

# USB 3.0

## with integrated ESD Protection & EMI Filter

Artikel-Nr. 829 993 STICK / 829 993 BAG

**NEW!**

### Order Code: 829 993 STICK

USB 3.0 EMC stick for fast testing in the EMC lab. This stick can be connected to your device during test to improve its EMC performance. Generally, you will pass all EMI and ESD tests with this device.



### Order Code: 829 993 BAG

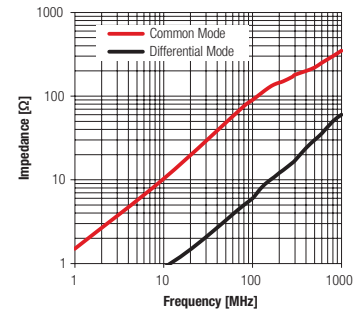
With this kit you can rebuild the design of the USB 3.0 EMC stick.

829 993 BAG contains schematic and the required components:

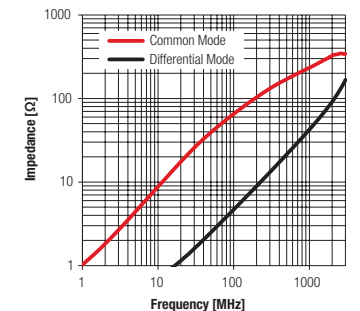
2x	WE-CBF	742 792 040
1x	WE-CNSW	744 232 090
2x	WE-CNSW HF	744 233 670
1x	WE-TVS	824 016 46
1x	WCAP-CSGP	885 012 206 051
1x	WR-COM USB Plug	692 112 030 100
1x	WR-COM USB Socket	692 122 030 100



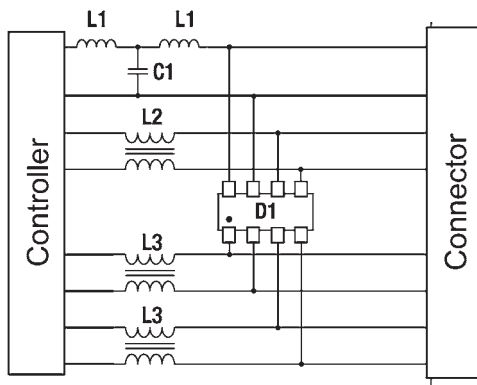
### WE-CNSW (744 232 090) Data Line Impedance



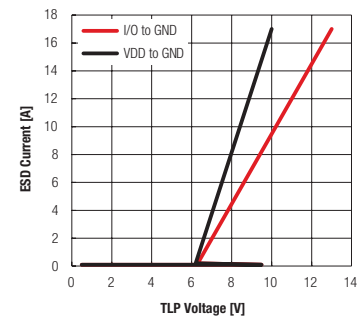
### WE-CNSW HF (744 233 670) Data Line Impedance



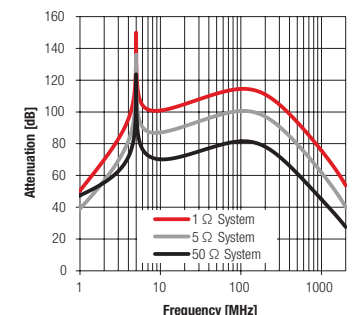
### Schematic



### WE-TVS (824 016 46) ESD Suppression



### LCL-Filter VCC Line Noise Suppression



**L1 WE-CBF 742 792 040**  
Size: 0805  
 $I_R$ : 2000 mA  
Z: 600 Ω

**L2 WE-CNSW 744 232 090**  
Size: 1206  
 $I_R$ : 370 mA  
Z: 90 Ω

**L3 WE-CNSW HF 744 233 670**  
Size: 0805  
 $I_R$ : 320 mA  
Z: 67 Ω

**D1 WE-TVS 824 016 46**  
Size: MSOP-8L  
 $V_{DC}$ : 5.0 V  
 $C_{ch}$ : 0,2 pF

**C1 WCAP-CSGP 885 012 206 051**  
Size: 0603  
C: 680 nF  
 $U_R$ : 16 V

**629 112 030 100**  
USB 3.0 Plug Type A  
SMD with Clip WR-COM

**629 122 030 100**  
USB 3.0 Socket Type A  
SMD Horizontal WR-COM