

1 Characteristics

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

Symbol	Parameter and test conditions	Value	Unit
T_j	Maximum 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	$^{\circ}\text{C}$

Figure 3. Electrical characteristics (definitions)

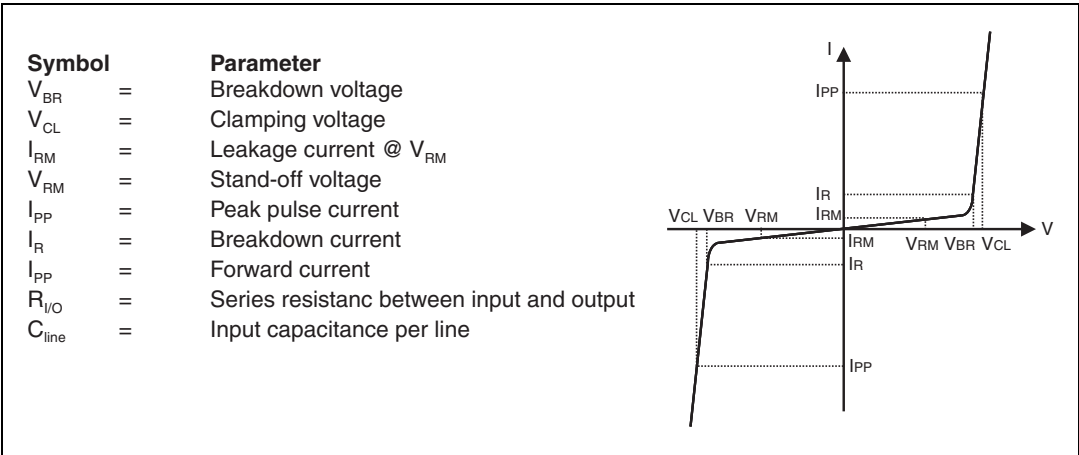


Table 2. Electrical characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Symbol	Test conditions	Min.	Typ.	Max.	Unit
V_{BR}	$I_R = 1\text{ mA}$	6	8	10	V
I_{RM}	$V_{RM} = 3\text{ V}$		50	200	nA
R_2	Tolerance $\pm 20\%$		70		Ω
C_{line}	$V_{line} = 0\text{ V}$, $V_{OSC} = 30\text{ mV}$, $F = 1\text{ MHz}$			30	pF

Figure 4. S21 all lines attenuation measurement

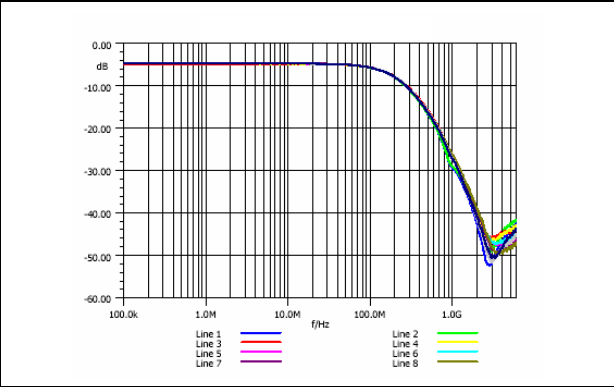


Figure 5. Analog cross talk measurement

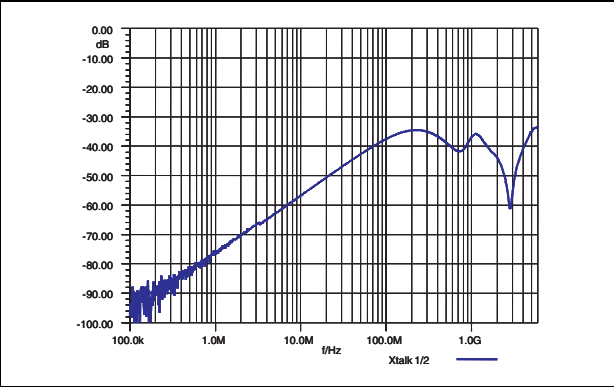


Figure 6. ESD response to IEC 61000-4-2 (+15 kV air discharge) on one input and on one output

