



EMIF08-2005QEJ

IPAD.™

EMI FILTER INCLUDING ESD PROTECTION

APPLICATIONS:

Where EMI filtering in ESD sensitive equipment is required :

- Computers and printer
- Communication systems
- Mobile phones

DESCRIPTION

The EMIF08-2005QEJ is a highly integrated device designed to suppress EMI/RFI noise in all systems subjected to electromagnetic interferences. Additionally, the EMIF08-2005QEJ filter includes an ESD protection circuitry which prevents destruction when subjected to ESD discharge up to 15kV.

BENEFITS

- EMI symmetrical low-pass filter
- Low PCB space consuming: 9 mm²
- Very thin package < 1 mm
- High reliability offered by monolithic integration

COMPLIES WITH THE FOLLOWING STANDARDS:

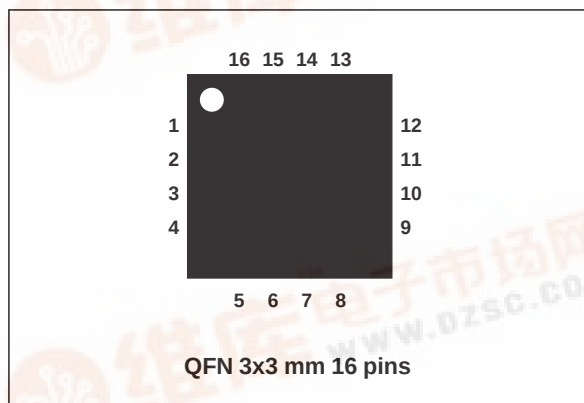
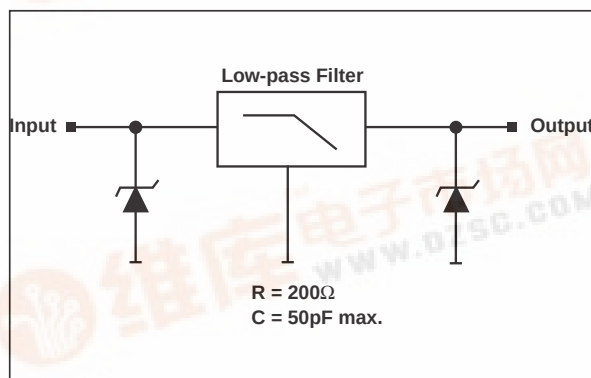
IEC61000-4-2:

15kV (air discharge)
8 kV (contact discharge)

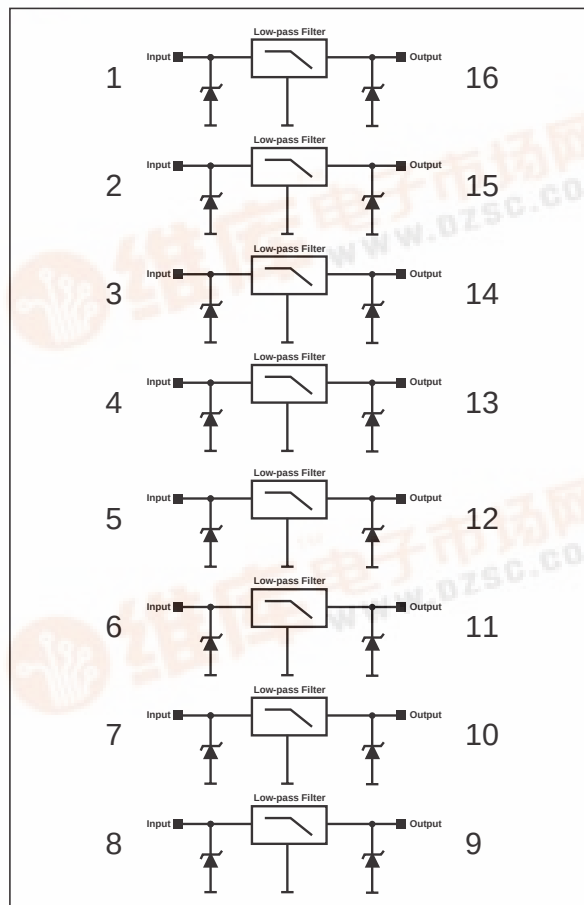
MIL STD 883E - Method 3015-7 Class 3:

25kV (human body test)

