

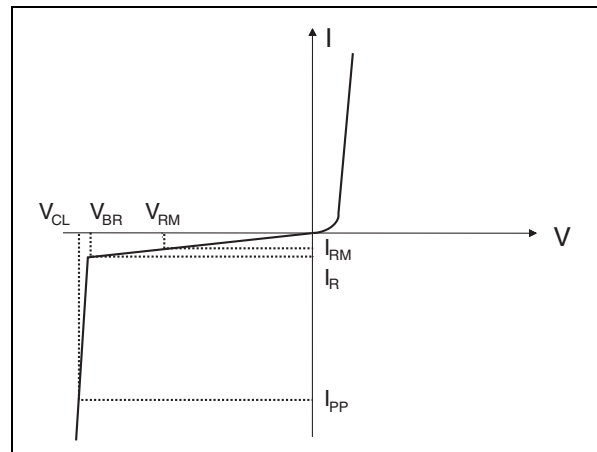
EMIF10-1K010F2

Table 2: Absolute Maximum Ratings ($T_{amb} = 25^{\circ}\text{C}$)

Symbol	Parameter and test conditions	Value	Unit
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 3: Electrical Characteristics ($T_{amb} = 25^{\circ}\text{C}$)

Symbol	Parameters
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
$R_{I/O}$	Series resistance between Input & Output
C_{in}	Input capacitance per line



Symbol	Test conditions	Min.	Typ.	Max.	Unit
V_{BR}	$I_R = 1 \text{ mA}$	6	8	10	V
I_{RM}	$V_{RM} = 3\text{V}$ per line			500	nA
$R_{I/O}$		900	1000	1100	Ω
R_{line}	At 0V bias	80	100	120	pF

