

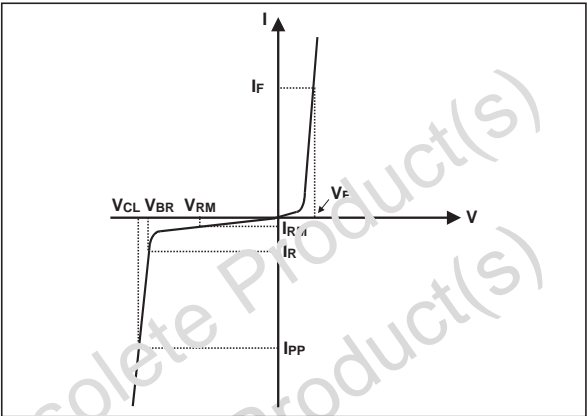
EMIF10-LCD01F1

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C)

Symbol	Parameter and test conditions	Value	Unit
T _j	Maximum junction temperature	125	°C
T _{op}	Operating temperature range	-40 to + 85	°C
T _{stg}	Storage temperature range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_{amb} = 25°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 _{line}	Input capacitance per line



Symbol	Test conditions	Min	Typ	Max	Unit
V _{BR}	I _R = 1mA	6	8	10	V
I _{RM}	V _{RM} = 3V			500	nA
R _{I/O}		90	100	110	Ω
C _{line}	At 0V bias			35	pF
Rt / Ft	Induced rise and fall time 10-90% at 26 MHz frequency signal V = 1.9 V (Rt / Ft input 1 ns, 50Ω impedance generator)		8 ⁽¹⁾		ns

(1) guaranteed by design

Fig. 1: S21(dB) all lines attenuation measurement and Aplac simulation.

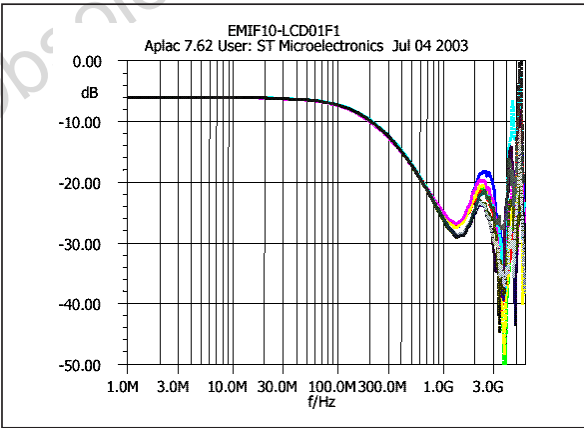


Fig. 2: Analog crosstalk measurements.

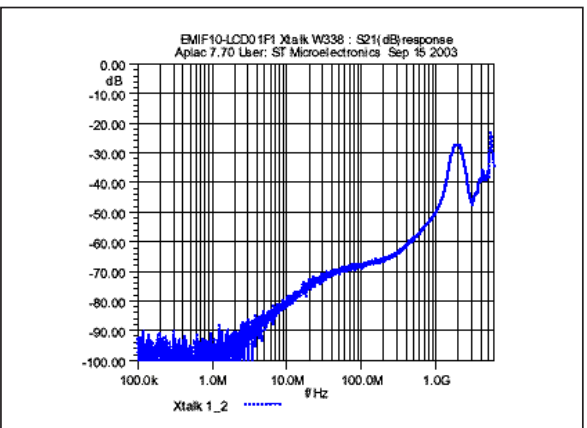


Fig. 3: ESD response to IEC61000-4-2 (+15kV air discharge) on one input and one output.

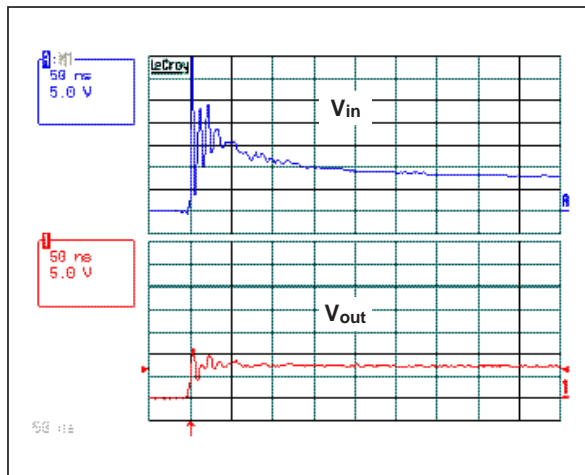


Fig. 4: ESD response to IEC61000-4-2 (-15kV air discharge) on one input and one output.

