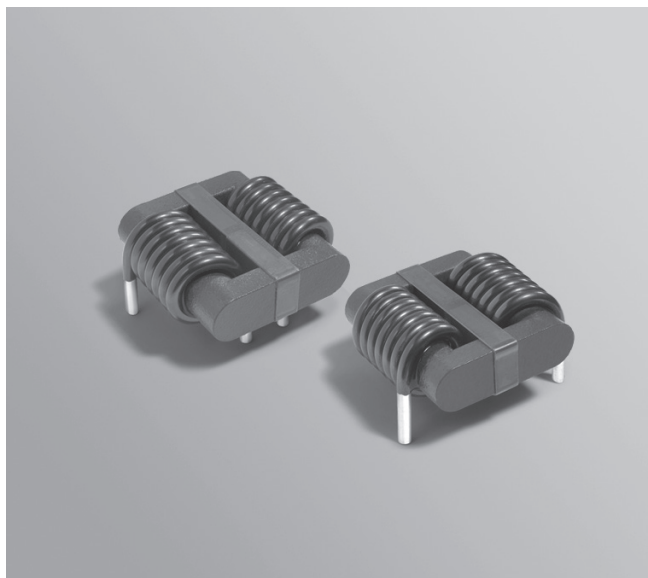


Combination Filter Chokes

Common and Differential Mode



- Combined common and differential mode filtering in a single component
- Provide differential filtering at higher frequencies (>1000 Ohms @ 50 MHz)
- 2000 Vrms, one minute isolation (hipot) between windings
- AEC-Q200 qualified

Core material Ferrite

Terminations RoHS compliant tin-silver (96.5/3.5) over copper

Weight PDMC-T124 21.53 g, PDMC-T454 16.25 g

Ambient temperature -40°C to +105°C with Irms current

Max part temperature +145°C (ambient + temp rise)

Storage temperature Component: -40°C to +145°C.

Tray packaging: -40°C to +80°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 25 per tray

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

Part number ¹	Common mode peak impedance (Ohms)	Inductance ² ±30% (μH)	DCR max ³ (mOhms)	Leakage inductance ⁴ max (μH)	Isolation ⁵ (Vrms)	Irms ⁶ (A)
PDMC-T124NL	815 @ 1.5 MHz	120	1.45	5.4	2000	20
PDMC-T454NL	3570 @ 1.5 MHz	450	8.2	22.2	2000	8.3

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

PDMC-T454NL

Termination L = RoHS compliant tin-silver (96.5/3.5) over copper

Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

2. Inductance shown for each winding, measured at 10 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4263B LCR meter or equivalent.

3. DCR is for each winding.

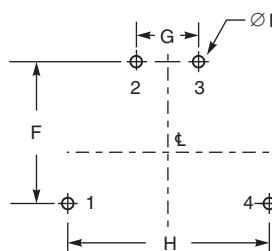
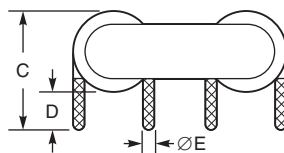
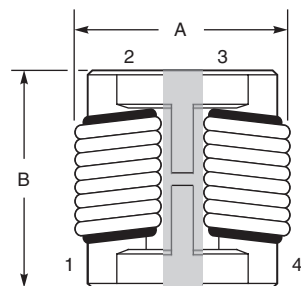
4. Leakage inductance is measured from pin 1 to pin 2 with pins 4 and 3 shorted.

5. 2000 Vrms, one minute isolation (hipot) between windings.

6. Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

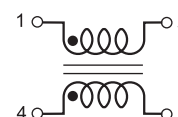
7. Electrical specifications at 25°C.

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



Recommended Land Pattern

Schematic

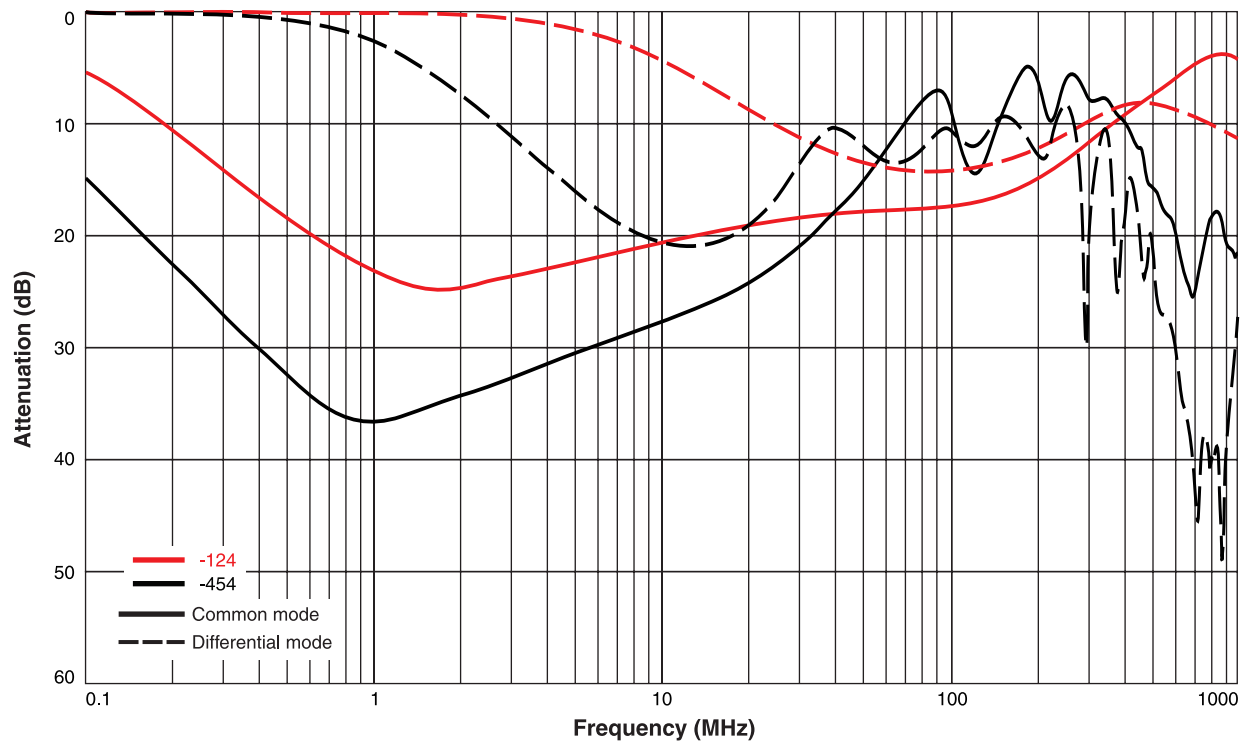


Part Code	A		B		C		D		E	F	G	H	I	Units
	nom	max	nom	max	nom	max	nom	max	nom	nom	nom	nom	nom	
T124	1.0	1.063	0.960	0.984	0.550	0.630	0.177	0.197	0.071	0.570	0.236	0.976	0.090	in
	25.40	27.00	24.38	25.00	14.00	16.00	4.50	5.00	1.80	14.50	6.00	24.80	2.30	mm
T454	1.0	1.043	0.960	0.984	0.550	0.630	0.177	0.197	0.035	0.570	0.276	0.937	0.051	in
	25.40	26.50	24.38	25.00	14.00	16.00	4.50	5.00	0.900	14.50	7.00	23.80	1.30	mm



Combination Line Chokes – Common and Differential Mode

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

