



## CMJ-2 Series • Miniature SMD Common Mode Double Chokes

### Features

- Miniature, low cost SMD for pick and place compatibility while providing consistent and reliable coplanarity
- Other inductance values and special types for operation at 150°C ambient are available upon request
- High attenuation over a wide frequency range - CAN bus types to 500MHz
- Available in Bifilar and Sector winding (Suffix S)
- Materials: UL94-VO
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Fully RoHS compliant and meets lead free reflow level J-STD-020C



### Electrical Specifications @ 25°C

Nominal Voltage: 42Vac (50/60Hz), 80Vdc  
 Operating Temperature: -25° to +85°C  
 Storage Temperature: -40° to +125°C  
 Climatic category: according to IEC68-1 25/85/56  
 Test voltage between windings: 500 Vrms



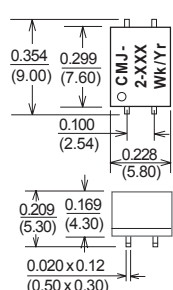
### Test frequency

Nominal Inductance: measured @ 100kHz/20 mVrms  
 Leakage Inductance: measured @ 100kHz, 100mVrms  
 Test Equipment: HP4192A

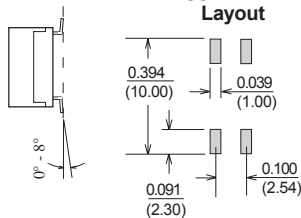
Weight: ~ 0.3 gram  
 Packaging: Tape & Reel

Part Number	OCL (μH) +50/-30%	I <sub>N</sub> (mA)	L <sub>L</sub> (μH)	R <sub>CU</sub> (mOhms)	V <sub>T</sub> (Vrms)	Number of Data Lines
<b>Sector Winding for CAN bus and similar applications</b>						
CMJ-2-060S	6	2500	0.40	22	500	2
CMJ-2-250S	25	800	1.50	112	500	2
CMJ-2-510S	51	800	2.00	148	500	2
<b>Bifilar Winding for Data and Signal Lines</b>						
CMJ-2-050	5	1200	0.05	100	500	2
CMJ-2-110	11	500	0.05	120	500	2
CMJ-2-250	25	500	0.10	96	500	2
CMJ-2-510	51	500	0.10	148	500	2
CMJ-2-101	100	500	0.25	260	500	2
CMJ-2-471	470	500	0.20	248	500	2
CMJ-2-102	1000	500	0.25	250	500	2
CMJ-2-222	2200	400	0.15	280	500	2
CMJ-2-472	4700	200	0.30	845	500	2
CMJ-2-103	10000	200	0.40	1200	500	2
CMJ-2-203	20000	140	0.70	1800	500	2
CMJ-2-473	47000	100	1.50	3450	500	2

### Dimensions



### Suggested Pad Layout



### Bifilar Winding



### Sector CMJ-2-XXXX Winding



### Schematic



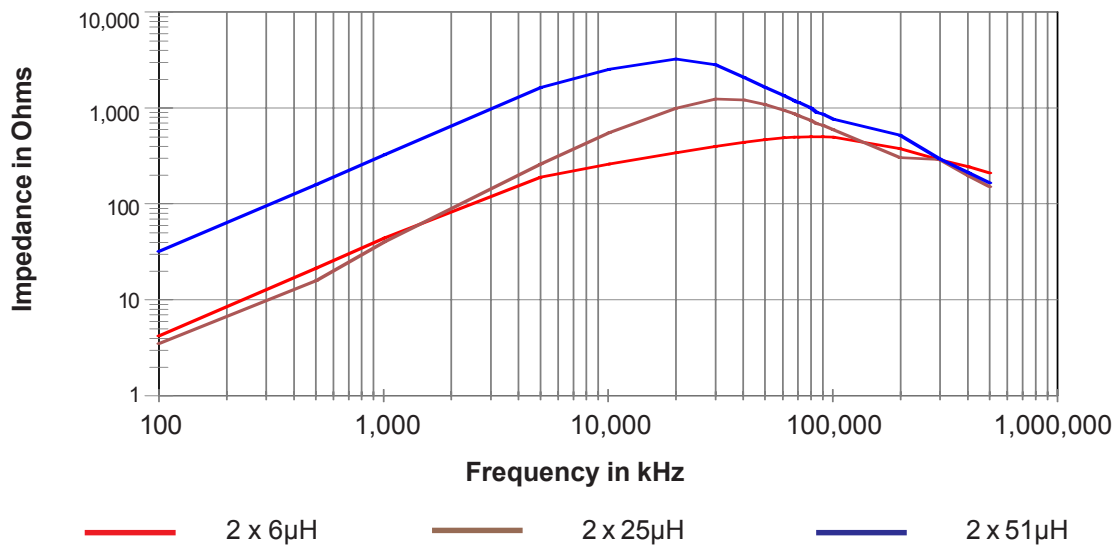
Surface Coplanarity will be 0.004(0.10) maximum