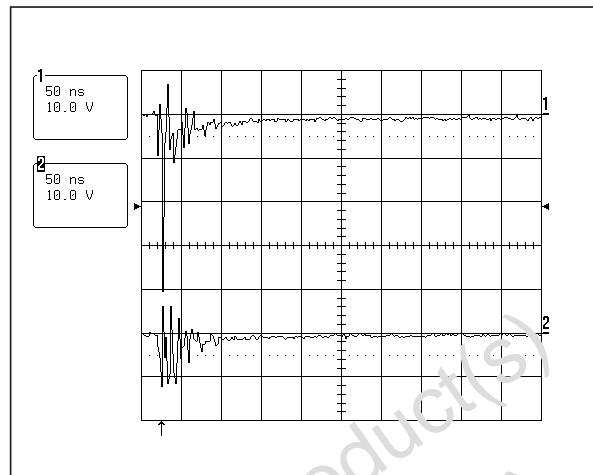


Fig. 5: Line capacitance versus applied voltage.

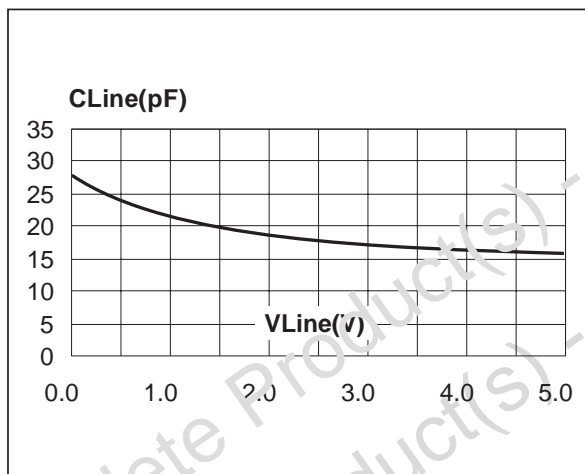


Fig. 6: Rise time 10-90% measurements with 1.9V signal at 26 MHz frequency (50Ω generator).

