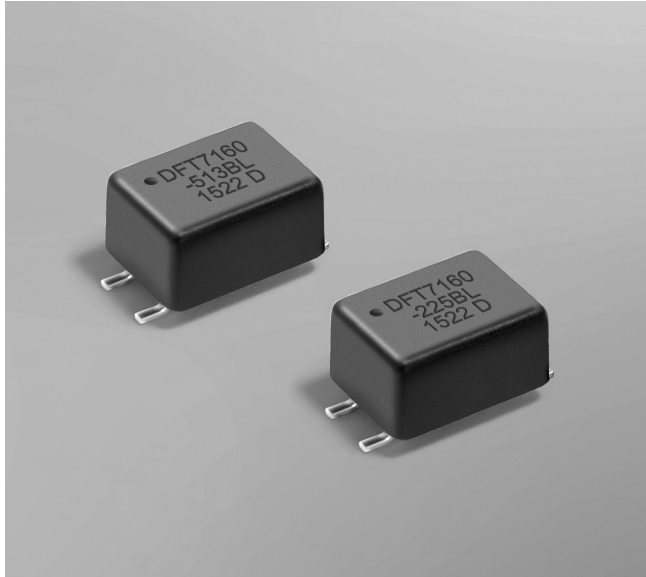


SMT Data Line EMI Filters DFT7160



- Current-compensated ring core double choke
- Miniature footprint; less than 5 mm tall
- Exceptional common mode noise attenuation.
- 250 Vrms, one minute isolation (hipot) between windings

Core material Ferrite

Environmental RoHS compliant

Terminations RoHS compliant matte tin over nickel over phos-bronze

Weight 220 – 230 mg

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +105°C (ambient + temp rise)

Storage temperature Component: –40°C to +105°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)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 250/7" reel; 1000/13" reel Plastic tape: 16 mm wide, 0.4 mm thick, 12 mm pocket spacing, 4.8 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Common mode impedance max (kOhms)	Cutoff frequency ² (MHz)	Inductance (mH) ³		Test frequency (kHz)	Irms ⁴ (mA)	DCR max ⁵ (Ohms)	Leakage inductance max (μH)
			nom	min				
DFT7160-513SL_	3.97 @ 69 MHz	25	0.051	0.0357	100	700	0.300	1.69
DFT7160-513BL_	4.00 @ 55 MHz	570	0.051	0.0357	100	700	0.300	0.091
DFT7160-474BL_	2.42 @ 7.5 MHz	410	0.47	0.329	100	1000	0.210	0.085
DFT7160-105BL_	3.12 @ 6.0 MHz	420	1.0	0.700	10	900	0.210	0.104
DFT7160-225BL_	6.66 @ 4.7 MHz	670	2.2	1.54	10	600	0.500	0.156
DFT7160-475BL_	13.47 @ 3.0 MHz	440	4.7	3.29	10	500	0.600	0.260

1. When ordering, please specify **packaging** code:

DFT7160-475BLC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

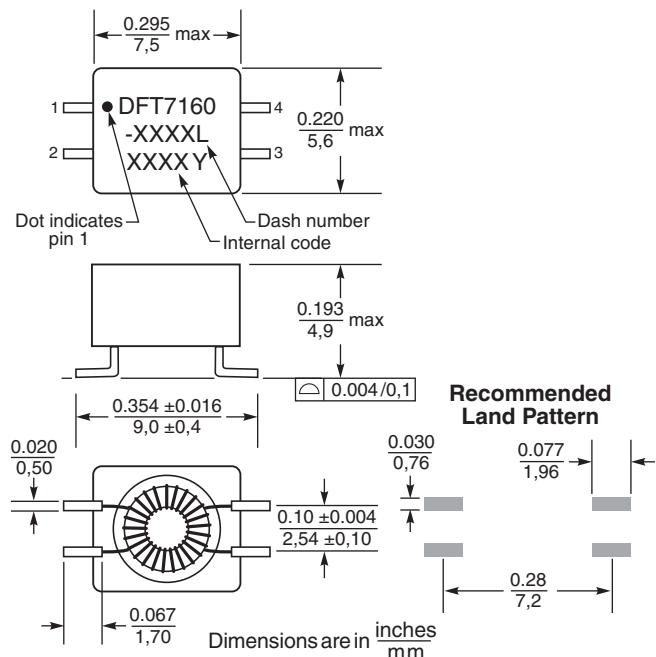
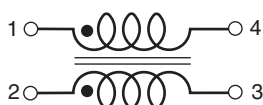
2. Frequency at which the differential mode attenuation equals 3 dB

