

**FEATURES**

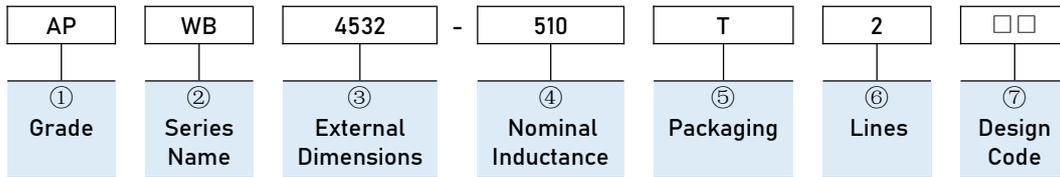
- Winding type realizes small size and low profile.
- Prevention of common mode noise at high frequency.
- Excellent solderability.
- Operating Temperature: -40°C~+85°C .
- RoHS, Halogen Free and REACH Compliance.



**APPLICATIONS**

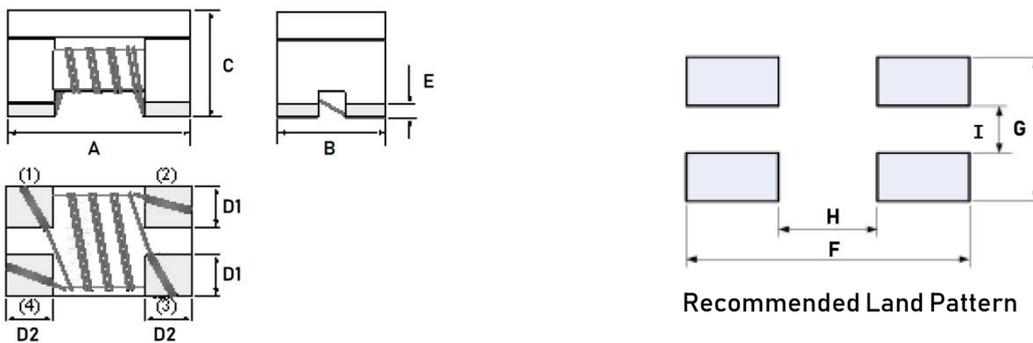
- Multimedia system.
- Facsimiles, Modems, Household Appliances, etc.

**PART NUMBERING**



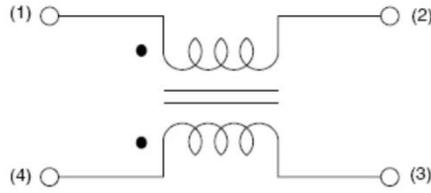
① Grade		② Series Name		③ External Dimensions	
AP	Grade Code	WB	Winding Type Common Mode Choke Coil	3225 [1210] 4532[1812]	
⑤ Packaging		④ Nominal Inductance		⑥ Number of Lines	
T	Tape & Reel	Code (example)	Nominal Inductance [μH]	2	
		110	11		
		510	51		
		201	200		
		⑦ Design Code			
		□□	Standard product is blank		

**DIMENSIONS & RECOMMENDED LAND PATTERN**



Series	Dimensions						Recommended Land Pattern				Unit: mm
	A	B	C	E	D1 Typ.	D2 Typ.	F Typ.	G Typ.	I Typ.	H Typ.	
APWB3225	3.2±0.2	2.5±0.2	2.1±0.2	0.2±0.1	0.8	0.9	4	2.5	0.9	2.2	
APWB4532	4.5±0.2	3.2±0.2	2.8±0.2	0.2±0.1	1	1.2	5.10	3.6	1.05	3.4	

