

FEATURES 特征

- Chip common mode filter for large current applications.
适用大电流的片式共模滤波器
- Excellent impedance characteristics, making it great for suppressing common mode noise.
高阻抗特性，能高效抑制共模噪音效果
- Compact size high performance and low cost.
体积小、性能高、成本低
- Operating Temp : -40°C~+125°C(Including self heating)
工作温度范围:-40°C~+125°C(包括自身温度上升)



APPLICATIONS 用途

- Current compensated choke for data and signal lines.
数据线和信号线的电流补偿扼流圈
- Common mode noise suppression of various electronic products, multimedia equipment, power cords.
各种电子产品、多媒体设备,电源线的共模噪音抑制

PART NUMBERING 产品型号

PRIM
4532
-
101
HS

①
②
③
④

① Series Name	
PRIM	Wire Wound Chip Common Mode Choke

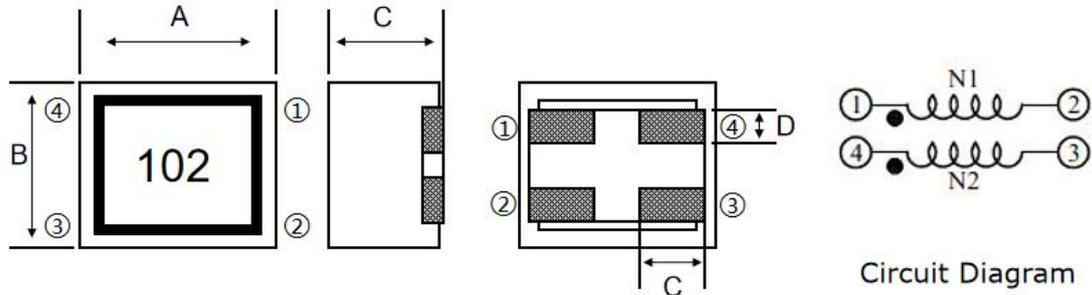
② External Dimensions [LxWxT mm]	
4532	5.0x4.5x2.8
5020	4.8x5.0x2.5
5040	4.8x5.0x4.5

③ Nominal Impedance	
Code (example)	Nominal Impedance [Ω]
101	100
501	500
102	1000

④ Internal Code
HS

DIMENSIONS & RECOMMENDED LAND PATTERN 尺寸及推荐焊盘

- PRIM4532



Unit: mm

Dimensions					
Series	A	B	C	D	E
PRIM4532	5.0±0.3	4.5±0.3	2.8±0.3	1.0	1.65

ELECTRICAL CHARACTERISTICS 特性规格表

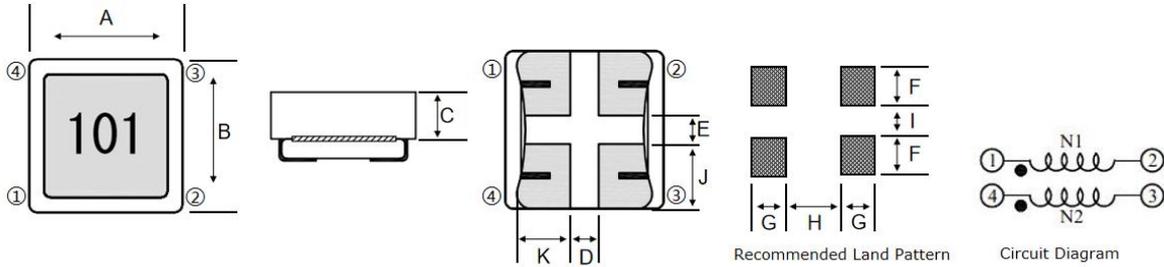
- PRIM4532 Series

Part Number	Inductance @100MHz,0.5V	DC Resistance	Rated Current	Rated Voltage	Insulation Resistance	Marking
	Typ.	Typ.	Max.	Max.	Min.	
Unit	Ω	mΩ	A	V	MΩ	-
Symbol	Z	DCR	Ir	Vdc	IR	-
PRIM4532-101HS	100	9±40%	6	50	9-11	101
PRIM4532-251HS	250	14±40%	5	50	9-11	251
PRIM4532-501HS	500	19±40%	2	50	9-11	501
PRIM4532-102HS	1000	24±40%	2	50	9-11	102
PRIM4532-142HS	1400	40±40%	2	50	9-11	142

- Rated Current: Temp.rise 40°C Typ.
- Storage Temperature: 15°C up to 25°C, 65% RH max.
- The temperature of electrical characteristic test is 25°C indoor temperature.