3. Inductance is for each winding, measured at test frequency using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture

4. Current that causes a 20°C temperature rise from 25°C ambient.

5. DCR is specified per winding.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

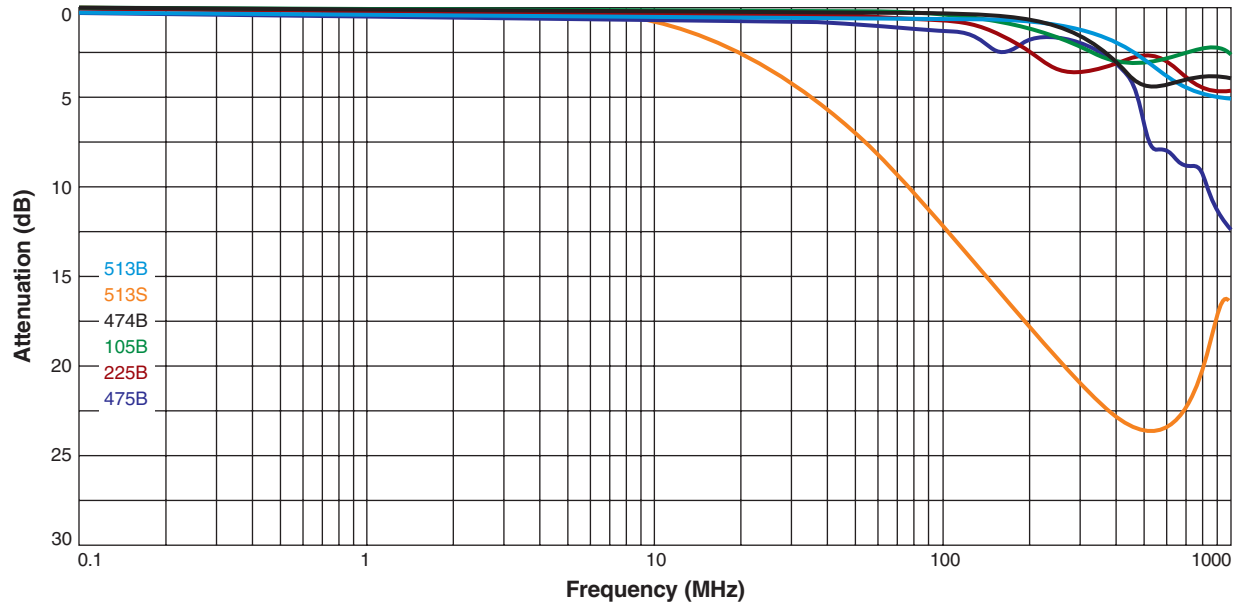




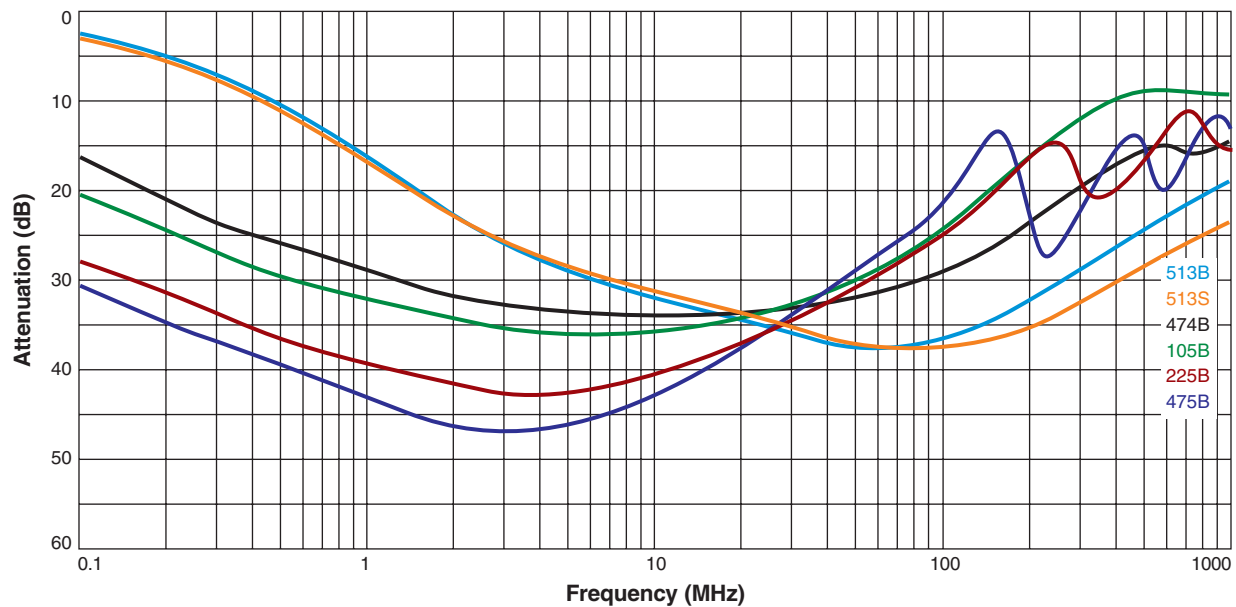
