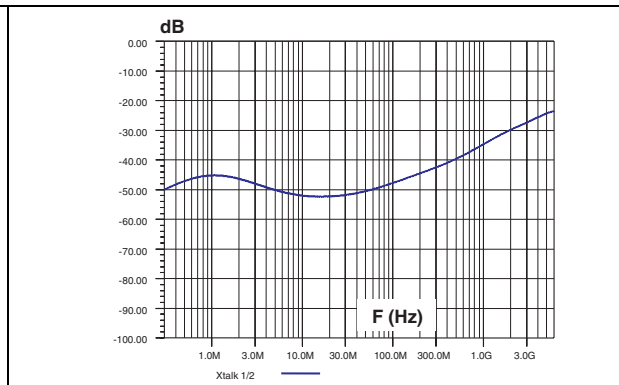


Figure 6. Digital crosstalk

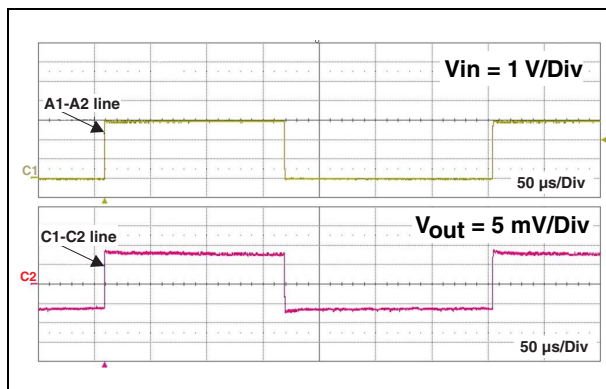


Figure 7. ESD response to IEC 61000-4-2 (+15 kV air discharge) on one input (V_{IN}) and one output (V_{OUT})

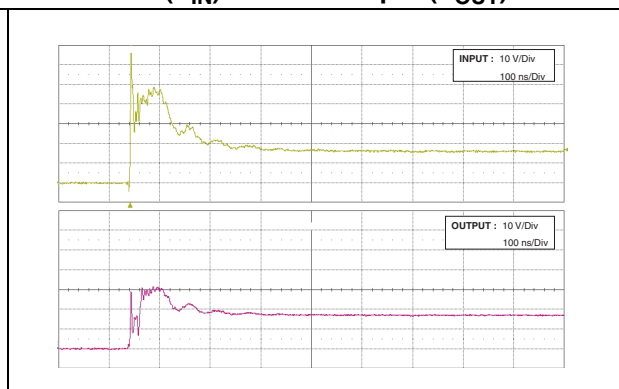


Figure 8. ESD response to IEC 61000-4-2 (-15 kV air discharge) on one input (V_{IN}) and one output (V_{OUT})

