

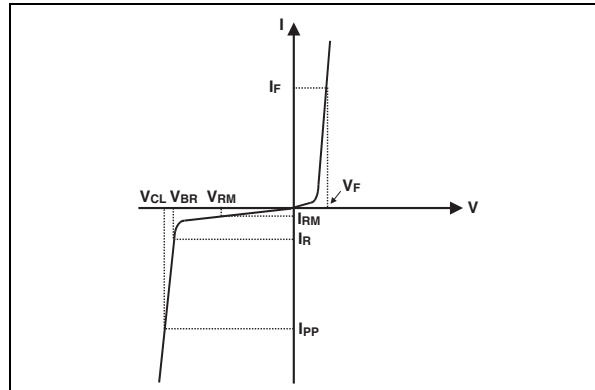
EMIF10-LCD01C1

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

Symbol	Parameter	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	Parameter
V_{BR}	Breakdown voltage
I_{RM}	Leakage current @ V_{RM}
V_{RM}	Stand-off voltage
V_{CL}	Clamping voltage
R_d	Dynamic resistance
I_{PP}	Peak pulse current
$R_{I/O}$	Series resistance between Input & Output
Cline	Input capacitance per line



Symbol	Test conditions	Min.	Typ.	Max.	Unit
V_{BR}	$I_R = 1 \text{ mA}$	6	8	10	V
I_{RM}	$V_{RM} = 3\text{V}$			500	nA
$R_{I/O}$		90	100	110	Ω
Cline	@ 0V bias		47		pF
Rt / Ft	Induced rise and fall time 10-90% at 26 MHz frequency signal $V = 1.9 \text{ V}$ (Rt / Ft input 1 ns, 50 Ω impedance generator)		8 (1)		ns

(1) guaranteed by design

Figure 3: S21(dB) all lines attenuation measurement and Apalc simulation

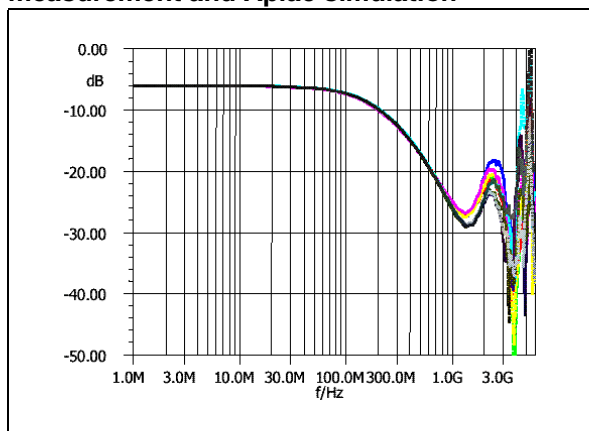


Figure 4: Analog cross talk measurements

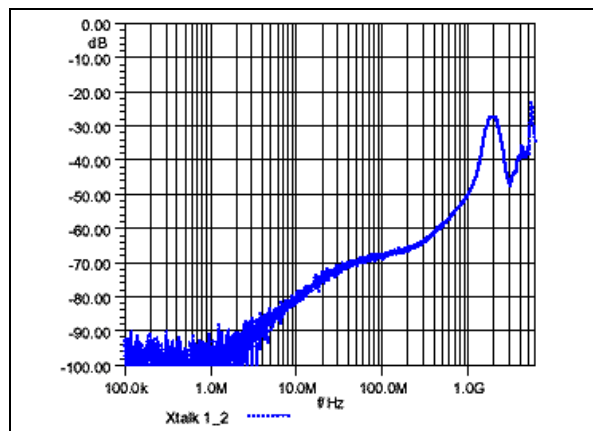


Figure 5: ESD response to IEC61000-4-2 (+15kV air discharge) on one input and on one output

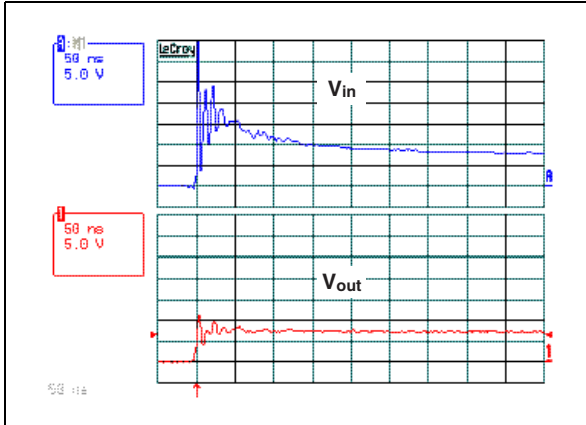


Figure 6: ESD response to IEC61000-4-2 (-15kV air discharge) on one input and on one output