BASIC CELL CONFIGURATION



PIN CONFIGURATION



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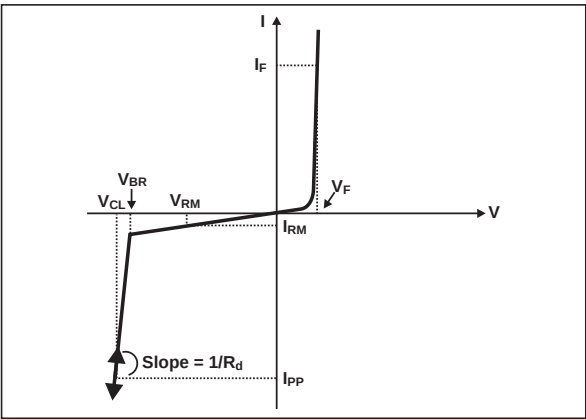
EMIF08-2005QEJ

ABSOLUTE RATINGS (Tamb = 25°C)

Symbol	Parameter and test conditions		Value	Unit
V _{PP}	ESD discharge	EC61000-4-2 air discharge IEC61000-4-2 contact discharge	± 15 ± 8	kV
T _j	Junction temperature		125	°C
T _{stg}	Storage temperature range		-55 + 150	°C
T _L	Maximum lead temperature for soldering		260	°C

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C)

Symbol	Parameter
V _{BR}	Breakdown voltage
I _{RM}	Leakage current @ V _{RM}
V _{RM}	Stand-off voltage
V _{CL}	Clamping voltage
I _{PP}	Peak pulse current
αT	Voltage temperature coefficient
V _F	Forward voltage drop



Symbol	Test conditions	Min.	Typ.	Max.	Unit
V _{BR}	I _R = 1 mA	6	8	10	V
I _{RM}	V _{RM} = 3V per line			500	μA
R _d	I _{PP} = 10A, t _p = 2.5μs (see note 1)		1		Ω
R _{IO}		180	200	220	Ω
C _{in}	Vbias = 0V F = 1MHz Vosc = 30mV		45	50	pF

Fig. 1: Filtering behavior.

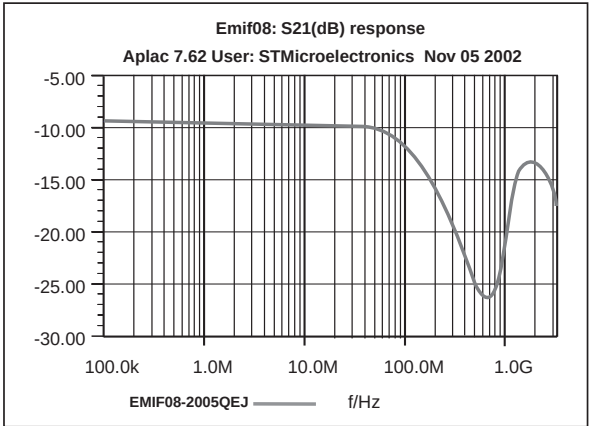
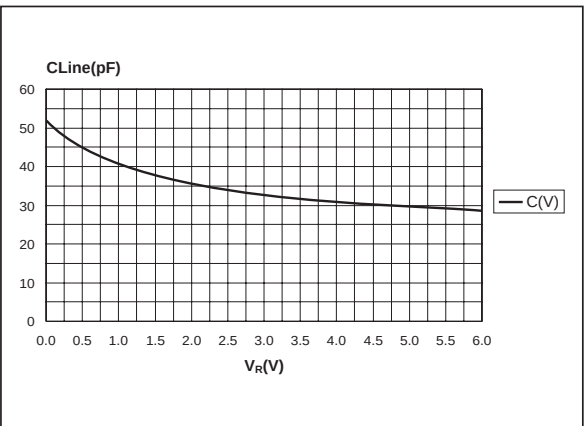
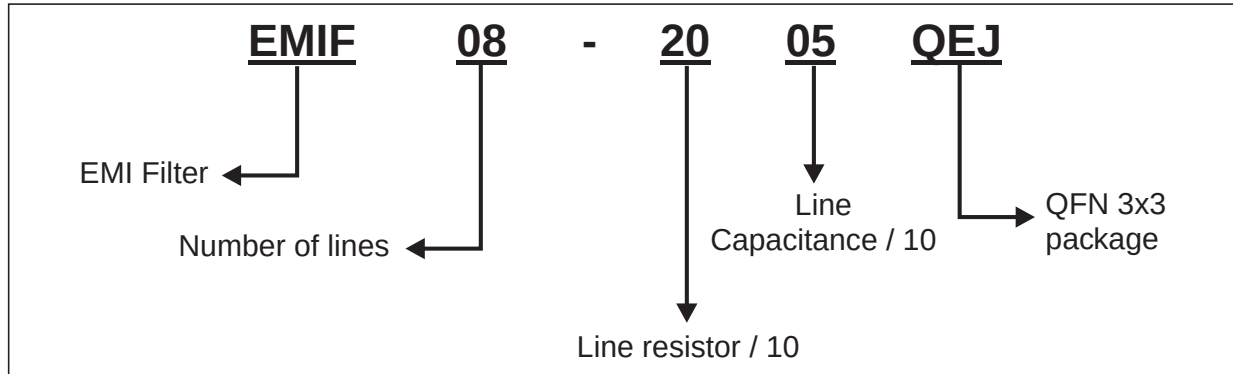