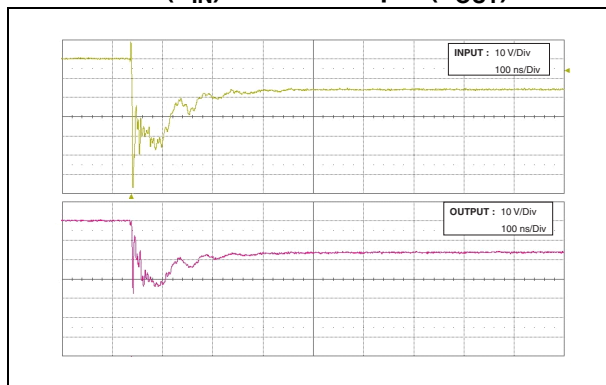
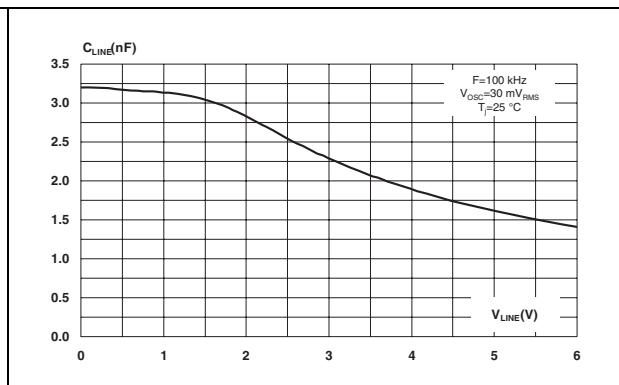
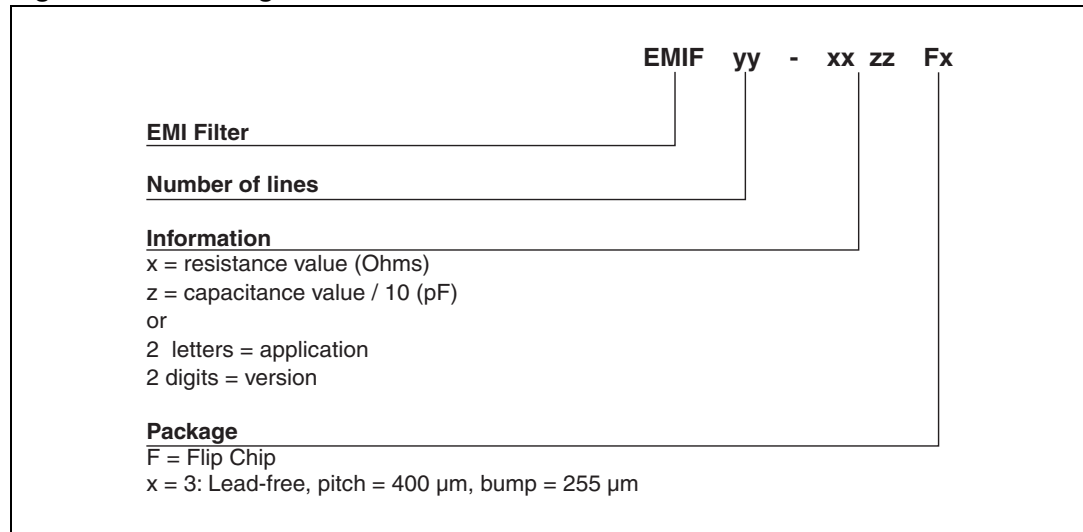


Figure 9. Line capacitance versus applied voltage



2 Ordering information scheme

Figure 10. Ordering information scheme



3 Package information

In order to meet environmental requirements, ST offers these devices in different grades of ECOPACK® packages, depending on their level of environmental compliance. ECOPACK® specifications, grade definitions and product status are available at: www.st.com. ECOPACK® is an ST trademark.

