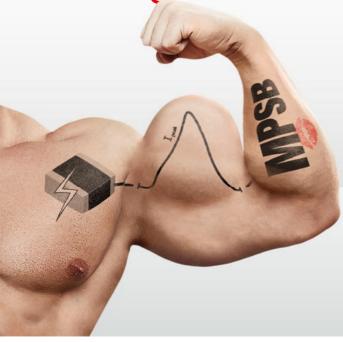


## huge **peak** strong **bead!**



### #strongBEAD

WE speed up **the future** 

The WE-MPSB series is the world's first ferrite bead that specifies how it performs under high current transients. This unique bead protects and extends the life of your application. It features an ultra-low  $R_{\rm DC}$  which delivers the lowest self-heating in its class at high currents. The WE-MPSB is ideal for DC/DC applications requiring high efficiency. For more information, please visit **www.we-online.com/WE-MPSB** 

Design your filter with our free online software — **REDEXPERT.** You will have the best guidance to ensure your circuit can withstand transient peak currents using our peak-specified WE-MPSB ferrite beads: **www.we-online.com/MPSB-designer** 

- muscular peak current capability
- high rated currents
- ultra-low R<sub>DC</sub> to minimize unwanted losses
- effective broadband filtering







### **WE-MPSB Multilayer Power Suppression Bead**

#### The innovative design



Optimized layer design for muscular peak current capability



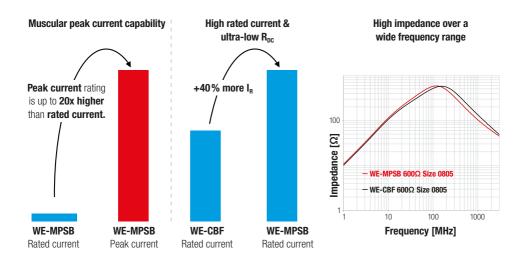
Greater trace cross sectional area for ultra-low R<sub>pc</sub>



High peak current rating to maximize lifetime

WE-MPSB optimizes high current vs.  $R_{DC}$  performance with up to 75 %  $R_{DC}$  reduction in comparison to similar components while maintaining a high impedance over a wide frequency range.

#### **Greatly improved peak current rating**



High impedances over wide frequency bandwidths and with up to 40 % higher rated current and up to 20 x higher peak current capability than standard ferrite beads.

#### Woldwide first **Multilayer SMD Ferrite** with clearly specified inrush peak current ratings



- Peak current is up to 20 times higher than rated current
- Up to 40 % higher rated current compared with similar products
- Optimized layer design to achieve ultra-low R<sub>nc</sub> and muscular rated current
- High impedance over a wide frequency range at rated current
- Minimized DC bias influence to impedance



THIRD PLACE (TIE)

#### **Application**

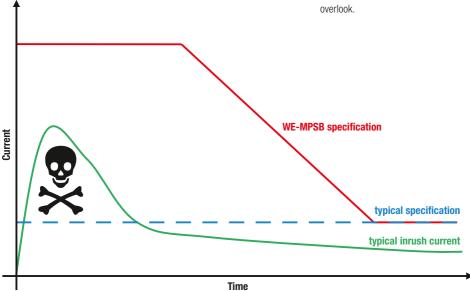
The WE-MPSB is ideal for use with an input capacitor in power supplies.

- Transient hostile environments
- Filter for inrush current applications
- Input/output filter of hot swap controllers
- Hot board insertion
- Electronic circuit breakers
- Industrial high side switch/circuit breakers
- Motor interference suppression
- Input/output filter for DC/DC converter

Standard chip bead ferrites are not designed for fast transients. This makes them vulnerable to peak current in critical environments.

The WF-MPSB is a muscular bead that can be exposed to peak currents without any damage. Its optimized layer design and ultra-low Rpc protects and extends the life of your application.

It is a solution you cannot afford to overlook.