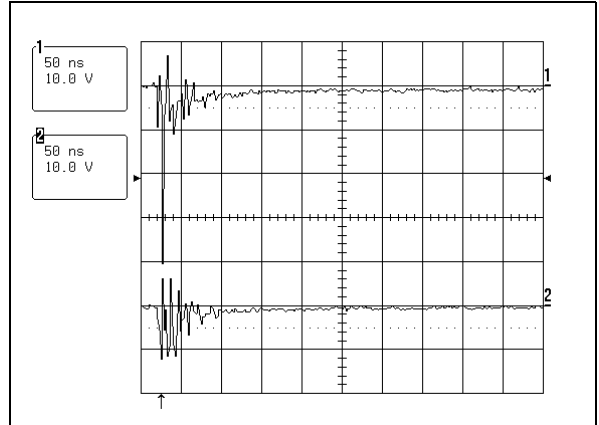


Figure 7: Line capacitance versus applied voltage

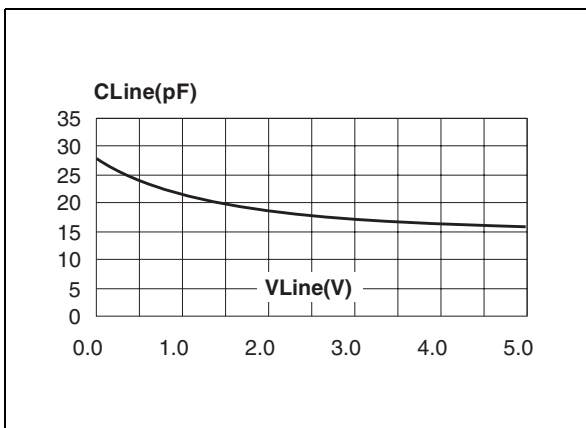


Figure 8: Rise time 10-90% measurements with 1.9V signal at 26 MHz frequency (50Ω generator)

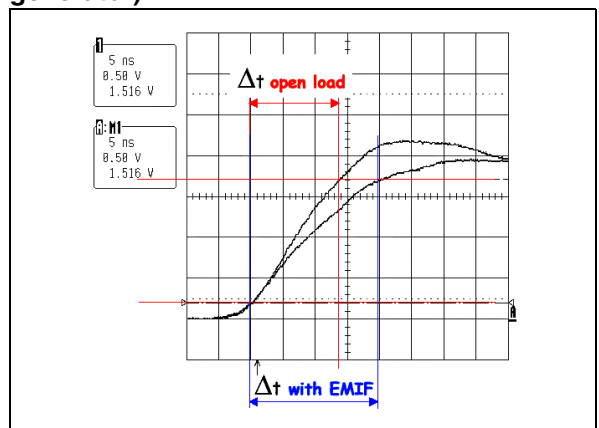


Figure 9: Fall time 10-90% measurements with 1.9V signal at 26 MHz frequency (50Ω generator)