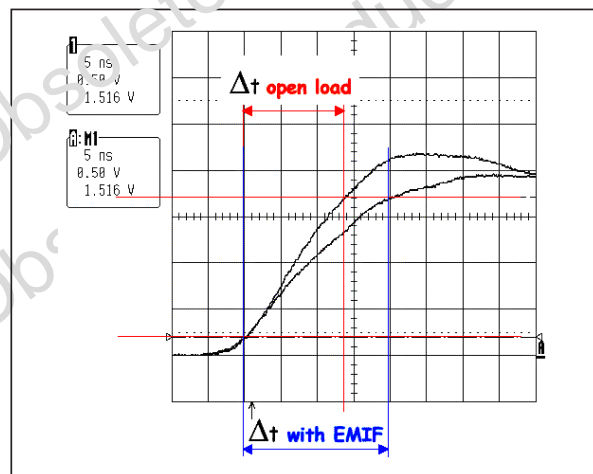
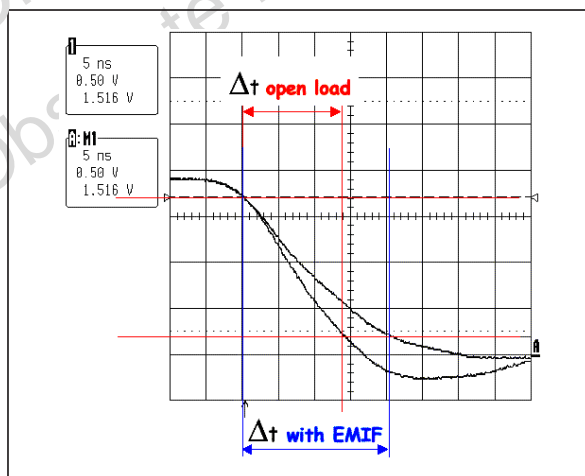
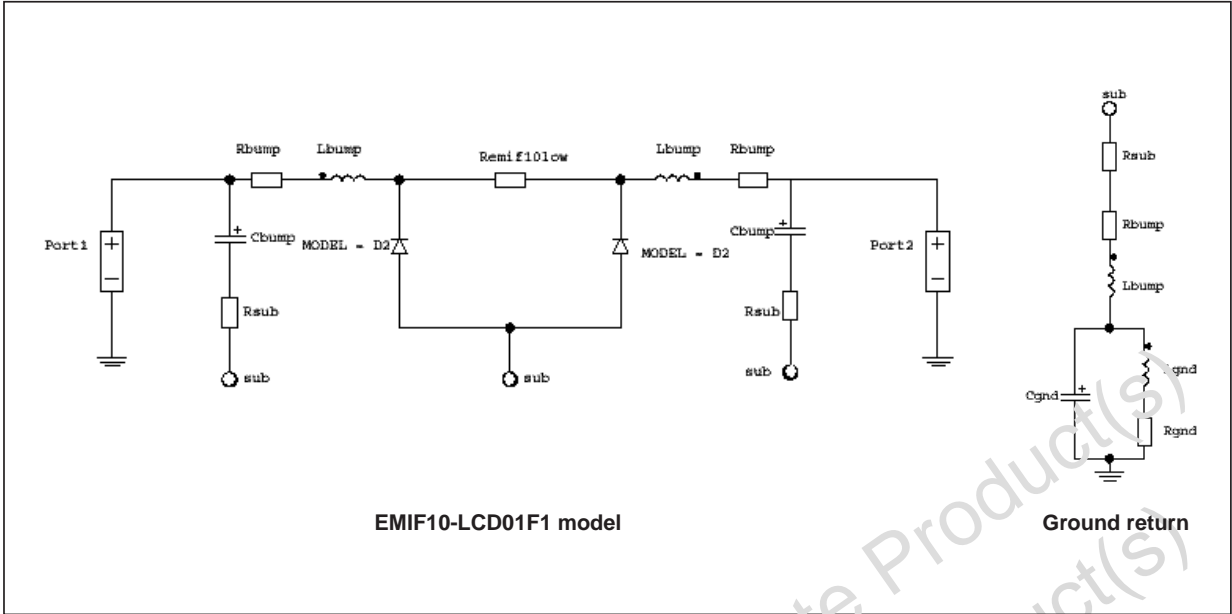


Fig. 7: Full time 10-90% measurements with 1.9V signal at 26 MHz frequency (50Ω generator).



EMIF10-LCD01F1

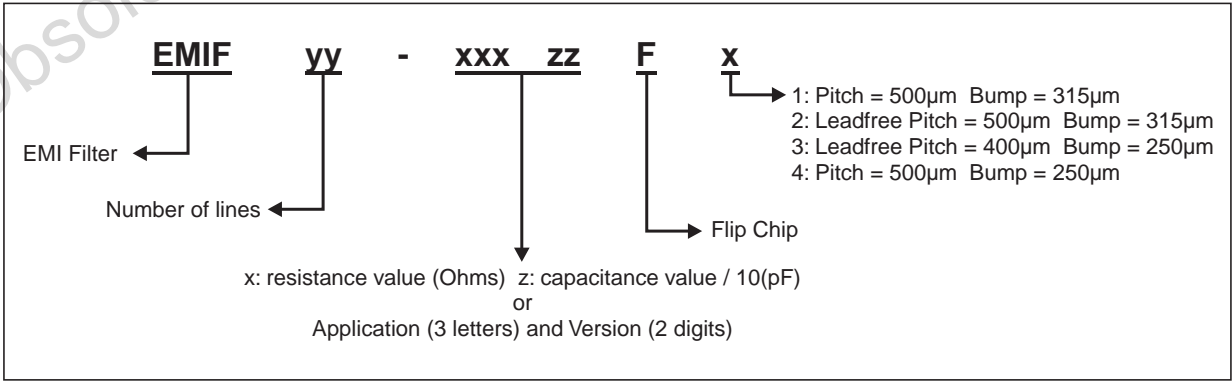
Aplac model.