**EQUIVALENT CIRCUIT**



**ELECTRICAL CHARACTERISTICS**

● APWB3225 Series

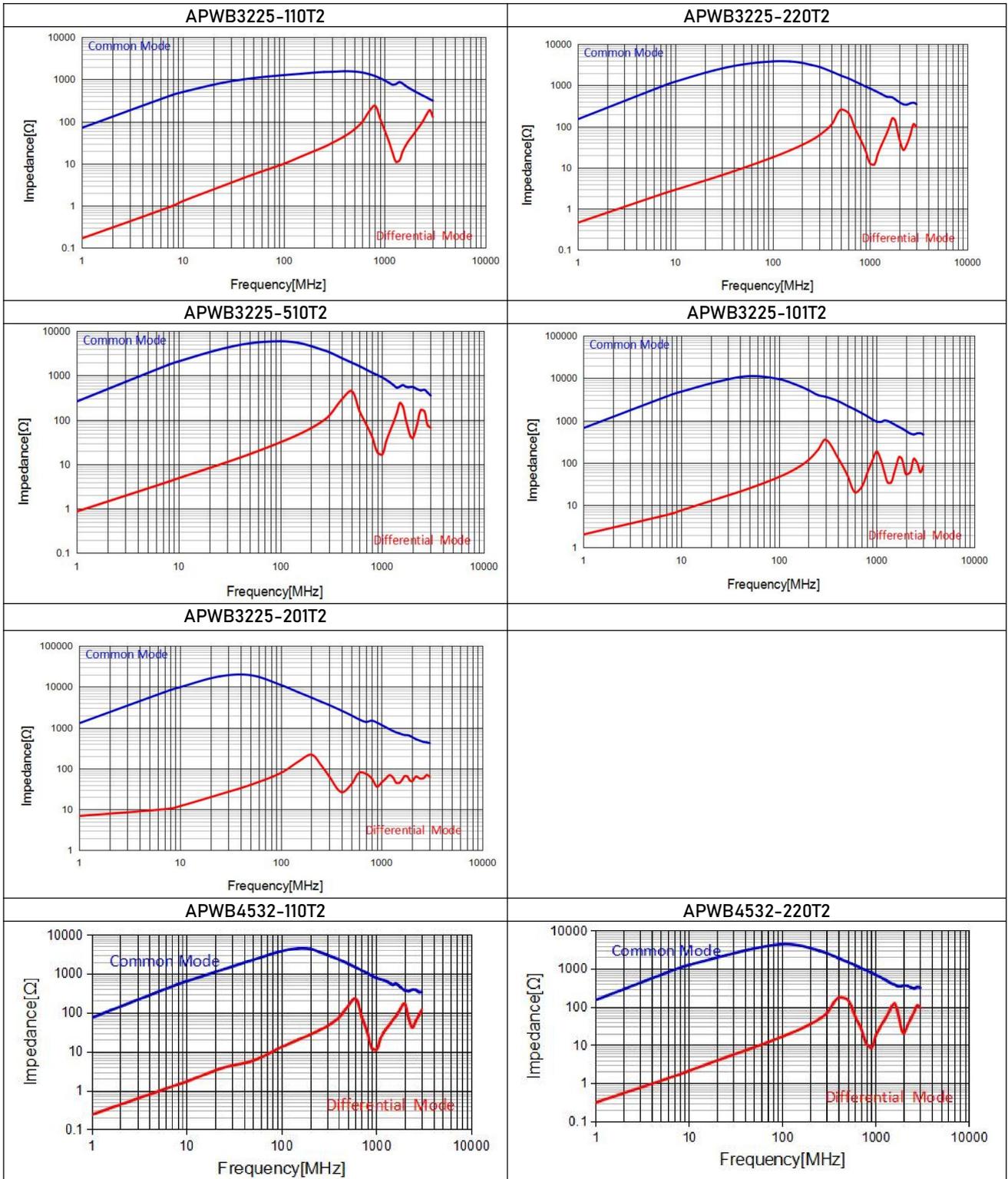
Part Number	Inductance	Heat Rating Current Max.	Rated Voltage	Test Freq.	DC Resistance Max.	Insulation Resistance Min.
Units	μH	mA	Volts	KHz/V	Ω	MΩ
Symbol	L(+50%/-30%)	I <sub>rms</sub>	VDC	Freq.	DCR	IR
APWB3225-110T2	11	400	80	100/0.1	0.4	10
APWB3225-220T2	22	300	80	100/0.1	0.5	10
APWB3225-510T2	51	200	80	100/0.1	0.7	10
APWB3225-101T2	100	150	80	100/0.1	1.5	10
APWB3225-201T2	200	70	80	100/0.1	4.8	10