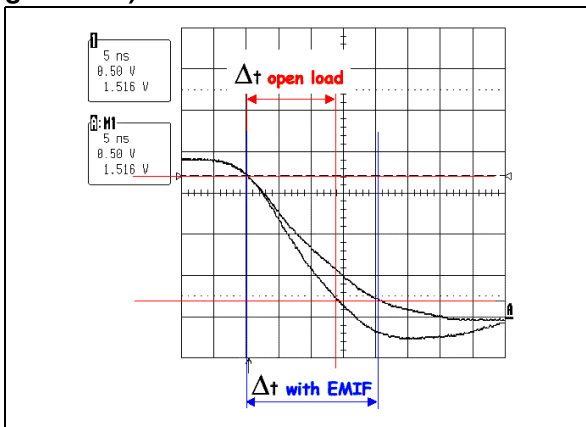


Figure 10: Aplac model

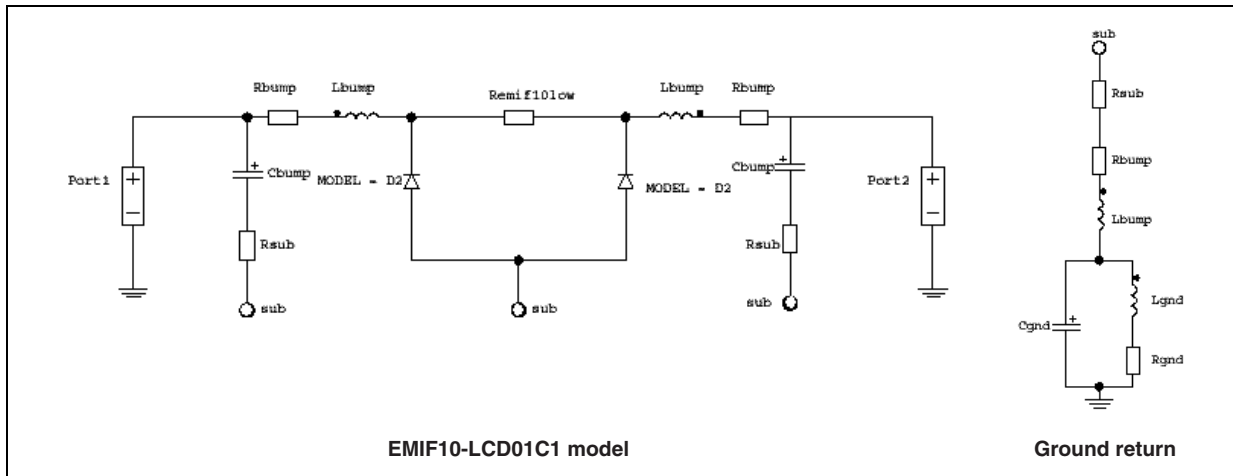


Figure 11: Aplac parameters

ZRZ structure	
aplacvar Remif10low 100	BV = 7
aplacvar Cemif10flow 17.5pF	CJO = Cemif10low
Bumps	IBV = 1u
aplacvar Lbump 50pH	IKF = 1000
aplacvar Rbump 20m	IS = 10f
aplacvar Cbump 1.5pF	ISR = 100p
Bulk	N = 1
aplacvar Rsub 100m	M = 0.3333
Gnd connections	RS = 0.015
aplacvar Rgnd 100m	VJ = 0.6
aplacvar Lgnd 200pH	TT = 50n
aplacvar Cgnd 0.15pF	

