1 Electrical characteristics

Table 1. Absolute maximum ratings (T_{AMB} = 25 °C)

Symbol	Parameter	Value	Unit
Tj	Maximum junction temperature	125	°C
Top	Operating temperature range	-40 to +85	°C
Tstg	Storage temperature range	-55 to +150	°C

Table 2. 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

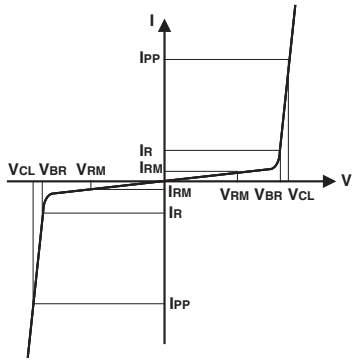


Table 3.

Symbol	Test condition	Min	Typ	Max	Unit
V_{BR}	I_R = 1 mA	6	8		V
I_{RM}	V_{RM} = 3 V per line			500	nA
$R_{I/O}$	Tolerance ± 20%		68		Ω
C_{line}	V_R = 0 V		100		pF

Figure 2. Attenuation simulation with 1 kΩ input and 10 kΩ ouput

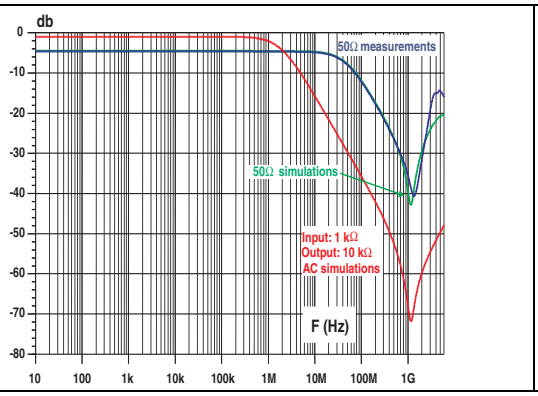


Figure 3. Analog crosstalk measurements

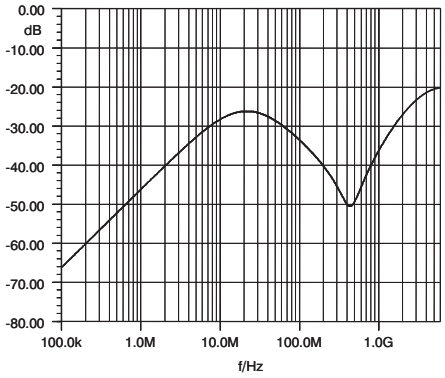


Figure 4. ESD response to IEC61000-4-2 (+15kV air discharge) on one input V(in) and one output V(out)

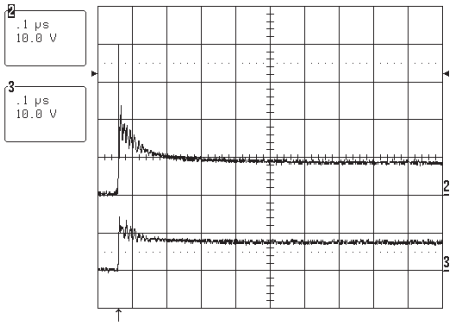


Figure 5. ESD response to IEC61000-4-2 (–15kV air discharge) on one input V(in) and one output V(out)

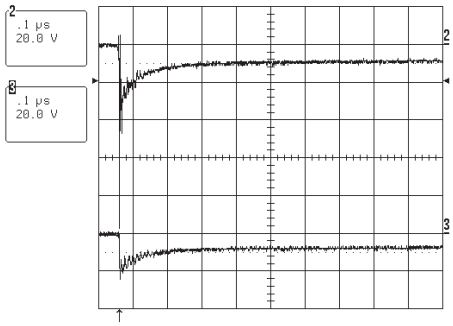


Figure 6. Line capacitance versus applied voltage.