Figure 3: S21 (dB) attenuation measurement and Aplac simulation

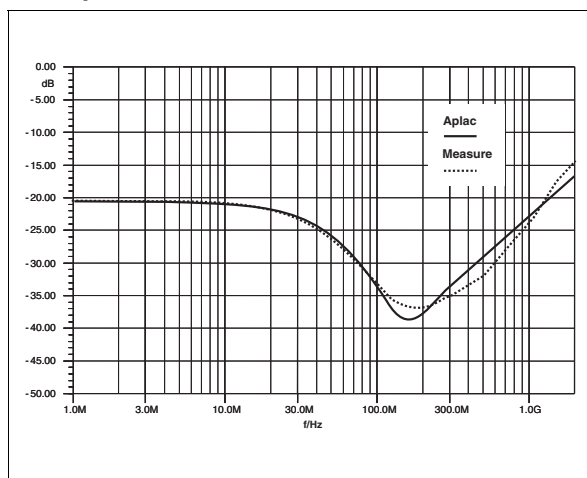


Figure 4: Analog crosstalk measurements

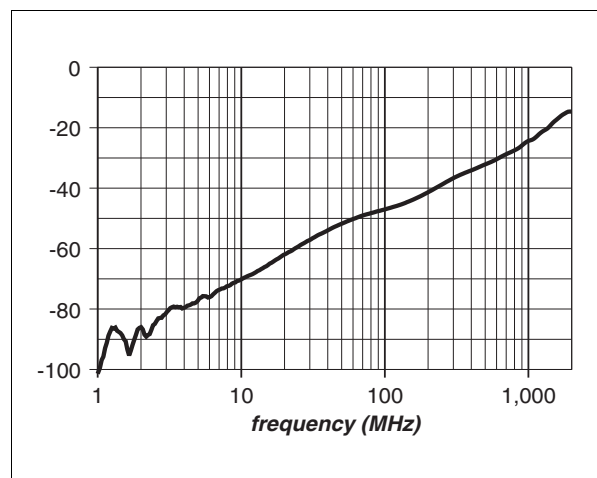


Figure 5: Digital crosstalk measurement

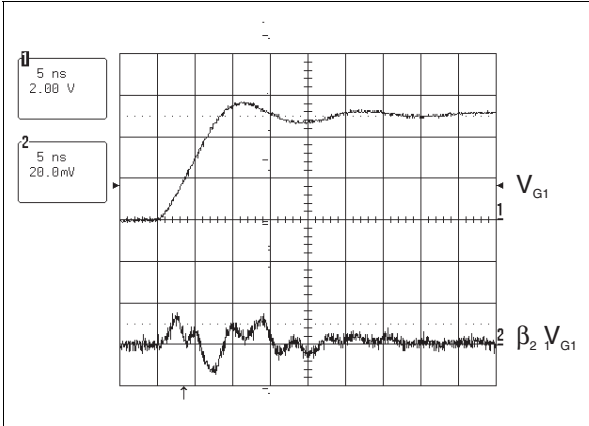


Figure 6: ESD response to IEC61000-4-2 (+15kV air disc.harge) on one input V(in) and on one output (Vout)

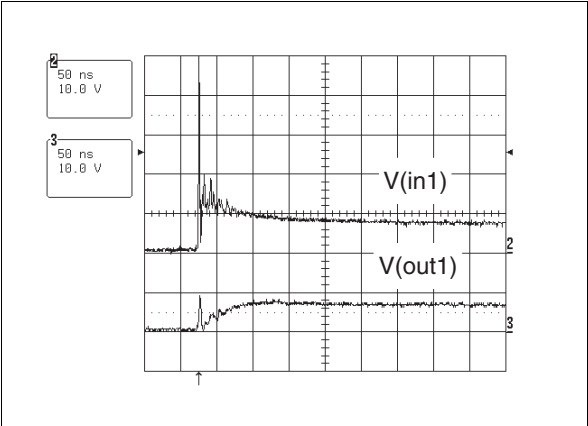


Figure 7: ESD response to IEC61000-4-2 (-15kV air discharge) on one input V(in) and on one output (Vout)