Figure 12: Order Code

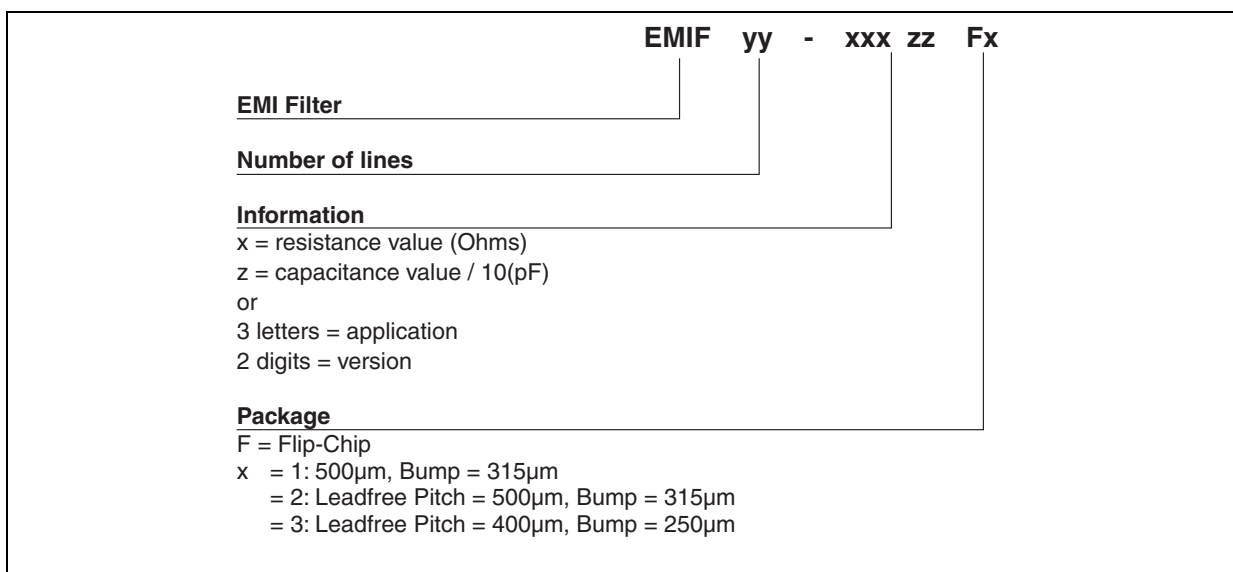


Figure 13: FLIP-CHIP Package Mechanical Data

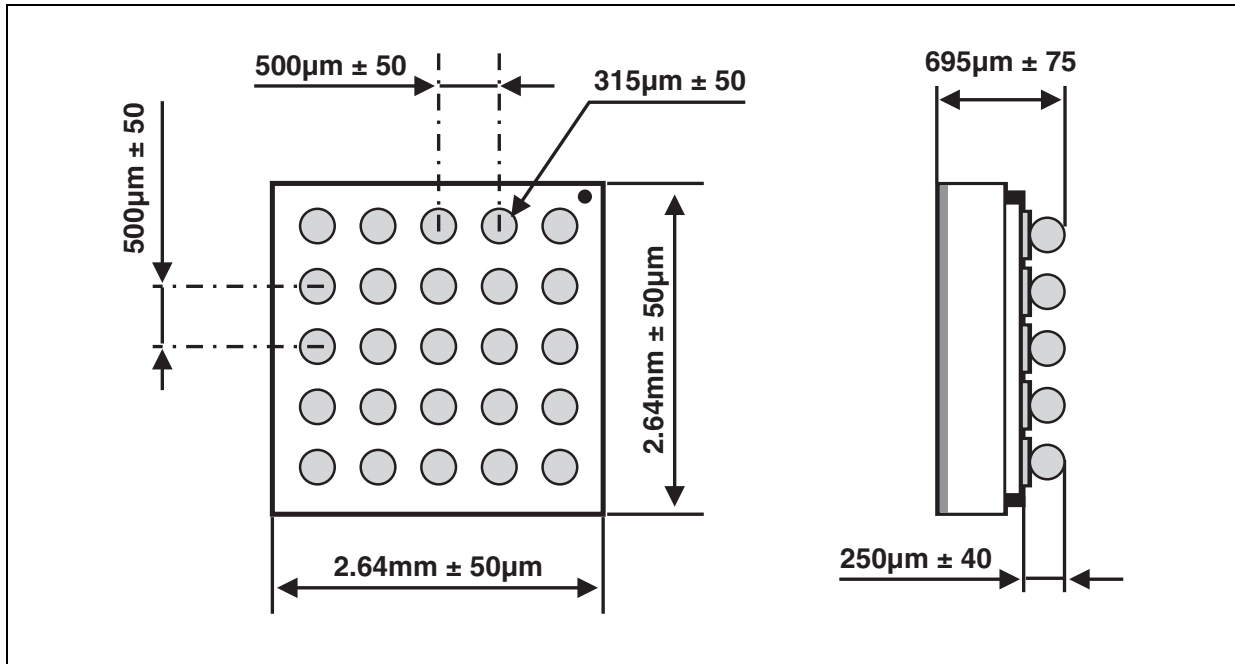


Figure 14: Foot Print Recommendations

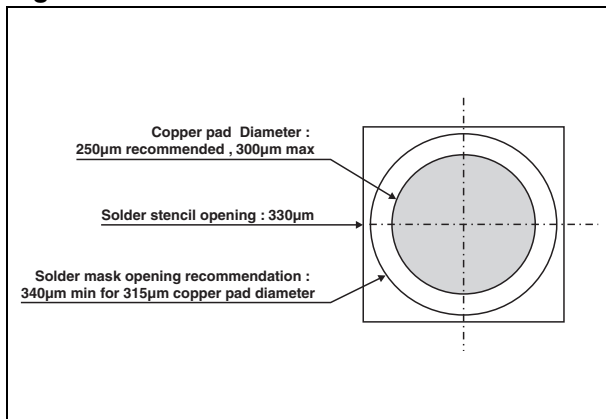


Figure 15: Marking

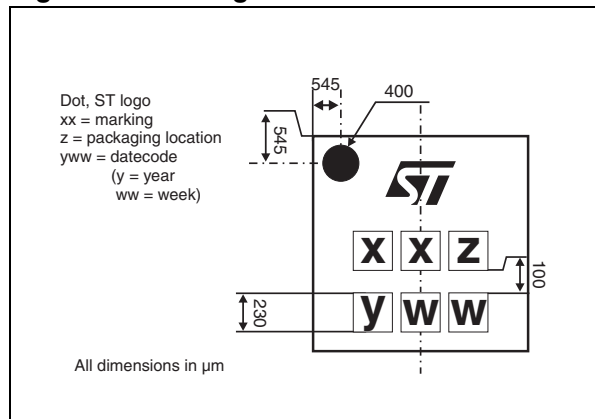


Figure 16: FLIP-CHIP Tape and Reel Specification

