## SMT Data Line EMI Filters - DFT4532

### Specifications
- **Common mode Cutoff Inductance (mH):**
  - Part number: DFT4532-513BL, 2.01 @ 61 MHz, 670 nH
  - Part number: DFT4532-513SL, 1.92 @ 99 MHz, 28 nH
  - Part number: DFT4532-104BL, 0.64 @ 9.7 MHz, 650 nH
  - Part number: DFT4532-224BL, 1.40 @ 13 MHz, 490 nH
  - Part number: DFT4532-334BL, 1.96 @ 9.6 MHz, 520 nH
  - Part number: DFT4532-474BL, 3.04 @ 9.6 MHz, 490 nH

- **Test frequency (kHz):**
  - Part number: DFT4532-513BL, 100 kHz
  - Part number: DFT4532-513SL, 100 kHz
  - Part number: DFT4532-104BL, 100 kHz
  - Part number: DFT4532-224BL, 100 kHz
  - Part number: DFT4532-334BL, 100 kHz
  - Part number: DFT4532-474BL, 100 kHz

- **Irms (mA):**
  - Part number: DFT4532-513BL, 370 mA
  - Part number: DFT4532-513SL, 370 mA
  - Part number: DFT4532-104BL, 500 mA
  - Part number: DFT4532-224BL, 400 mA
  - Part number: DFT4532-334BL, 370 mA
  - Part number: DFT4532-474BL, 350 mA

- **DCR (Ohms):**
  - Part number: DFT4532-513BL, 0.250 Ohms
  - Part number: DFT4532-513SL, 0.250 Ohms
  - Part number: DFT4532-104BL, 0.150 Ohms
  - Part number: DFT4532-224BL, 0.200 Ohms
  - Part number: DFT4532-334BL, 0.250 Ohms
  - Part number: DFT4532-474BL, 0.320 Ohms

- **Leakage inductance (µH):**
  - Part number: DFT4532-513BL, 0.010 µH
  - Part number: DFT4532-513SL, 0.025 µH
  - Part number: DFT4532-104BL, 0.070 µH
  - Part number: DFT4532-224BL, 0.080 µH
  - Part number: DFT4532-334BL, 0.100 µH
  - Part number: DFT4532-474BL, 0.130 µH

### Additional Details
- **Part Number:** DFT4532-474BL
- **Core Material:** Ferrite
- **Environmental:** RoHS compliant
- **Terminals:** RoHS compliant matte tin over nickel over phosphorous bronze
- **Weight:** 78 – 86 mg
- **Ambient temperature:** -40°C to +85°C
- **Maximum part temperature:** +105°C
- **Storage temperature:** Component: -40°C to +105°C.
- **Resistance to soldering heat:** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
- **Moisture Sensitivity:** Level 1 (unlimited floor life at <30°C / 85% relative humidity)
- **Failures in Time (FIT) / Mean Time Between Failures (MTBF):**
  - 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
- **Packaging:** 600/7” reel; 2000/13” reel
  - Plastic tape: 12 mm wide, 0.4 mm thick, 8 mm pocket spacing, 3.43 mm pocket depth
- **PCB washing:** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf

### Technical Details
- **Dimensions:**
  - Recommended Land Pattern
  - Dimensions are in millimeters

### Product Features
- Current-compensated ring core double choke
- Exceptional common mode noise attenuation
- AEC-Q200 Grade 3 (-40°C to +85°C)
- 250 Vrms, one minute isolation (hipot) between windings

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**Notes:**
1. When ordering, please specify **termination** and **packaging** code:
   - **Termination:** L = RoHS compliant matte tin over nickel over phosphorous bronze
   - **Special order, add cost:** S = non-RoHS tin-lead (63/37)
   - **Packaging:** C = 7” machine-ready reel. EIA-481 embossed plastic tape (600 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge)
   - **D** = 13” machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2000 parts per full reel).
2. Frequency at which the differential mode attenuation equals 3 dB
3. Inductance is for each winding, measured at test frequency using a Voltech AT3600 or equivalent.
5. DCR is specified per winding.

**Refer to Doc 362 “Soldering Surface Mount Components” before soldering.**
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Attenuation vs Frequency

Differential Mode

- **104B**
- **224B**
- **334B**
- **474B**
- **513B**
- **513S**

Common Mode

- **104B**
- **224B**
- **334B**
- **474B**
- **513B**
- **513S**
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Impedance vs Frequency

Differential Mode

Common Mode