Low Profile USB Common Mode Choke 0805

- For noise suppression in super high speed signal lines: USB 3.x, HDMI 2.0, HDBaseT™, DisplayPort, DVI, etc.; and in high speed differential signal lines: USB 2.0, IEEE1394, LVDS, etc.
- Suitable for USB-type C specification 1.0
- Up to 6 GHz differential mode 3 dB cutoff frequency; up to 30 dB common mode noise attenuation in GHz range

Core material: Ferrite
Environmental: RoHS compliant
Terminations: Matte tin over nickel over silver-palladium-glass frit.
Weight: 14.7 – 15.5 mg
Ambient temperature: -40°C to +125°C with Irms current.
Maximum part temperature: 140°C
Storage temperature: Component: -40°C to +140°C.
Tape and reel packaging: -40°C to +80°C
Resistance to soldering heat: Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles.
Moisture Sensitivity Level (MSL): 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF): 10.06 per billion hours / 9.940E+07 hours, calculated per Telcordia SR-332
Packaging: 2000/7″ reel; 7500/13″ reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.295 mm pocket depth

<table>
<thead>
<tr>
<th>Part number</th>
<th>Common mode peak impedance (kOhms)</th>
<th>Cutoff frequency (GHz)</th>
<th>Common mode attenuation typ (dB)</th>
<th>DCR max (Ohms)</th>
<th>Isolation (Vrms)</th>
<th>Irms (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0805USBF-421MR_</td>
<td>&gt;0.14 @ &gt;3.0 GHz</td>
<td>6.6</td>
<td>4.6</td>
<td>28</td>
<td>0.11</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-901MR_</td>
<td>&gt;0.30 @ &gt;3.0 GHz</td>
<td>5.8</td>
<td>9.1</td>
<td>60</td>
<td>0.14</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-172MR_</td>
<td>0.52 @ 2.5 GHz</td>
<td>3.3</td>
<td>12.8</td>
<td>101</td>
<td>0.22</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-262MR_</td>
<td>0.69 @ 2.0 GHz</td>
<td>2.4</td>
<td>15.4</td>
<td>165</td>
<td>0.235</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-372MR_</td>
<td>0.93 @ 1.8 GHz</td>
<td>1.4</td>
<td>18.1</td>
<td>241</td>
<td>0.27</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-502MR_</td>
<td>1.22 @ 1.5 GHz</td>
<td>0.93</td>
<td>21.6</td>
<td>315</td>
<td>0.32</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-672MR_</td>
<td>1.65 @ 1.2 GHz</td>
<td>0.69</td>
<td>23.3</td>
<td>434</td>
<td>0.37</td>
<td>250</td>
</tr>
<tr>
<td>0805USBF-902MR_</td>
<td>1.91 @ 1.0 GHz</td>
<td>0.73</td>
<td>25.4</td>
<td>560</td>
<td>0.63</td>
<td>250</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:
   0805USBF-902MR_C

2. Frequency at which the differential mode attenuation equals −3 dB
3. Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.
4. DCR is specified per winding.
5. Winding to winding isolation (hipot) tested for one minute.
6. Current per winding that causes a 15°C rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
USB 2.0, 3.x Common Mode Filter — 0805USBF

Typical Attenuation (Ref: 50 Ohms)

Typical Impedance vs Frequency