Dimensions: Inches (Millimeters)  
 Tolerance: ±0.010 (0.25) unless specified otherwise

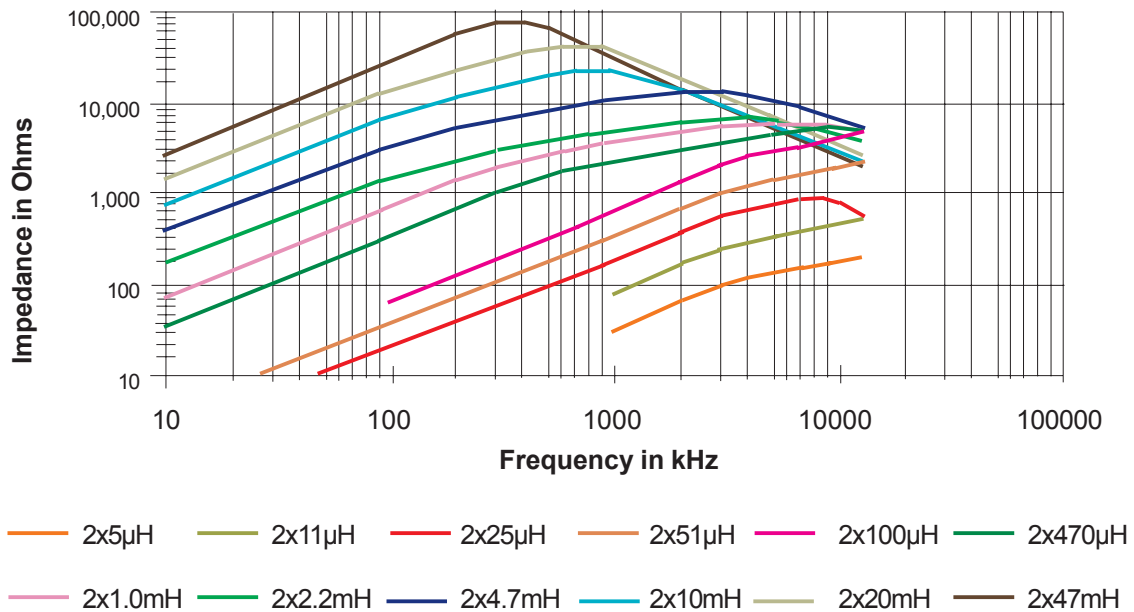
See following page for typical impedance curves

## CMJ-2 Series • Impedance Performance

### Impedance Performance CMJ-2 Series Double Chokes with Sector Winding



### Impedance Performance CMJ-2 Series Double Chokes with Bifilar Winding



## Sales & Marketing, Design and Manufacturing Facilities

<http://www.talema-nuvotem.com>

#### Eastern Europe & Czech Republic

NTMAGNETICS s.r.o.  
Chebská 27  
322 00 Píseň  
Tel: Int. + 420 377 - 338 351  
Fax: Int. + 420 377 - 338 350  
Email: [talema@talema.cz](mailto:talema@talema.cz)  
Web Site: [www.ntmagnetics.cz](http://www.ntmagnetics.cz)

#### Germany

TALEMAELEKTRONIK GMBH  
Sembdnerstr. 5, Postfach 2523  
82110 Germering  
Tel: Int. + 49 89 - 841 00 - 0  
Fax: Int. + 49 89 - 841 00 25  
Email: [info@talema.de](mailto:info@talema.de)

#### Ireland

NUVOTEM TEO.  
Crolly  
Co. Donegal  
Tel: Int. + 353 74 - 954 8666  
Fax: Int. + 353 74 - 954 8139  
Email: [info@nuvotem.com](mailto:info@nuvotem.com)

#### India

TALEMA ELECTRONIC PVT. LTD.  
Opposite the SIDCO Industrial Estate  
Gins Towers  
4/5S.H/1, Omalur Main Road  
Salem - 636 004, Tamil Nadu  
Tel: Int. + 91 427 - 244 1325  
Fax: Int. + 91 427 - 243 0034  
E-mail: [talema@talemaindia.com](mailto:talema@talemaindia.com)  
Web Site: [www.talemaindia.com](http://www.talemaindia.com)