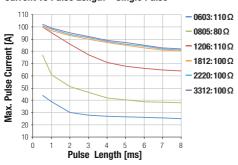
### **Product Overview**



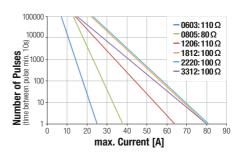
Electrical properties									
Order Code	Size	Z@100 MHz (Ω)	Z <sub>max</sub> (Ω)	TC Z <sub>max</sub> (MHz)	I <sub>R</sub> (A)	R <sub>DC</sub> (mΩ)	l load (A) @ 1 Pulse	I load (A) @ 0,5 ms	I load (A) @ 2 ms
742 792 280 8	0603	8	25	1930	9.5	2.5	80	100	93
742 792 282 60		26	39	515	6.5	5.0	50	83	74
742 792 286 00		60	99	458	5.1	8.5	44	67	57
742 792 281 11		110	135	226	4.1	14.5	25	44	30
742 792 208 00	0805	80	120	662	4.0	13.0	38	77	51
742 792 201 81		180	202	155	4.0	26.5	36	81	48
742 792 203 21		320	347	170	2.5	30.5	26	59	35
742 792 206 01		600	551	108	2.1	43.0	18	41	24
742 792 211 00	1206	10	41	2178	10.5	1.0	80	100	93
742 792 211 11		110	118	150	5.4	9.5	64	100	86
742 792 212 81		280	288	125	3.5	22	35	79	47
742 792 216 01		600	610	83	2.5	38	27	61	36
742 792 235 60	1612	56	90	1000	10.0	2.5	80	100	93
742 792 261 01	1812	100	160	1100	8.0	4.5	80	100	93
742 792 241 01	2220	100	160	1000	7.0	3.5	80	100	94
742 792 241 51		150	230	700	5.0	7.0	80	100	93
742 792 241 71		170	280	700	4.0	11	80	100	93
742 792 241 81		180	240	600	5.0	7.5	80	100	93
742 792 242 51		250	300	150	4.0	8.5	80	100	93
742 792 242 71		270	350	300	4.0	10	80	100	93
742 792 244 01		400	450	110	4.5	15	80	100	93
742 792 245 51		550	660	300	4.0	28	80	100	93
742 792 235 60	3312	56	160	1200	10.0	2.5	80	100	95

# \* testing is limited to 100 A currents

#### Current vs Pulse Length - Single Pulse



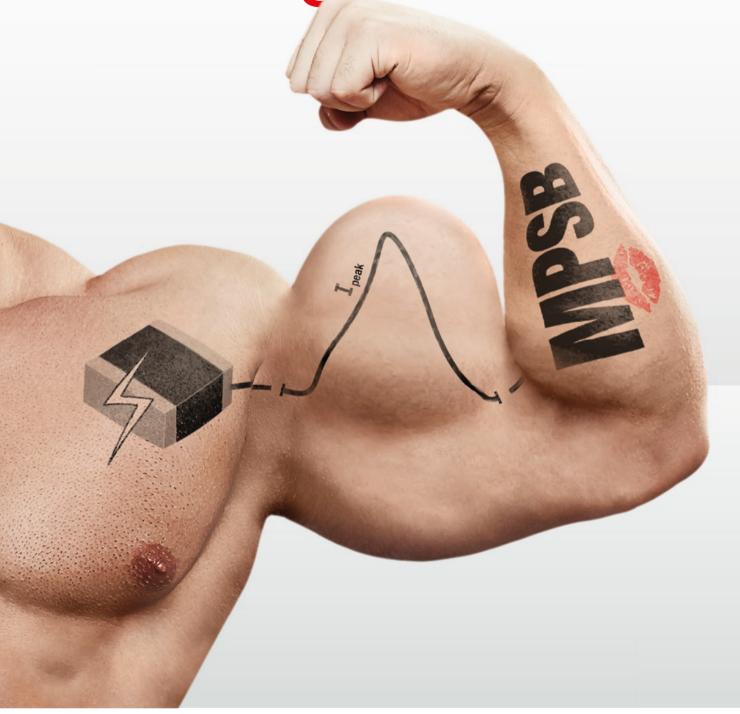
#### No. of Pulses vs Current - 8 ms Pulse







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- muscular peak current capability
- high rated currents
- $\blacksquare$  ultra-low  $\mathbf{R}_{\mathrm{DC}}$  to minimize unwanted losses
- effective broadband filtering

Products in original size: 0603 0805 1206 1612 1812 2220 3312