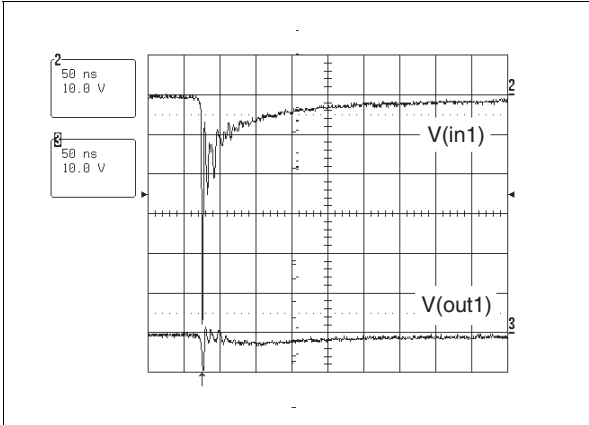


Figure 8: Line capacitance versus applied voltage

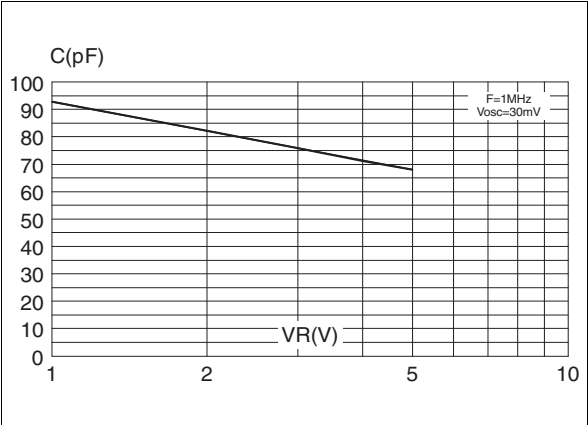


Figure 9: Aplac model single line structure

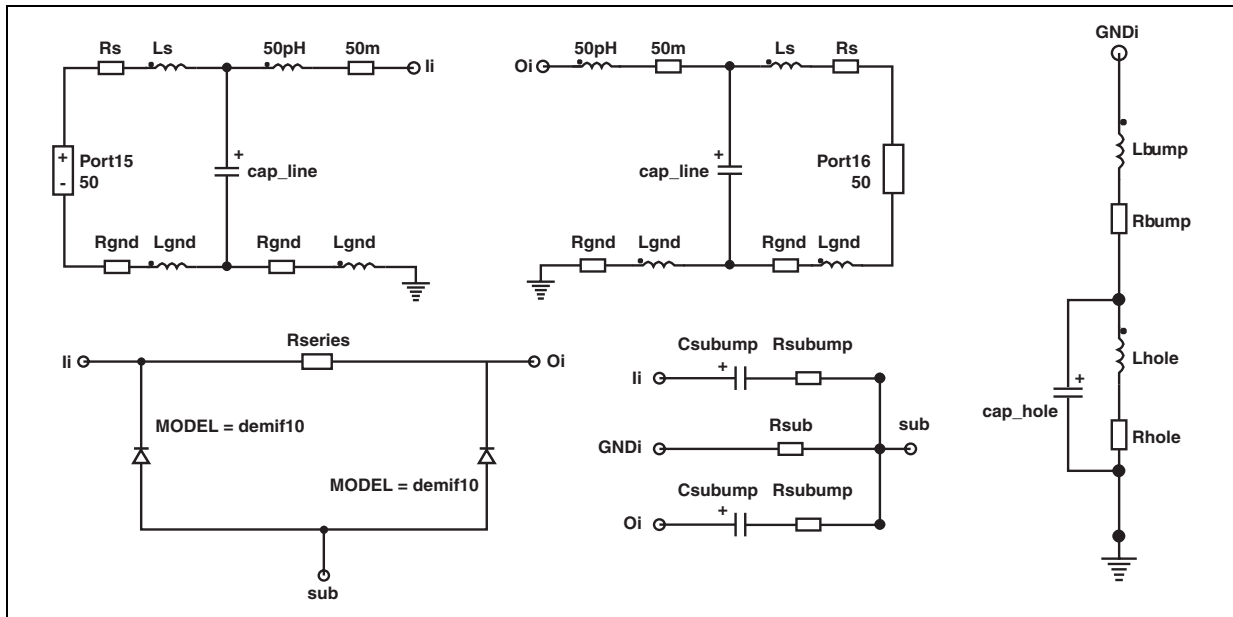


Figure 10: Aplac model parameters

Cz	57pF	Model demif10
Rseries	960	BV = 7
cap_line	0.8pF	IBV = 1m
Ls	0.6nH	CJO = Cz
Rbump	50m	M = 0.3333
Lbump	50pH	Rs = 1
Rs	0.15	VJ = 0.6
Csubump	15pF	TT = 100n
Rsubump	0.15	
Rsub	0.1	
lhole	1.2nH opt	
Rhole	0.15	
cap_hole	0.15pF	
Rgnd	0.25	
Lgnd	0.4nH	