● APWB4532 Series

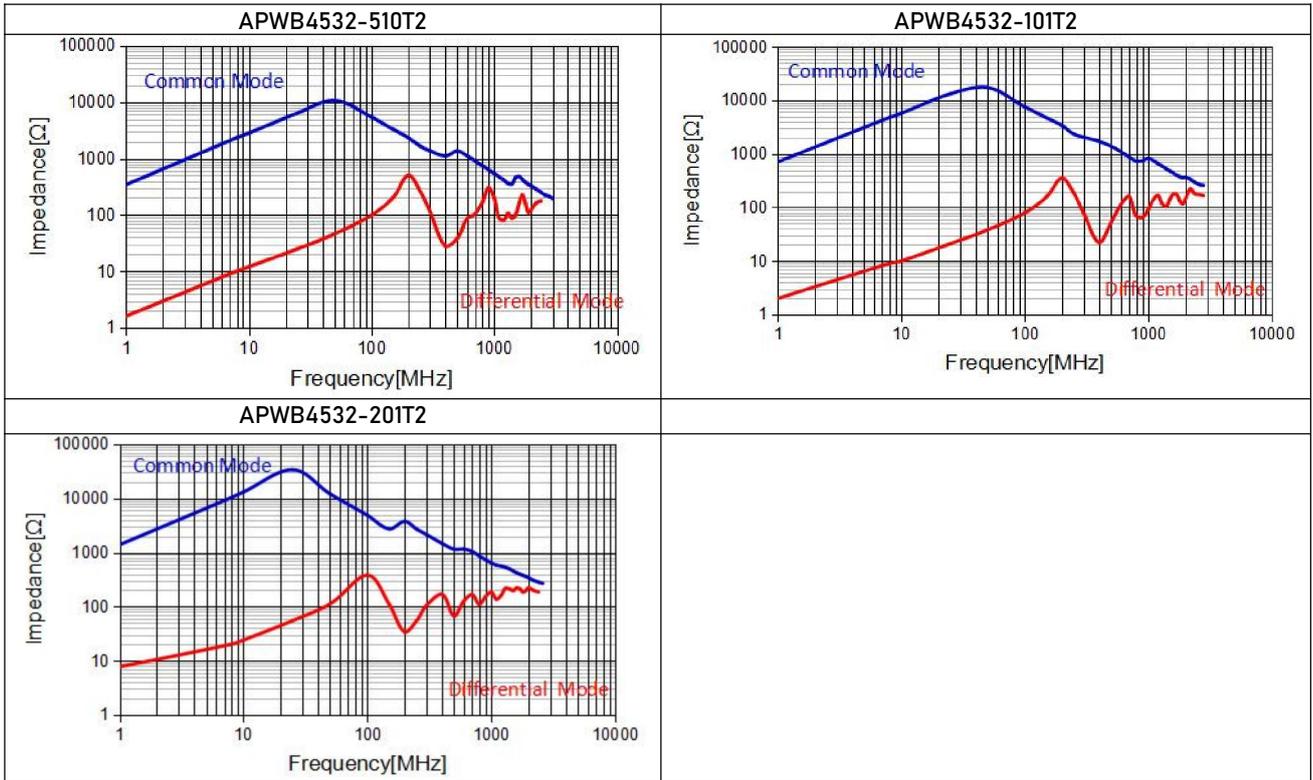
Part Number	Inductance	Heat Rating Current Max.	Rated Voltage	Test Freq.	DC Resistance Max.	Insulation Resistance Min.
Units	μH	mA	Volts	KHz/V	Ω	MΩ
Symbol	L(+50%/-30%)	I <sub>rms</sub>	VDC	Freq.	DCR	IR
APWB4532-110T2	11	360	50	100/0.1	0.6	10
APWB4532-220T2	22	310	50	100/0.1	1.0	10
APWB4532-510T2	51	230	50	100/0.1	1.0	10
APWB4532-101T2	100	200	50	100/0.1	2.0	10
APWB4532-201T2	200	100	50	100/0.1	4.5	10

- Rating DC current: Temperature rise(ΔT) is 40 °C approximately at I<sub>rms</sub>.
- Storage temp.: -10 °C ~ +40 °C R.H.: 65% Max.
- Moisture sensitivity level (MSL) : 2