DIMENSIONS & RECOMMENDED LAND PATTERN 尺寸及推荐焊盘

● PRIM5020-PRIM5040



Unit: mm

Series	Dimensions						Recommended Land Pattern				
	A	B	C	D	E	F	G	H	I	J	K
			Max.	Typ.	±0.2	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
PRIM5020	4.8±0.2	5.0±0.2	2.5	1.1	1.5	2.3	1.6	0.8	1.0	1.9	1.4
PRIM5040	4.8±0.2	5.0±0.2	4.5	0.8	1.0	2.3	1.6	0.8	1.0	1.9	1.4

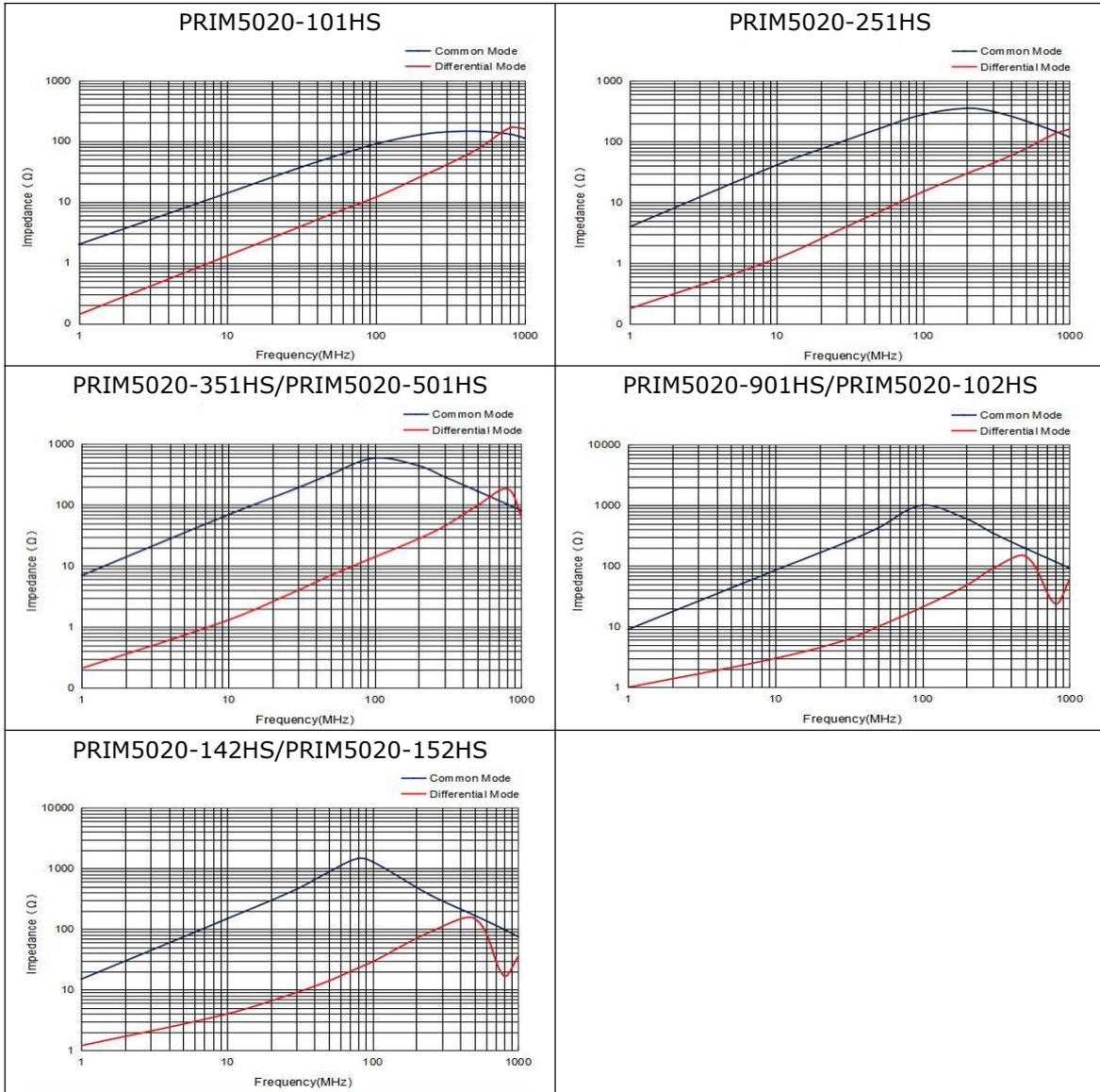
ELECTRICAL CHARACTERISTICS 特性规格表

● PBCM50xx Series

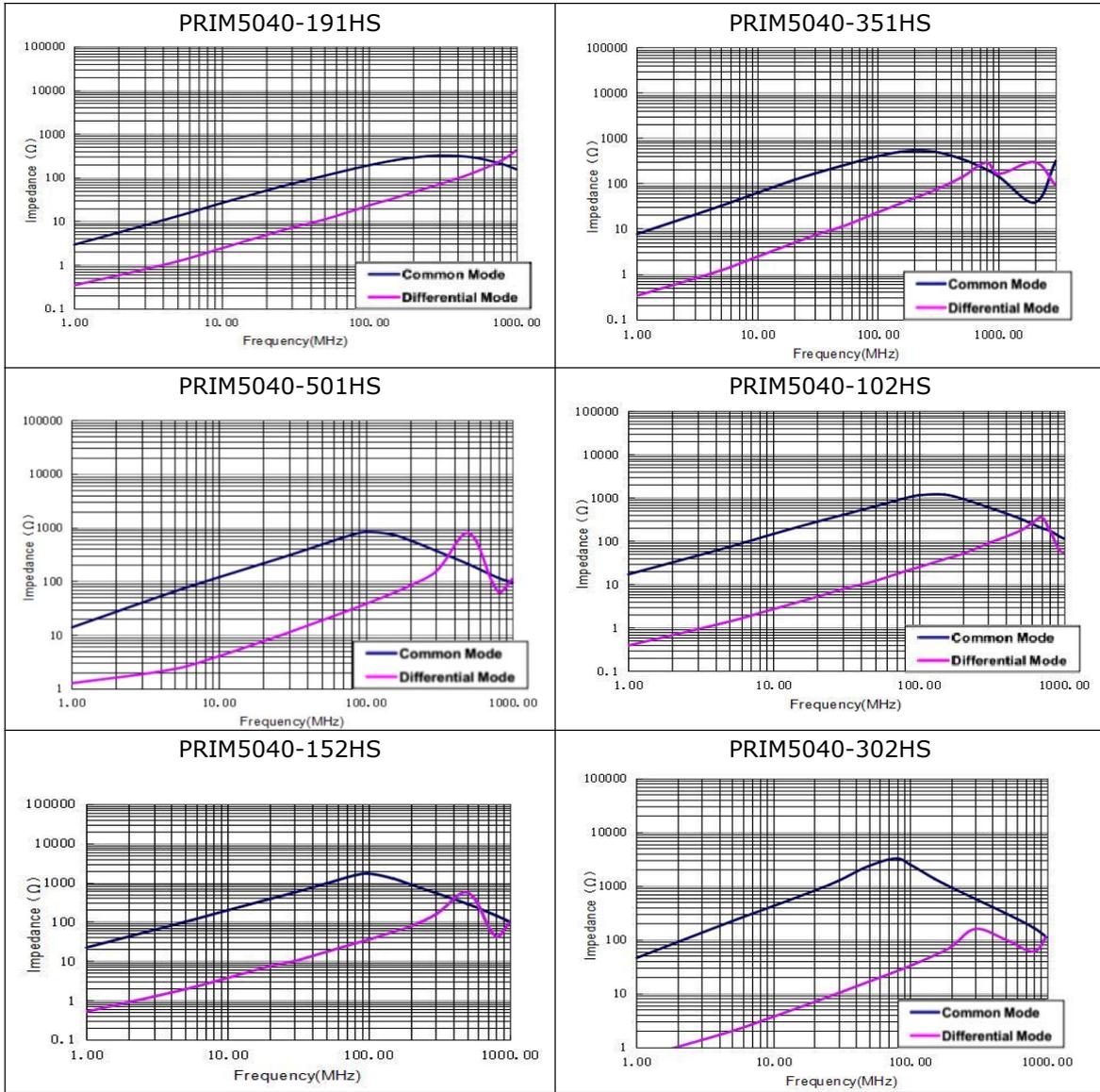
Part Number	Inductance @100MHz,0.5V	DC Resistance	Rated Current	Rated Voltage	Insulation Resistance	Marking
	Typ.	Max.	Max.	Max.	Min.	
Unit	Ω	mΩ	A	V	MΩ	-
Symbol	Z	DCR	Ir	Vdc	IR	-
PRIM5020-101HS	100	13	5.5	50	10	101
PRIM5020-251HS	250	20	4.5	50	10	251
PRIM5020-351HS	350	20	3.5	50	10	351
PRIM5020-501HS	500	27	3.5	50	10	501
PRIM5020-901HS	900	34	1.6	50	10	901
PRIM5020-102HS	1000	34	1.6	50	10	102
PRIM5020-142HS	1400	56	1.2	50	10	142
PRIM5020-152HS	1500	56	1.2	50	10	152
PRIM5040-191HS	190	20	5	50	10	191
PRIM5040-351HS	350	40	2	50	10	351
PRIM5040-501HS	500	50	1.5	50	10	501
PRIM5040-102HS	1000	60	1.3	50	10	102
PRIM5040-152HS	1500	100	1	50	10	152
PRIM5040-302HS	3000	200	0.5	50	10	302