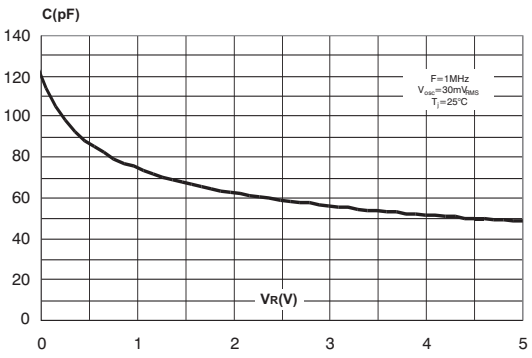


Figure 7. Aplac mode

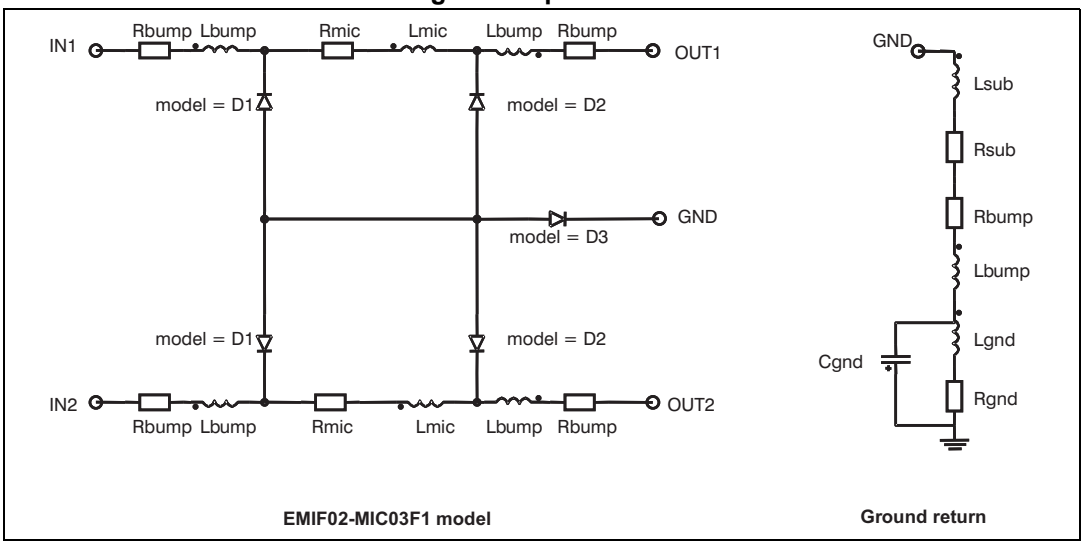
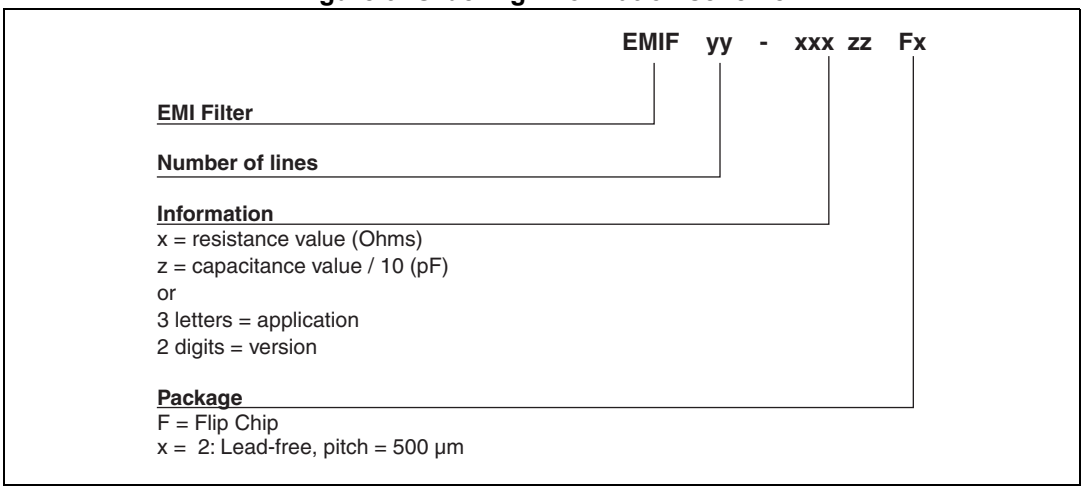


Figure 8. Aplac parameters

Model D1	Model D3	Model D2	aplacvar Rmic 68
CJO=Cdiode1	CJO=Cdiode3	CJO=Cdiode2	aplacvar Lmic 10p
BV=7	BV=7	BV=7	aplacvar Cdiode1 100pF
IBV=1u	IBV=1u	IBV=1u	aplacvar Cdiode2 3.6pF
IKF=1000	IKF=1000	IKF=1000	aplacvar Cdiode3
IS=10f	IS=10f	IS=10f	1.17nF
ISR=100p	ISR=100p	ISR=100p	aplacvar Lbump 50pH
N=1	N=1	N=1	aplacvar Rbump 20m
M=0.3333	M=0.3333	M=0.3333	aplacvar Rsub 0.5m
RS=0.7	RS=0.12	RS=0.3	aplacvar Rgnd 10m
VJ=0.6	VJ=0.6	VJ=0.6	aplacvar Lgnd 50pH
TT=50n	TT=50n	TT=50n	aplacvar Cgnd 0.15pF
			aplacvar Lsub 10pH

2 Ordering information scheme

Figure 9. 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 10. Flip Chip dimensions

