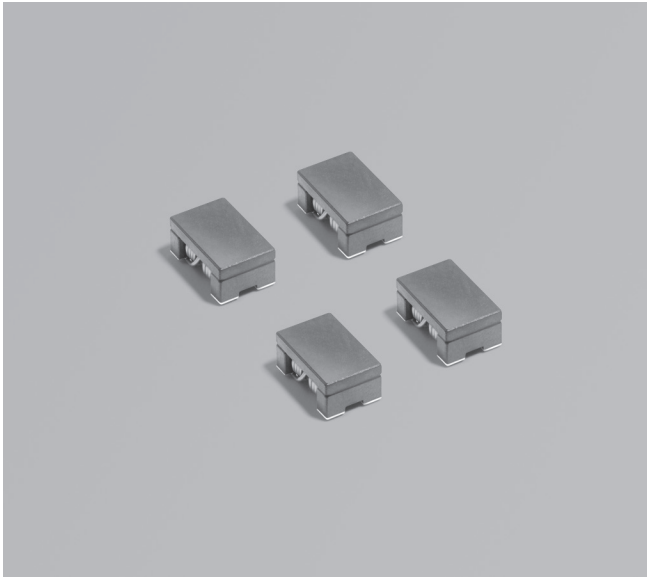


NEW!

Common Mode Chokes DFC7045



- Miniature, low-profile common mode choke; only 3.3 mm tall
- Smaller footprint and higher current capability than typical parts on the market
- Provides exceptional high-frequency common mode noise attenuation
- Designed and fabricated for systems mounted in harsh automotive conditions
- AEC-Q200 qualified

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations RoHS compliant tin over nickel over silver glass frit

Weight 0.53 – 0.54 g

Ambient temperature –40°C to +125°C with (15°C rise) Irms current.

Maximum part temperature +140°C (ambient + temp rise).

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)

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 typ (Ohms)	Inductance ±25% (µH) ²		DCR max (mOhms) ³		Isolation ⁴ (VDC / Vrms)	Leakage L max (µH) ⁵	Irms (A)		
		L1	L2	pri	sec			25°C ⁷	85°C ⁸	125°C ⁹
DFC7045-222RC	250 @ 100 MHz	2.2	2.2	10	10	1500 / 1060	0.20	9.1	7.9	4.7
DFC7045-372RC	450 @ 100 MHz	3.7	3.7	17	17	1500 / 1060	0.35	7.8	7.0	4.0
DFC7045-502RC	710 @ 100 MHz	5.0	5.0	21	21	1500 / 1060	0.44	6.7	6.0	3.5

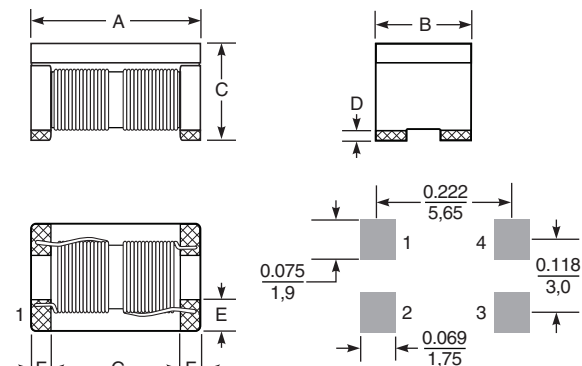
1. When ordering, please specify **packaging** code:

DFC7045-502RC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

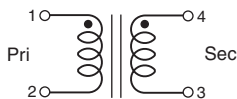
D = 13" machine-ready reel. EIA-481 embossed plastic tape (2200 parts per full reel). Factory order only, not stocked.

- Inductance is measured at 100 kHz, 0.1 Vrms, 0 ADC on an Agilent 4263B (or equivalent).
 - DCR is measured on a Keithley 580 Micro-ohmmeter (or equivalent).
 - 1500 VDC / 1060 Vrms, one minute isolation (hipot) measured between primary and secondary.
 - Leakage Inductance LL is measured at 100 kHz, 0.1 Vrms on an Agilent 4263B (or equivalent) with pins 3,4 shorted.
 - Current that causes a 40°C rise at 25°C.
 - Current that causes a 15°C rise at 125°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Recommended Land Pattern

A max	B max	C max	D min	E	F	G	
0.281	0.181	0.134	0.008	0.059	0.053	0.169	in
7,15	4,60	3,40	0,203	1,50	1,35	4,30	mm



Packaging 500/7" reel; 2200/13" reel; Plastic tape: 16 mm wide, 0.4 mm thick, 8 mm pocket spacing, 3.5 mm pocket depth