- All data is tested based on 25 ambient temperature.
- Rated current the value of DC current when the temperature rise is $\Delta T40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
- Storage Temperature: 15°C up to 25°C , 65% RH max.

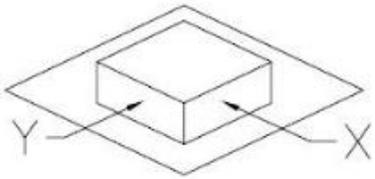
CHARACTERISTICS(REFERENCE) 特征曲线



CHARACTERISTICS(REFERENCE) 特征曲线

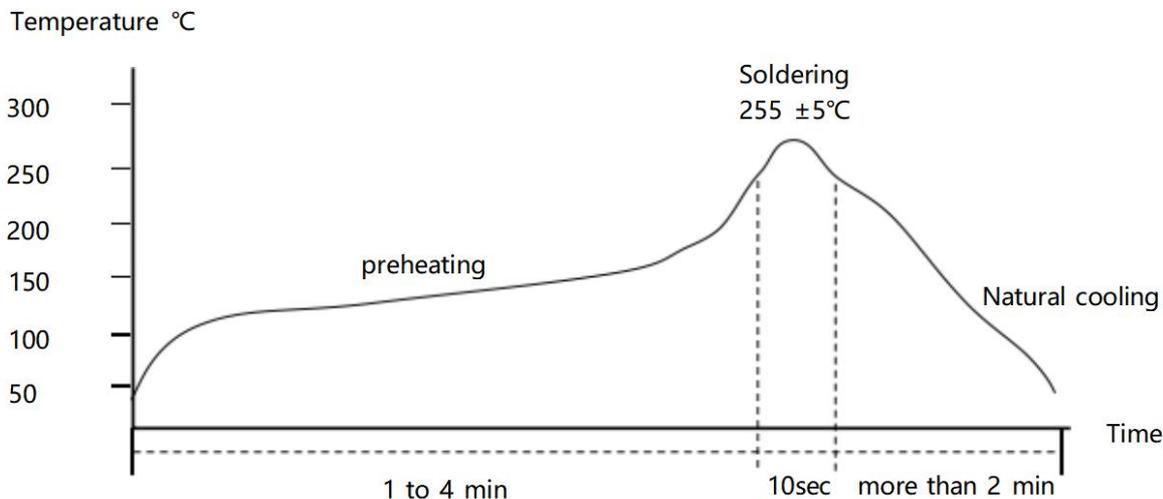


RELIABILITY TEST 可靠性测试

Operating Temperature	- 40 to +125 °C (Contain Heating coil)
Appearance Inspection	No external defects by visual inspection
Terminal Strength	 <p>After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right)</p>
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 10 MΩ at 50V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 1mA for 3S between wire and core
Temperature characteristics	Inductance coefficient (0~2,000) × 10 / °C (- 40~ + 125 °C)
Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition

A test is made under the above mentioned condition , and it is kept for 2 hours in the normal