Figure 11. Package dimensions

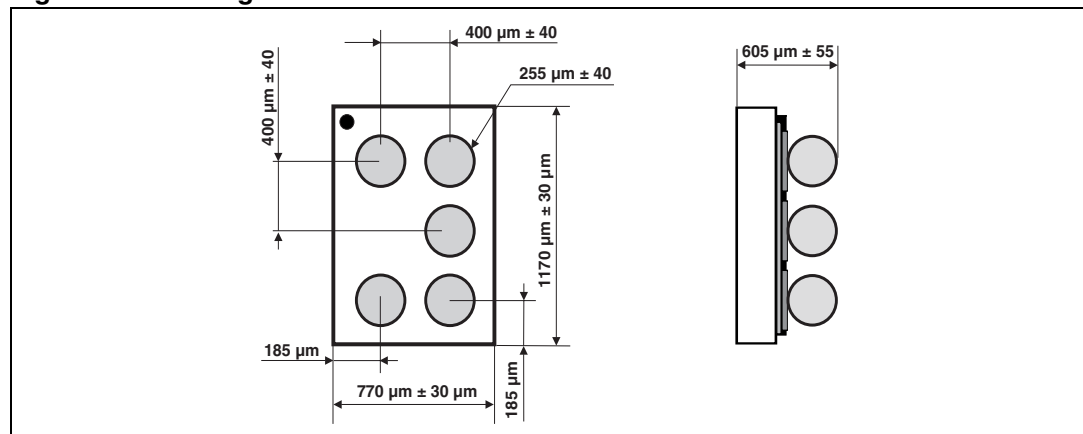


Figure 12. Footprint

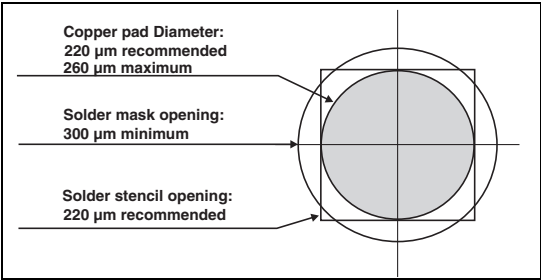


Figure 13. Marking

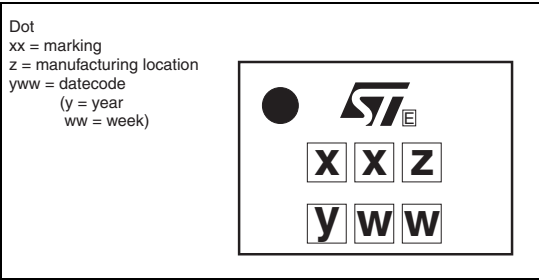
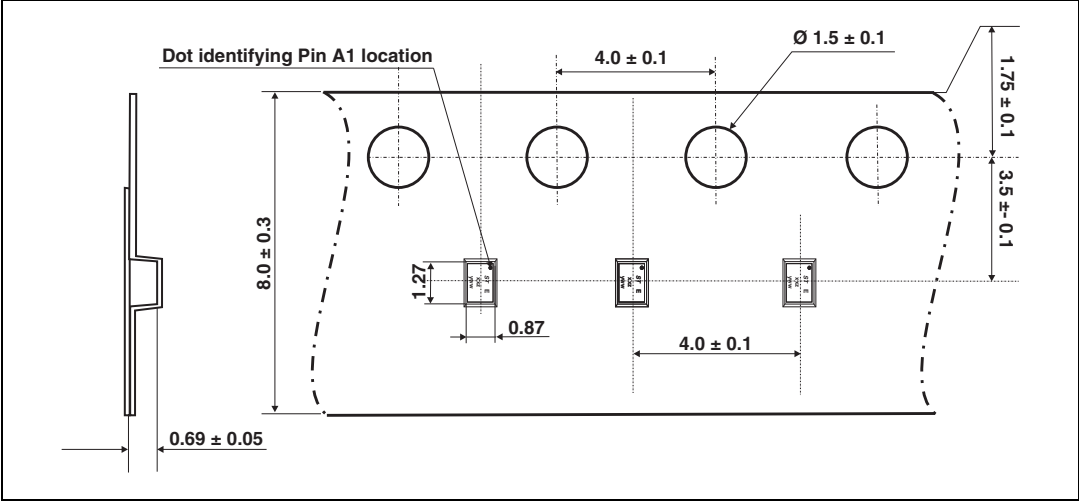


Figure 14. Flip Chip tape and reel specification



Note: Note: More information is available in the application note:
AN2348: "Flip Chip: Package description and recommendations for use"
AN1751: "EMI filters: Recommendations and measurements"

4 Ordering information

Table 3. Ordering information

Order code	Marking	Package	Weight	Base qty	Delivery mode
EIMF02-AV01F3	HH	Flip Chip	1.4 mg	5000	Tape and reel 7"

5 Revision history

Table 4. Document revision history

Date	Revision	Changes
06-Oct-2006	1	Initial release.
11-Oct-2006	2	Corrected test conditions for C_{line} in Table 2.
17-Apr-2008	3	Updated ECOPACK statement. Updated Figure 10 , Figure 11 and Figure 14 . Reformatted to current standards.
08-Apr-2010	4	Updated dimensions on page 1 and Figure 4 , Figure 11 , Figure 14 .

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