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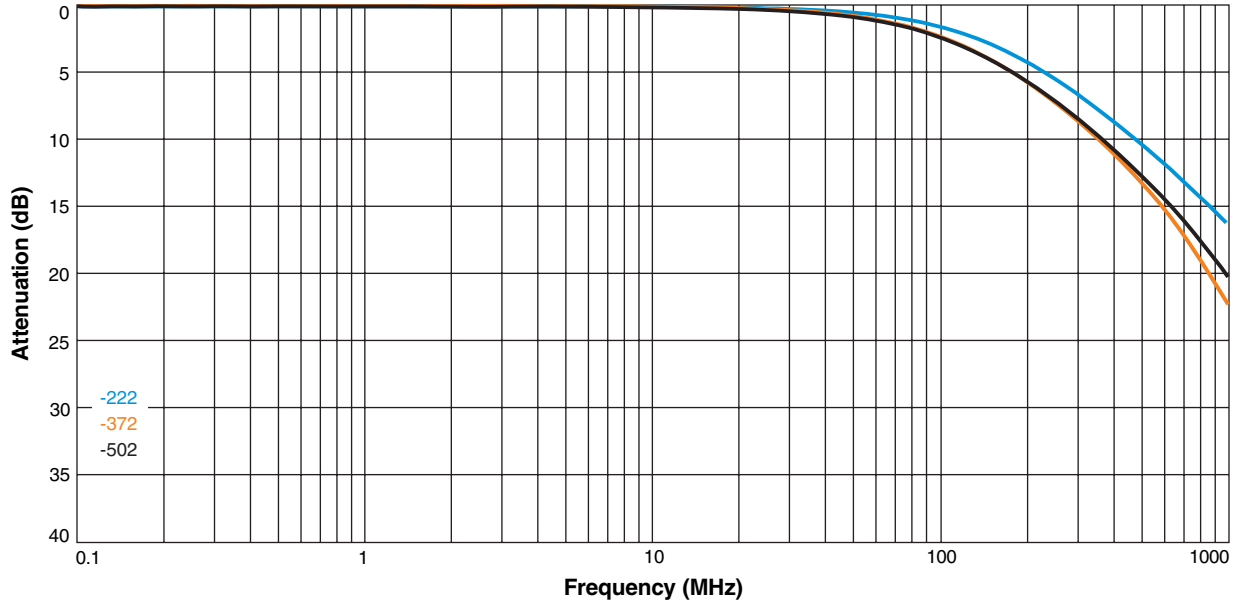
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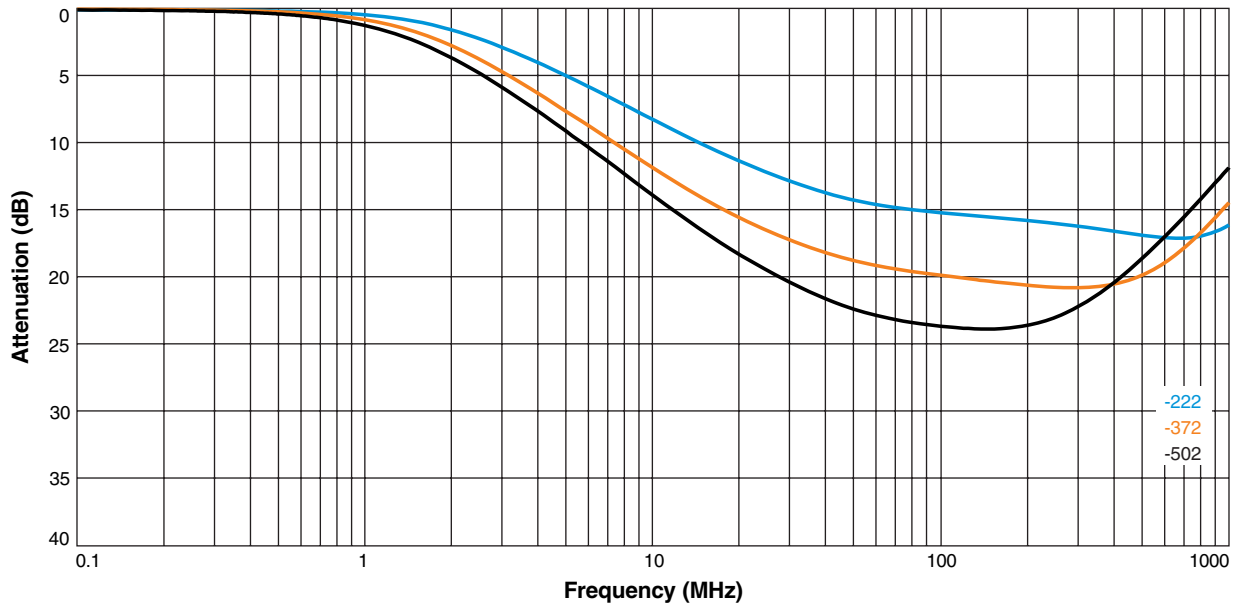
DFC7045 Common Mode Chokes