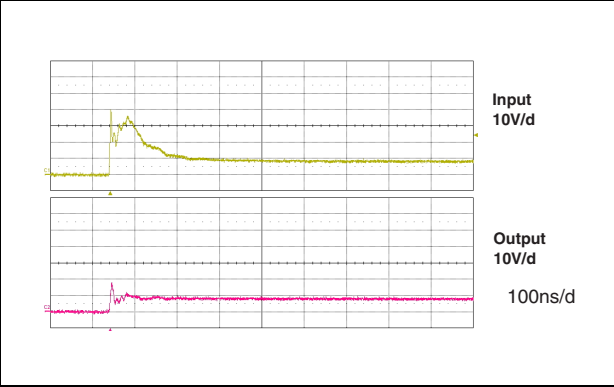


Figure 7. ESD response to IEC 61000-4-2 (-15 kV air discharge) on one input and on one output

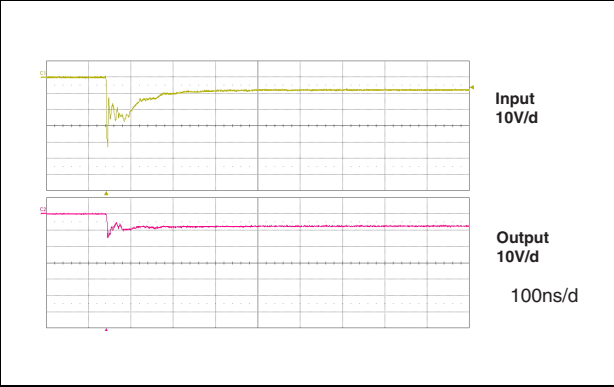
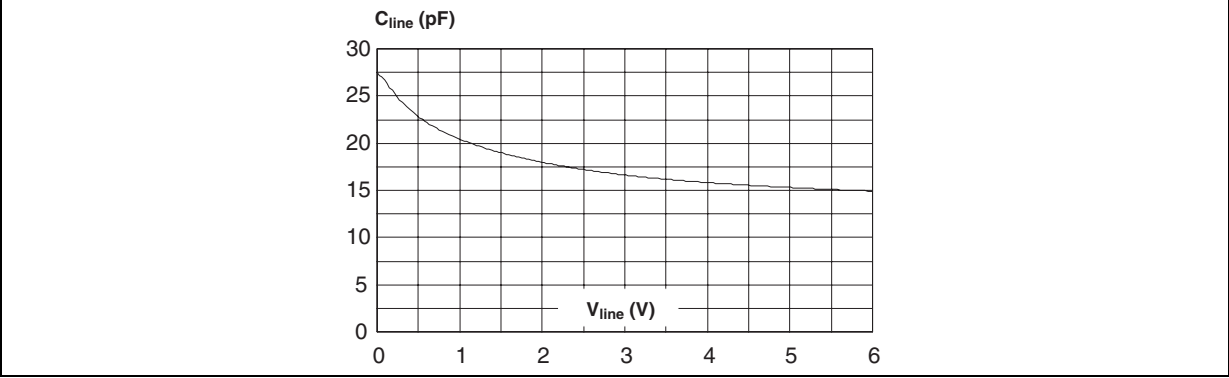
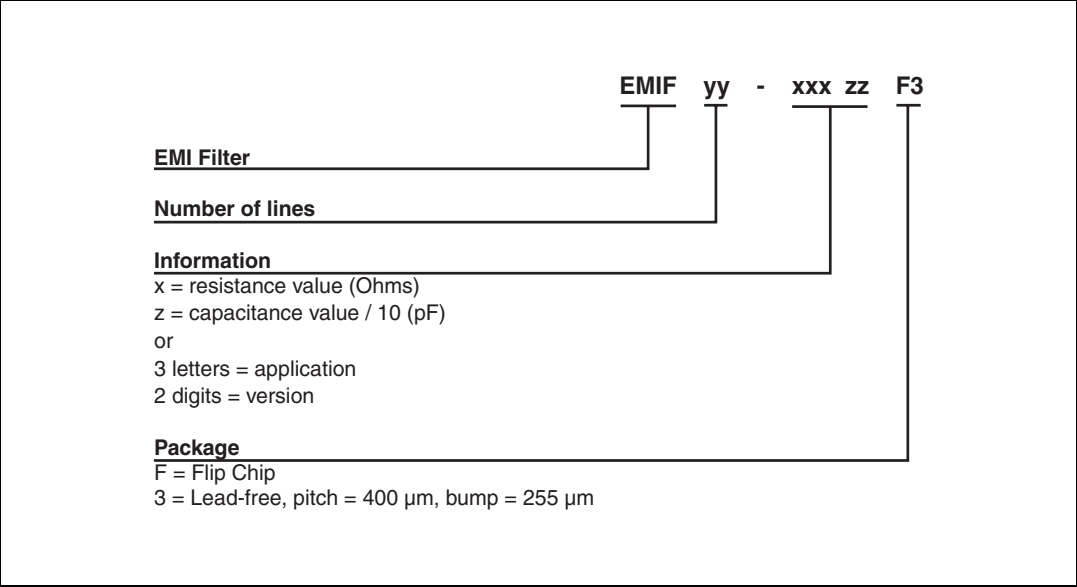