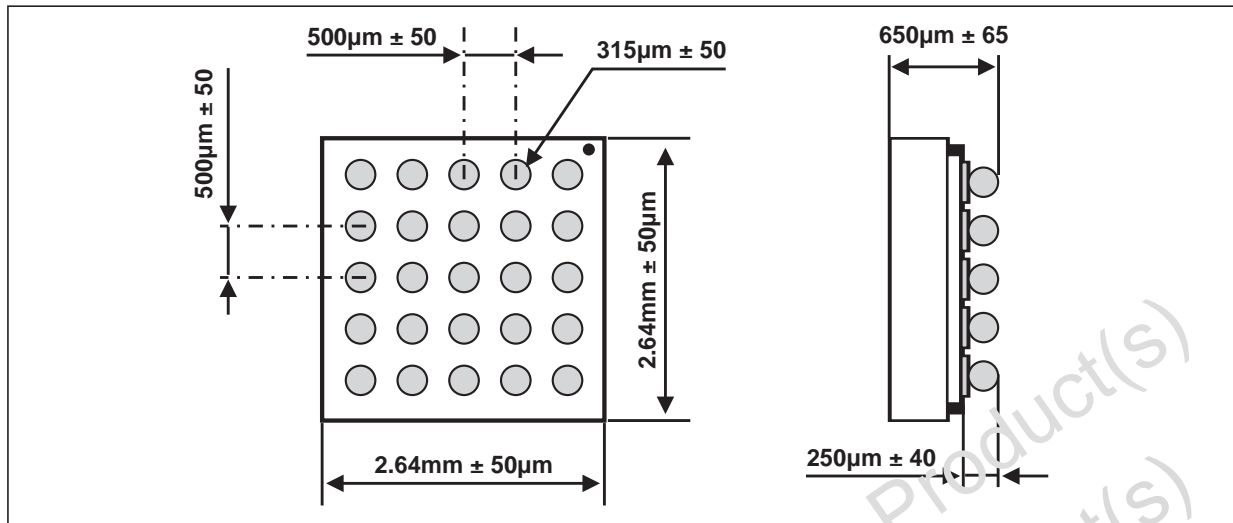
Aplac parameters.