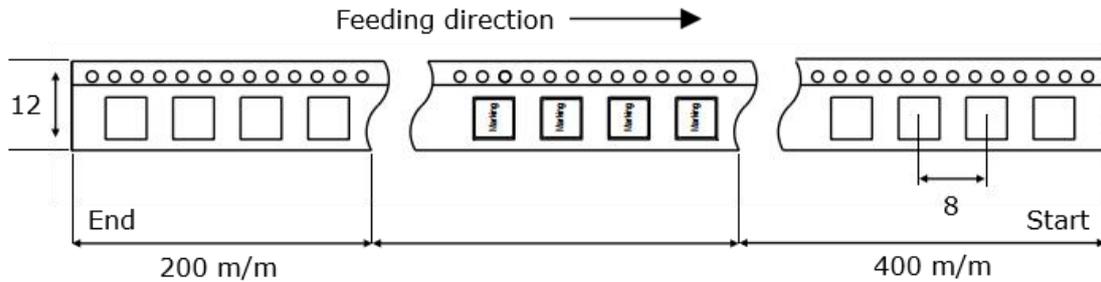
IR Reflow profile



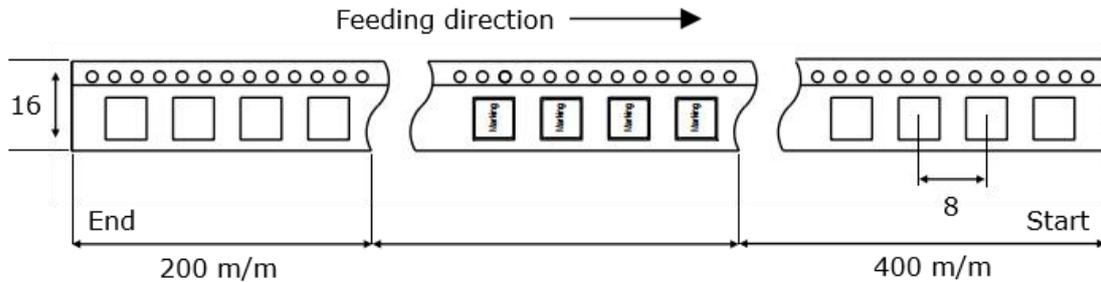
Temperature and humidity . After that , no mechanical and electrical defect should be found .

PACKING 包装

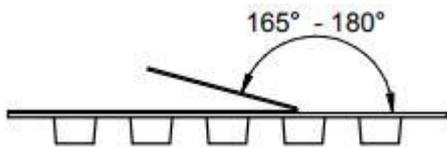
- Dimension of plastic taping: (Unit: mm)
The following dimensions are related to the actual fit of the machine, for reference only.
- PRIM4532/PRIM5020 Series



- PRIM5040 Series



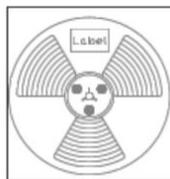
- Transparent carrier and cover tape.



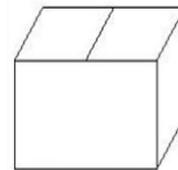
P/N	Tapewidth	Distance	Pull-of force
PRIM4532	12mm	8mm	10~120g
PRIM5020	12mm	8mm	10~120g
PRIM5040	16mm	12mm	10~120g



Reel



Inner Carton Quantity



Out Carton Quantity

Product Series	Reel	Inner Carton Quantity	Out Carton Quantity
PRIM4532	500PCS	3500PCS	21000PCS
PRIM5020	2500PCS	7500PCS	22500PCS
PRIM5040	1000PCS	3000PCS	9000PCS

■ SAFETY REMINDERS 注意事项

SAFETY REMINDERS

- 1. When the APV's products are used in occasions other than general electronic equipment, such as vehicle mounted, medical equipment, military, aerospace, etc., please be sure to contact the company's business department. In case of machine failure caused by exceeding the recommended use range of the company's products, the company will not bear relevant responsibilities
- 2. When the company's products are used outside the general electronic equipment, such as vehicle mounted, medical, military, aviation, aerospace and other environments, please contact the company's business department and put forward a request. Otherwise, the company will not bear any relevant responsibility for the machine failure caused by the use beyond the scope recommended by the company
- 3. Please pay attention to the storage conditions that temperature: below 15-25°C and humidity: 65% RH Max. If product is preserved for more than 6 months, the solderability of their terminals may be deteriorated..