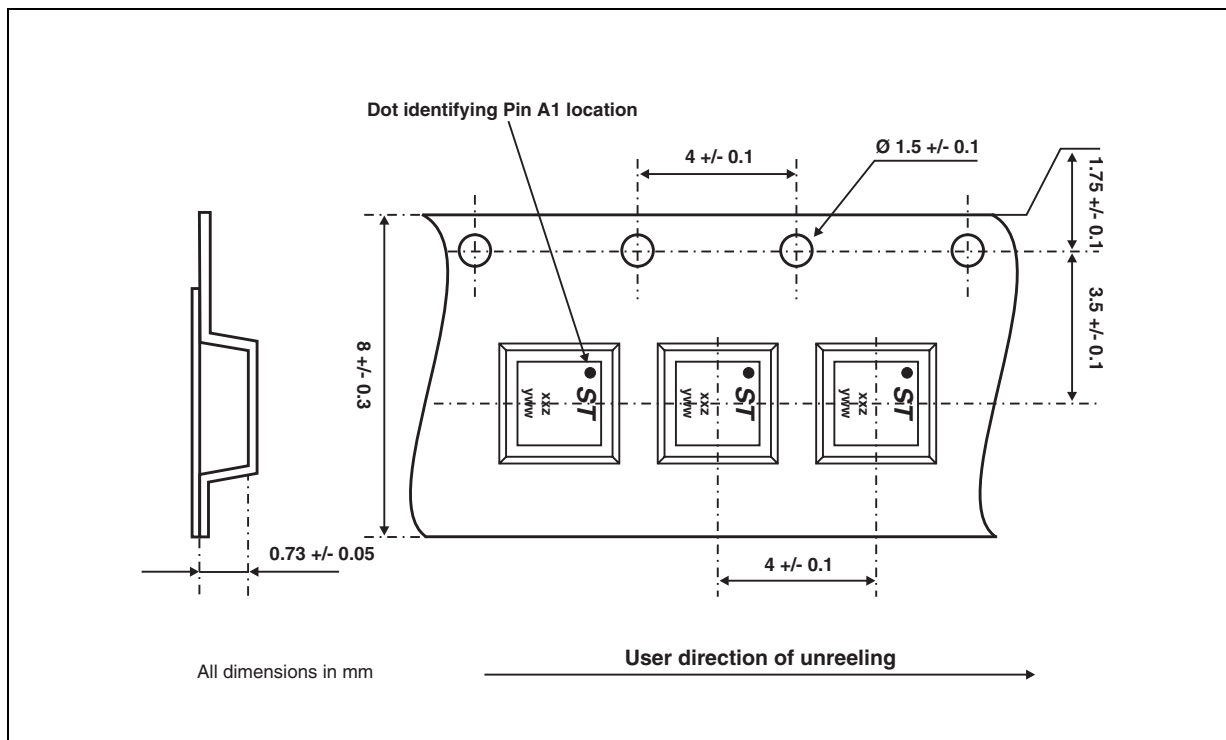


Table 4: Ordering Information

Part Number	Marking	Package	Weight	Base qty	Delivery mode
EMIF10-LCD01C1	FL	Flip-Chip	9.3 mg	5000	Tape & reel (7")

Note: Further packing information 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
Sep-2004	1	First issue

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