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	

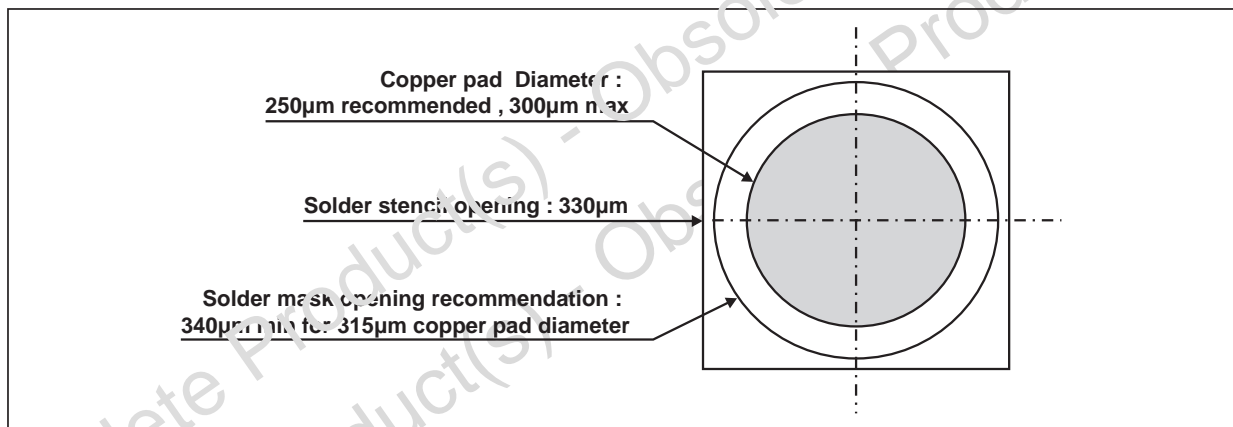
ORDER CODE



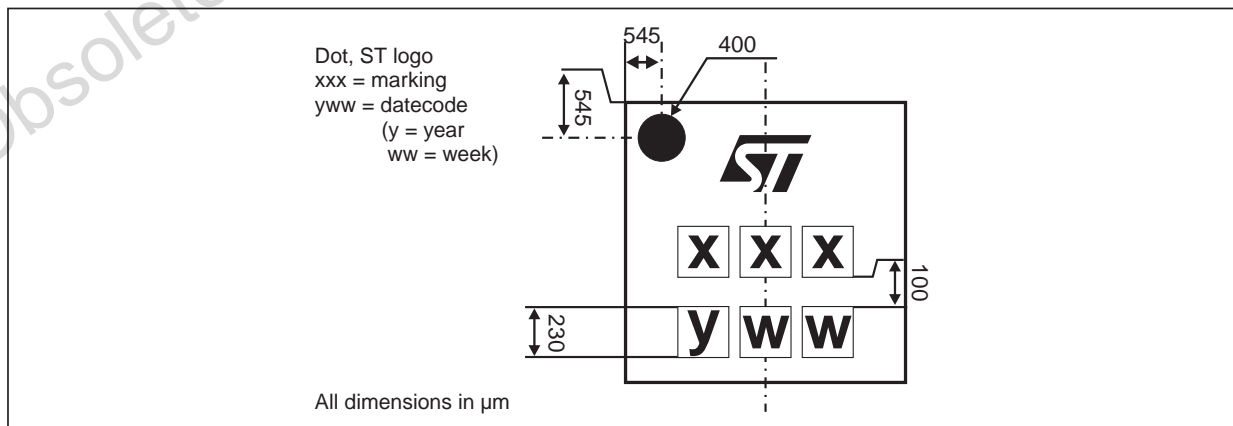
PACKAGE MECHANICAL DATA FLIP CHIP



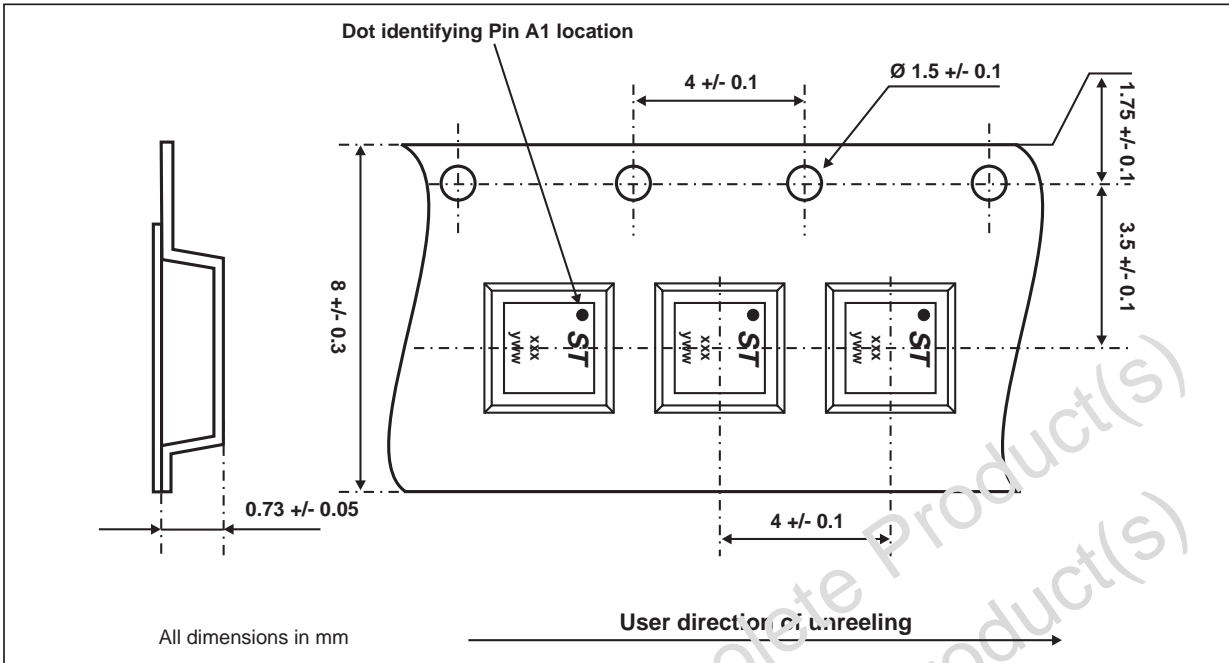
FOOT PRINT RECOMMENDATIONS



MARKING



PACKING



OTHER INFORMATION

Ordering code	Marking	Package	Weight	Base qty	Delivery mode
EMIF10-LCD01F1	FLT	Flip Chip	9.3 mg	5000	Tape & reel (7")

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

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