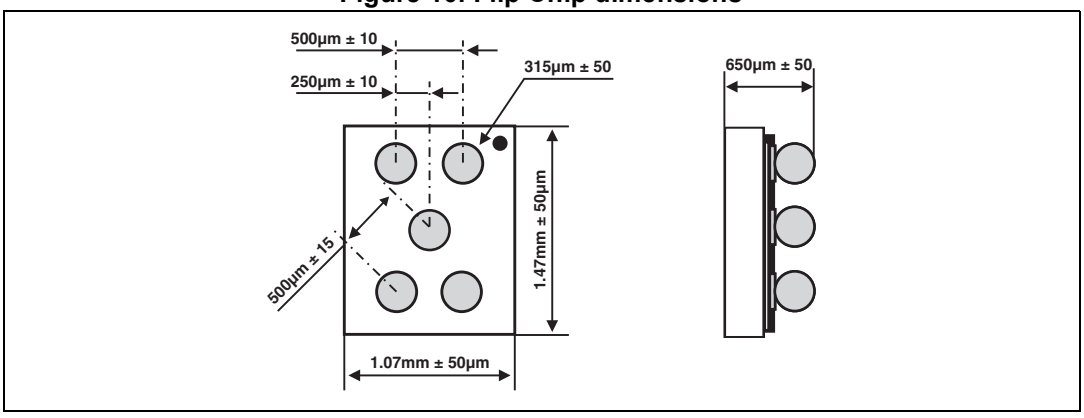


Figure 11. Footprint

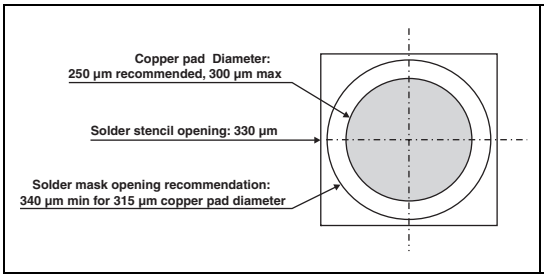


Figure 12. Marking

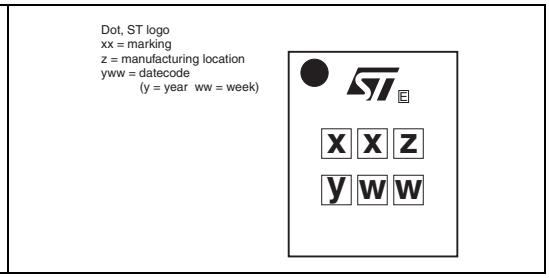
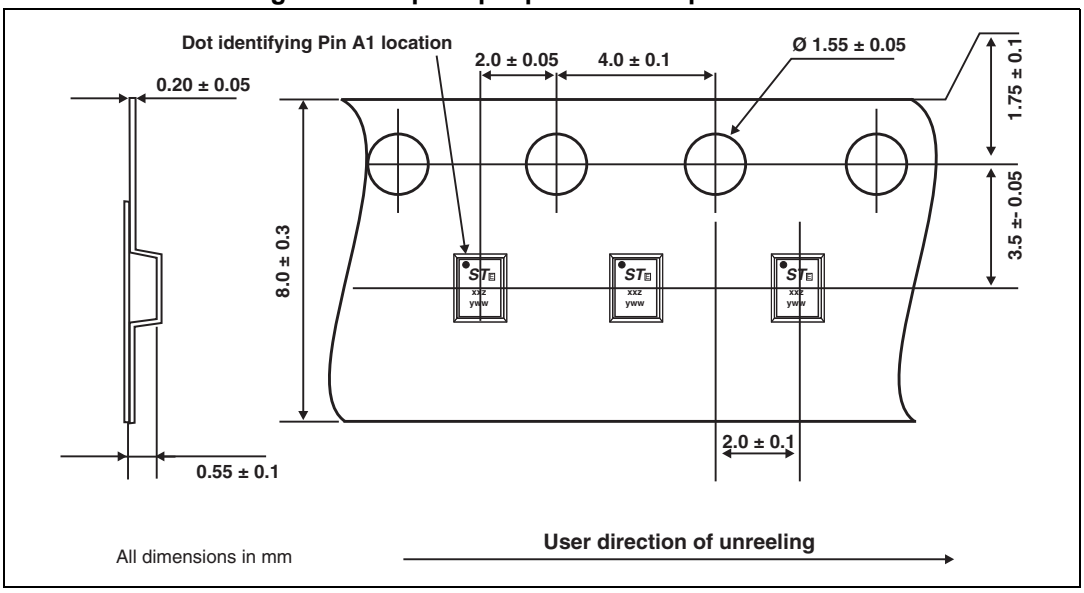


Figure 13. Flip Chip tape and reel specification



4 Ordering information

Table 4. Ordering information

Order code	Marking	Package	Weight	Base qty	Delivery mode
EMIF02-MIC03F2	FW	Flip Chip	2.1 mg	5000	Tape and reel (7”)

Note: More packing information is available in the applications note:
AN1235: “Flip Chip: package description and recommendations for use”
AN 1751: “EMI filters: Recomendations and measurements”

5 Revision history

Table 5. Document revision history

Date	Revision	Changes
14-Oct-2006	1	Initial release
31-Mar-2014	2	Reformatted to current standards. Added ECOPACK statement. Updated *Figure 2* and *Figure 13*.
18/07/2014	3	Updated typo error on *Features*.

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