Attenuation vs Frequency

Differential Mode



Common Mode



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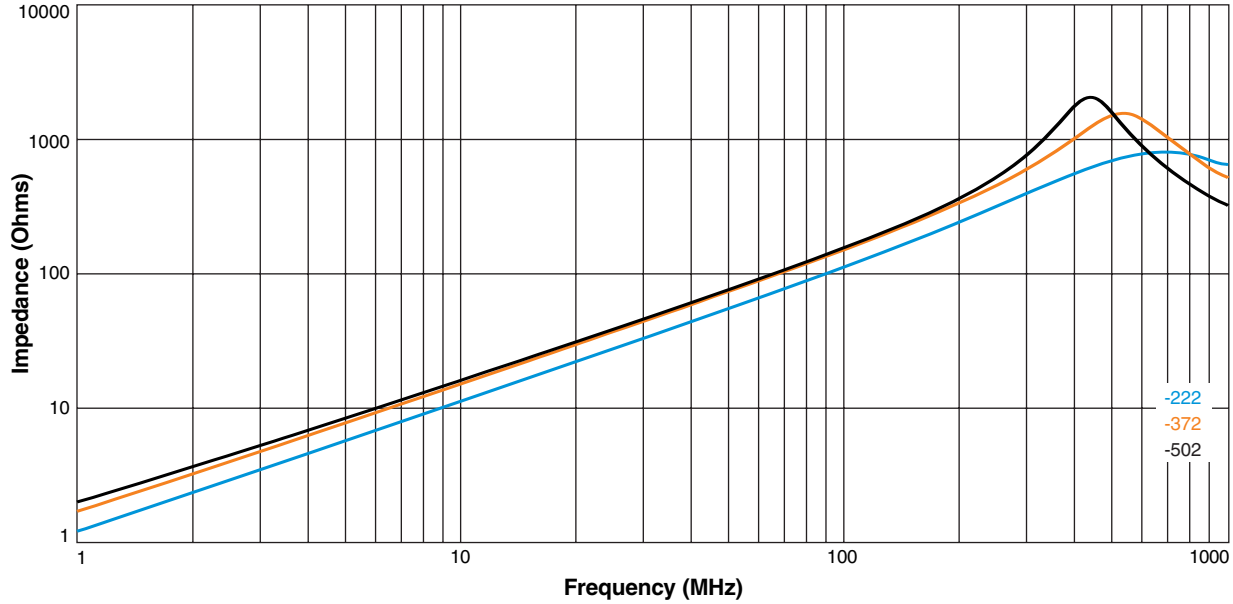
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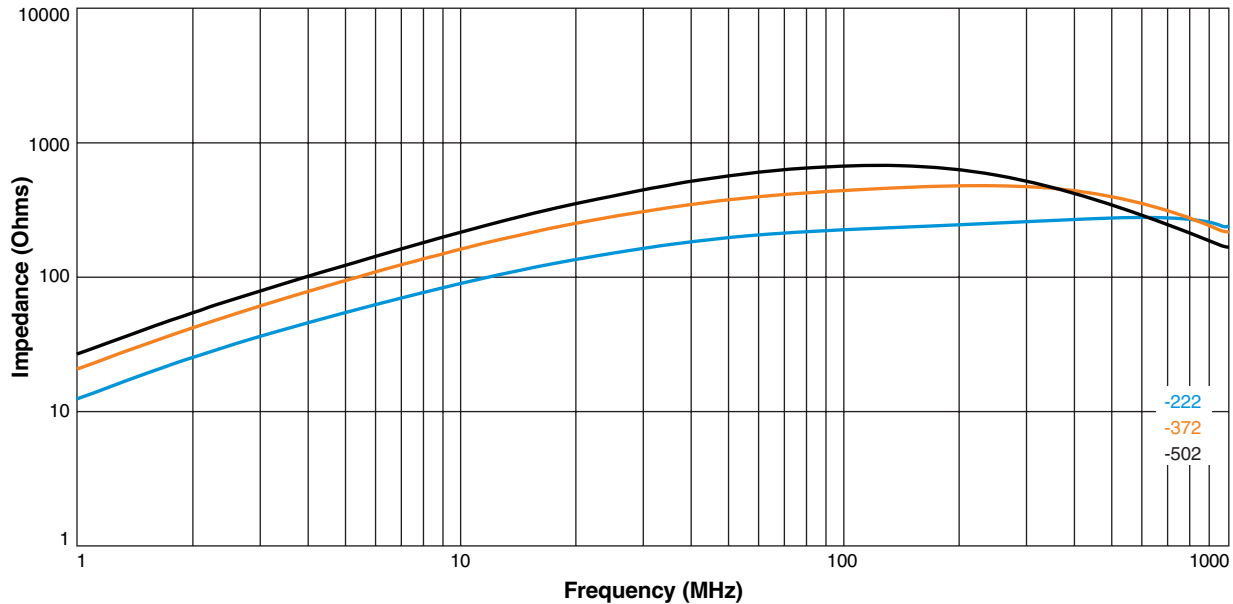
DFC7045 Common Mode Chokes

Impedance vs Frequency

Differential Mode



Common Mode



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