SMT Data Line EMI Filters – DFT7160

Attenuation vs Frequency

Differential Mode



Common Mode



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1273-2 09/12/17

© Coilcraft Inc. 2017

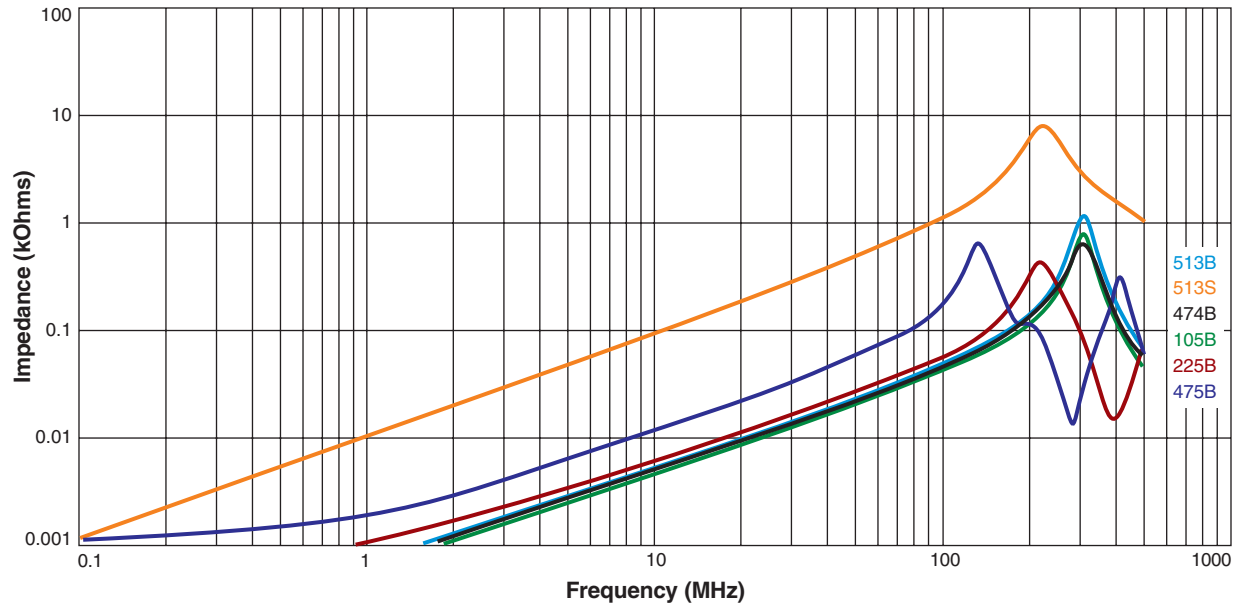
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



SMT Data Line EMI Filters – DFT7160

Impedance vs Frequency

Differential Mode



Common Mode