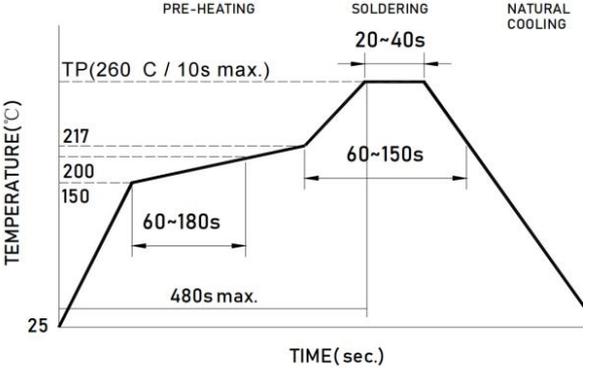
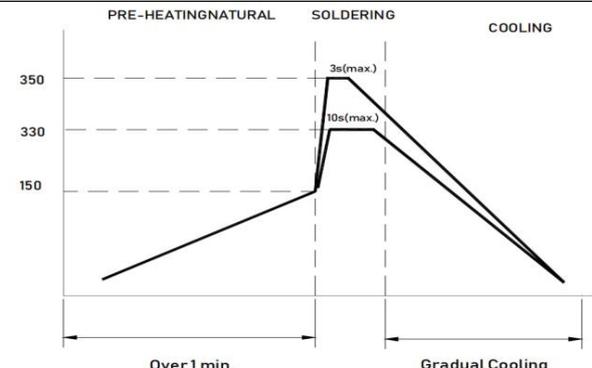
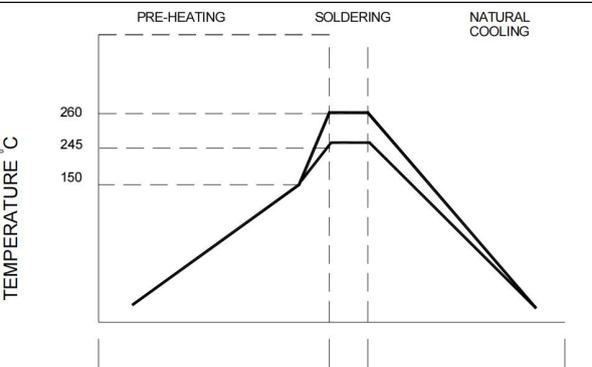
ELECTRICAL CHARACTERISTIC CURVE



ELECTRICAL CHARACTERISTIC CURVE



**SOLDERING CONDITIONS**

<p><b>Re-flow Soldering</b></p> <ul style="list-style-type: none"> <li>● Preheat circuit and products to 150 °C</li> <li>● 260 °C tip temperature (max)</li> <li>● Reflow times: no more than 2 times</li> <li>● Solder paste thickness: the best 0.08mm is, but max is 0.1mm</li> </ul>	 <p>The graph shows a temperature profile for re-flow soldering. The y-axis is TEMPERATURE (°C) with values 25, 150, 200, 217, and 260. The x-axis is TIME (sec.) with various intervals: 480s max. for the initial ramp to 150°C, 60~180s for the ramp to 200°C, 60~150s for the dwell at 200°C, 20~40s for the dwell at 260°C (TP), and 60~150s for the cooling phase. The profile is divided into PRE-HEATING, SOLDERING, and NATURAL COOLING stages.</p>
<p><b>Hand Soldering</b></p> <ul style="list-style-type: none"> <li>● Use a 20 watt soldering iron with tip diameter of 1.0mm.</li> <li>● Limit soldering time to 3 sec.</li> </ul>	 <p>The graph shows a temperature profile for hand soldering. The y-axis is TEMPERATURE (°C) with values 150, 330, and 350. The x-axis is TIME (sec.) with intervals: Over 1 min. for the pre-heating ramp, 3s(max) for the soldering dwell at 350°C, 10s(max) for the cooling dwell at 330°C, and Gradual Cooling for the final phase. The profile is divided into PRE-HEATING, SOLDERING, and COOLING stages.</p>
<p><b>Wave Soldering</b></p> <ul style="list-style-type: none"> <li>● Never contact the ceramic with the iron tip.</li> <li>● 1.0mm tip diameter (max).</li> </ul>	 <p>The graph shows a temperature profile for wave soldering. The y-axis is TEMPERATURE °C with values 150, 245, and 260. The x-axis is TIME (sec.) with intervals: Over 2 min. for the pre-heating ramp, Within 10 sec. for the soldering dwell at 260°C, and Gradual Cooling for the final phase. The profile is divided into PRE-HEATING, SOLDERING, and NATURAL COOLING stages.</p>

**Note:**  
**This series product is not applies in automotive or related products. Otherwise, we will shall not bear than the resulting all the problems of quality and responsibility.**

Please be sure to request approval specifications that provide further details of the products. Kindly not that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.