Figure 11: Ordering Information Scheme

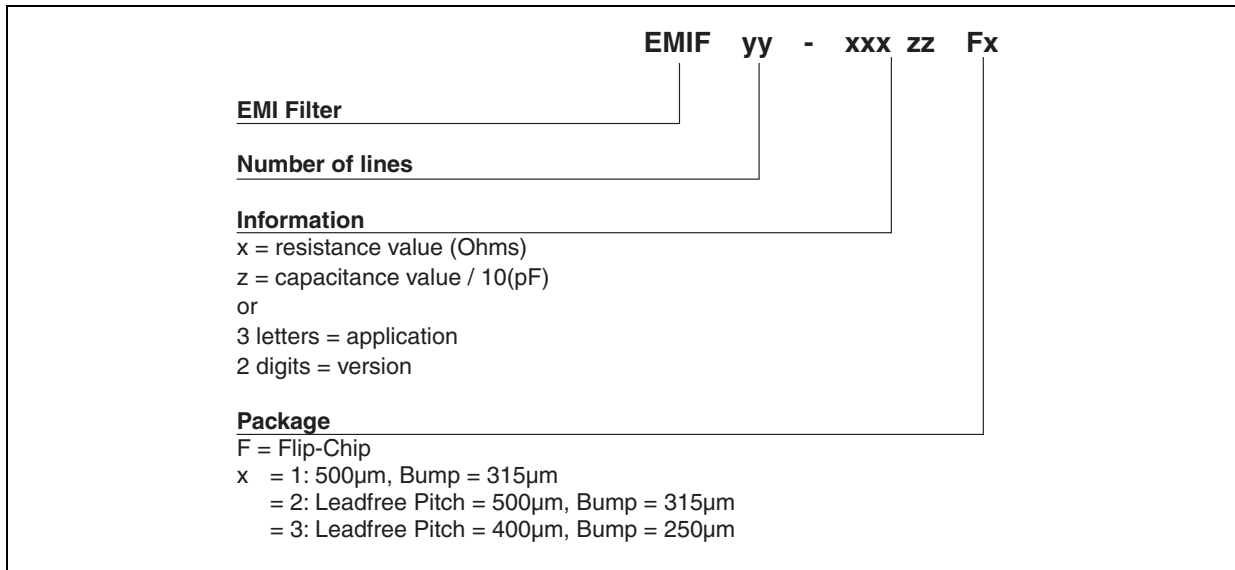


Figure 12: FLIP-CHIP Package Mechanical Data

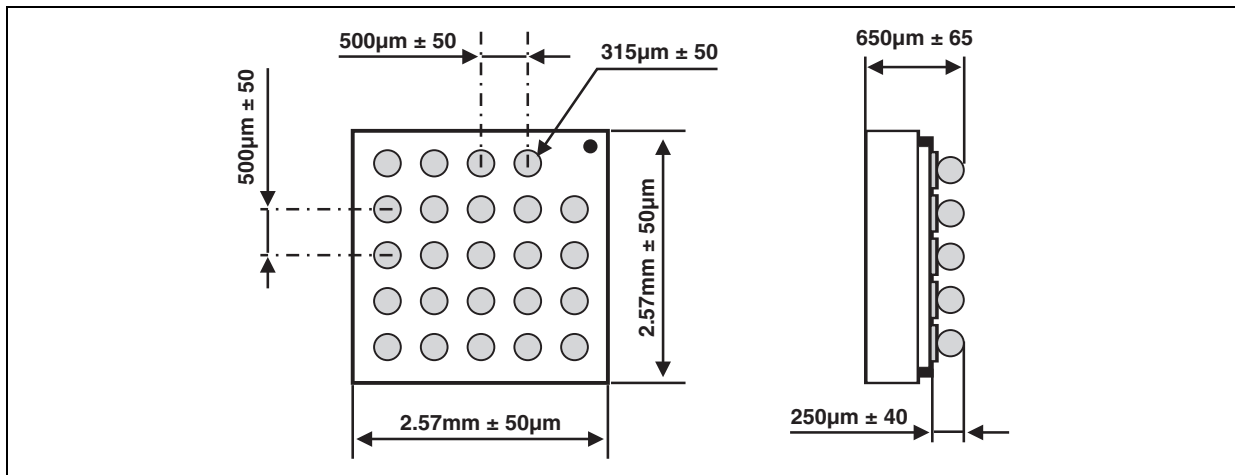


Figure 13: Foot print recommendations

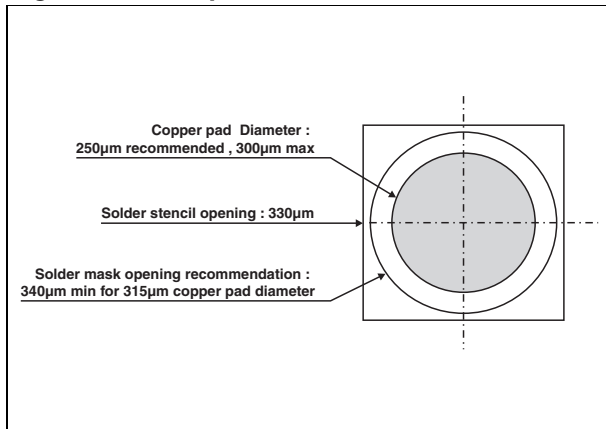


Figure 14: Marking

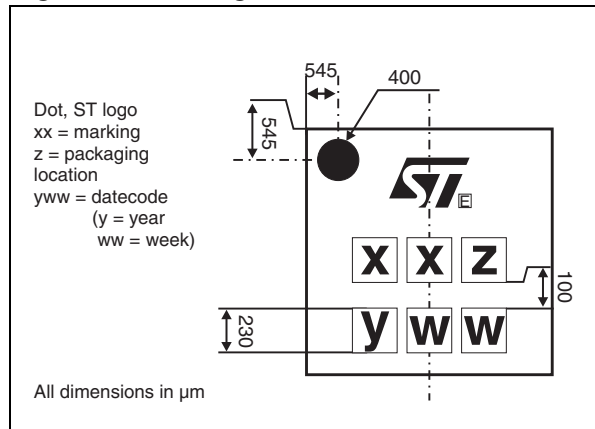


Figure 15: FLIP-CHIP Tape and Reel Specification

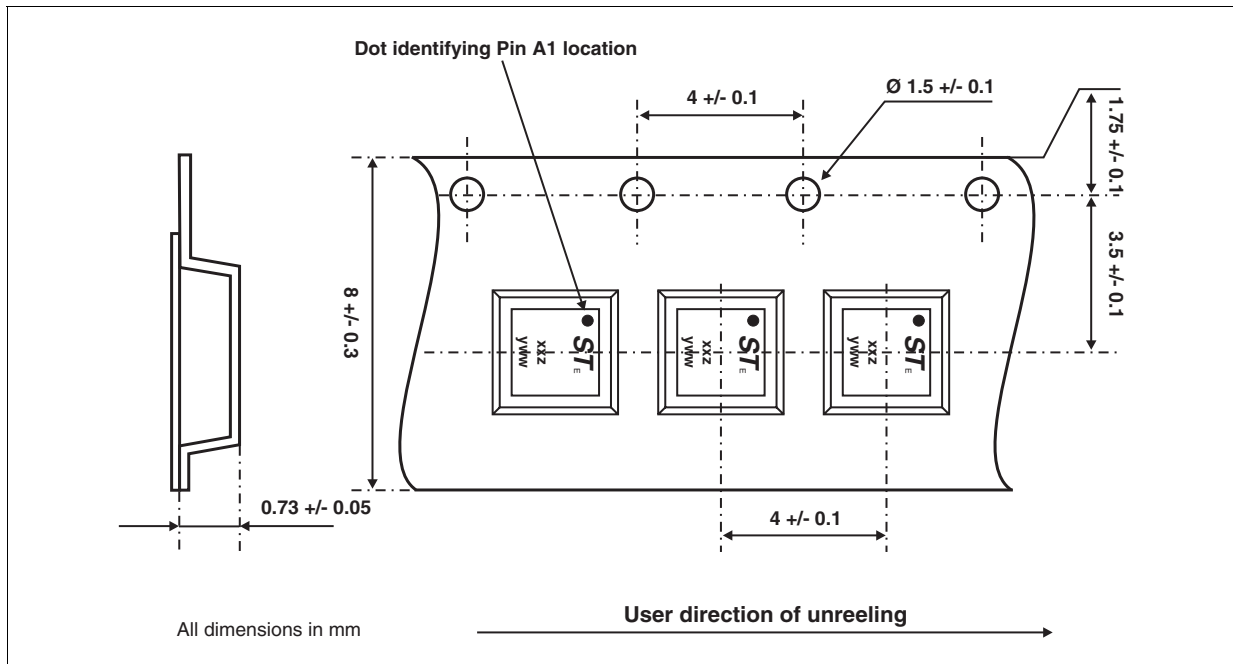


Table 4: Ordering Information

Ordering code	Marking	Package	Weight	Base qty	Delivery mode
EMIF010-1K010F2	FD	Flip-Chip	9.2 mg	5000	Tape & reel 7"

Note: More informations are available in the application notes:
 AN1235: "Flip-Chip: Package description and recommendations for use"
 AN1751: "EMI Filters: Recommendations and measurements"

Table 5: Revision History

Date	Revision	Description of Changes
12-Oct-2004	1	First issue

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