Figure 8. Line capacitance versus applied voltage



2 Ordering information scheme

Figure 9. Ordering information scheme



3 Package information

- Epoxy meets UL94, V0
- Lead-free packages

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 10. Package dimensions

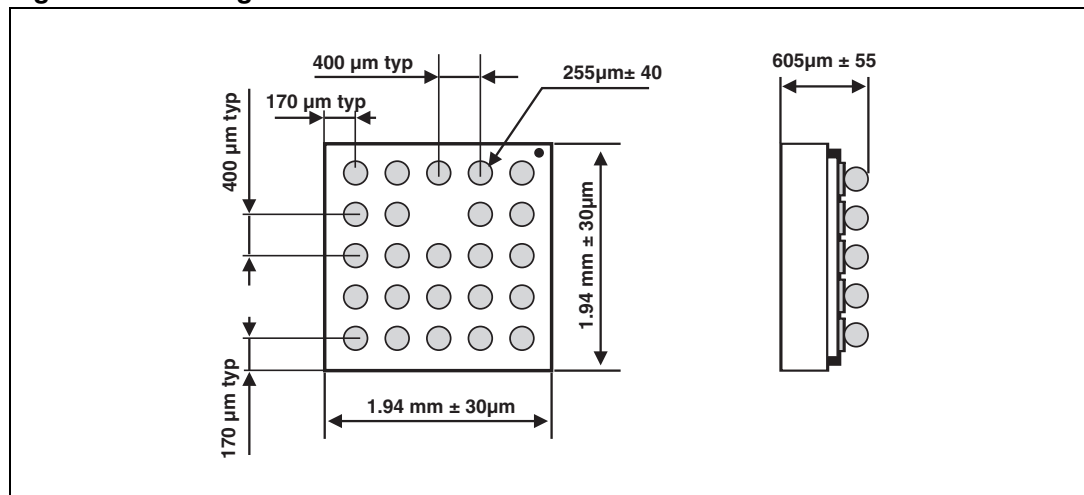


Figure 11. Footprint

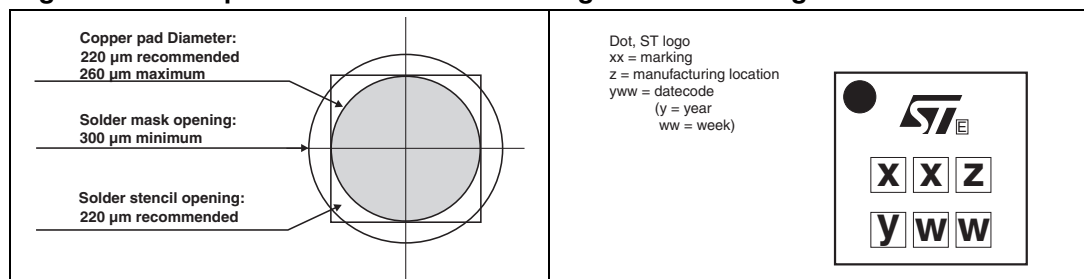


Figure 12. Marking

Dot, ST logo
 xx = marking
 z = manufacturing location
 yww = datecode
 (y = year
 ww = week)

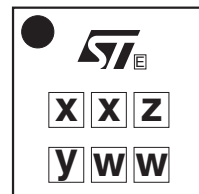
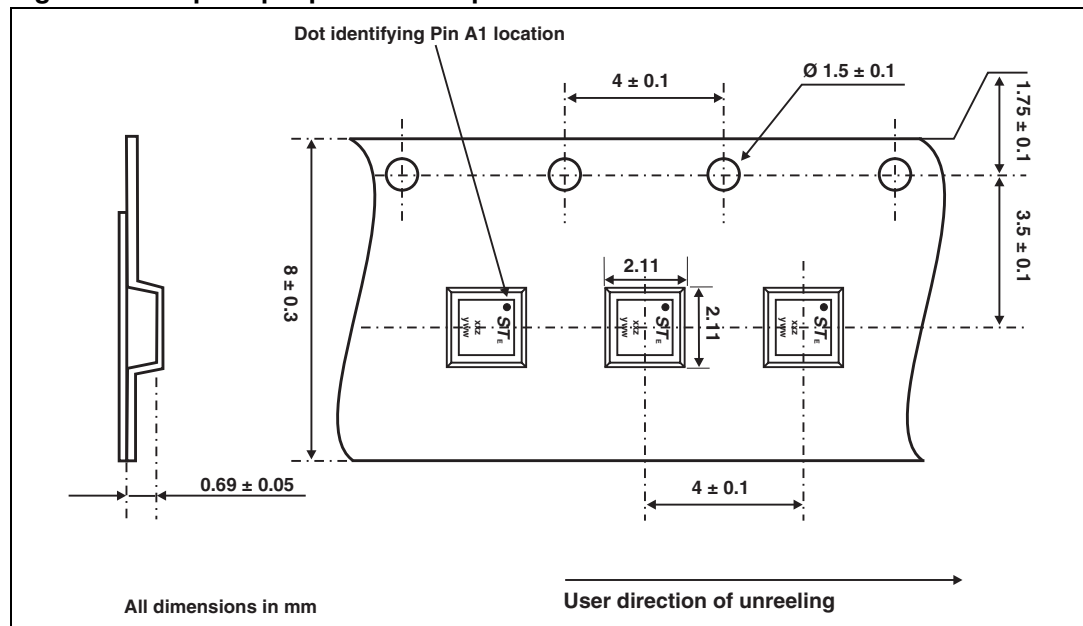


Figure 13. Flip-Chip tape and reel specification



Note:

More information is available in the application notes:

AN2348: "STMicroelectronics 400 micro-metre Flip-Chip: Package description and recommendation for use"

AN1751: "EMI Filters: Recommendations and measurements"

4 Ordering information

Table 3. Ordering information

Order code	Marking	Package	Weight	Base qty	Delivery mode
EMIF10-LCD02F3	GY	Flip-Chip	5.0 mg	5000	Tape and reel 7"

5 Revision history

Table 4. Document revision history

Date	Revision	Changes
11-Jul-2005	1	First issue.
28-Apr-2008	2	Updated ECOPACK statement. Updated Figure 9 , Figure 10 , Figure 11 and Figure 13 . Reformatted to current standards.
18-Nov-2009	3	Updated Figure 10 for die dimension reduction. Updated Figure 13 for scaling.

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