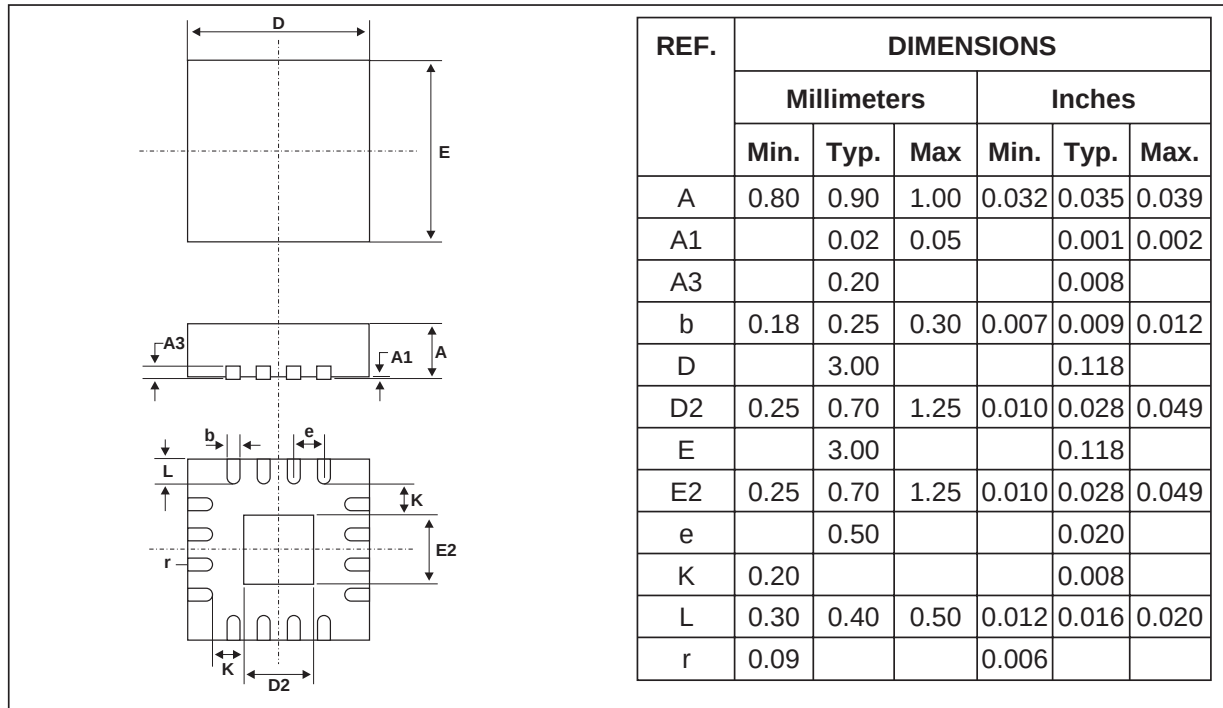
Fig. 2: Capacitance versus reverse applied voltage.



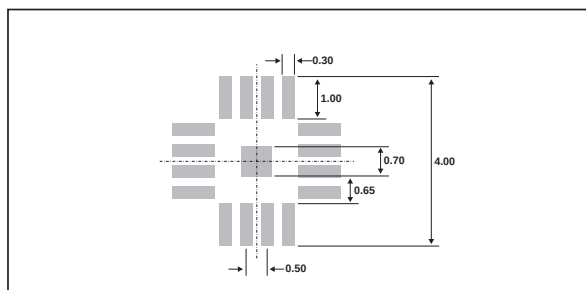
ORDER CODE



PACKAGE OUTLINE DIMENSIONS



FOOT PRINT DIMENSIONS (in millimeters)



OTHER INFORMATION

Ordering code	Marking	Package	Weight	Base qty	Delivery mode
EMIF08-2005QEJ	EM08	QFN 3x3 16 pins	22.1 mg	3000	Tape & reel

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