



**FEATURES**

- ◆ Internal silver printed layers and magnetic shielded structures to minimize crosstalk
- ◆ Monolithic structure for excellent reliability
- ◆ Smaller DC resistance and larger allowable current than PZ series
- ◆ Can be used in a wide range of frequency to sUPBpress EMI

**APPLICATIONS**

- ◆ Noise sUPBpression for power lines or large current signal lines of electric equipments, Such as communication equipments, computers,A/V equipments, auto electronics.

**PRODUCT IDENTIFICATION**

**HPCB** = **FE** **E** **1608** **T** **221** **2R2** **F** **XX**  
 A B C D H F G H I

A

Type	
HPCB	Chip Ferrite Bead for Ultra Large Current

B

FE	Material Code
F=ferrite	G, D, E, U

C

Feature Code	
E	Extra Current

D

External Dimensions (L×W) (mm)	
1005 [0402]	1.0x0.5
1608 [0603]	1.65x0.8
2012 [0805]	2.0x1.25

E

Packing	
T	Tape & Reel

F

Nominal Impedance	
Example	Nominal Value
300	30Ω
221	220Ω
102	1000Ω

G

Rated Current	
1R5	1.5A
2R2	2.2A

H

Hazardous Substance Free Products
F

I

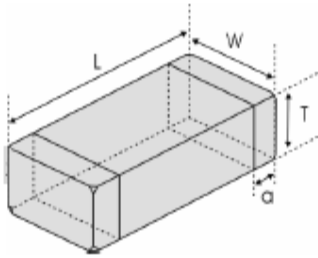
Internal Code
XX

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**SHAPE AND DIMENSIONS**

Unit: mm [inch]



Type	L	W	T	a
HPCB-1005 [0402]	1.0±0.15 [.039±006]	0.5±0.15 [.020±006]	0.5±0.15 [.020±006]	0.25±0.1 [.010±004]
HPCB-1608 [0603]	1.65±0.15 [.065±006]	0.8±0.15 [.031±006]	0.8±0.15 [.031±006]	0.3±0.2 [.012±008]
HPCB-2012 [0805]	2.0 (+0.3, -0.1) [.079 (+.012, -.004)]	1.25±0.2 [.049±008]	0.85±0.2 [.033±008]	0.5±0.3 [.020±012]

**SPECIFICATIONS**

**HPCB-UPB-1005 TYPE**

Part Number	Impedance	Z Test Freq.	Max. DC Resistance	Max. Rated Current	Thickness
Units	Ω	MHz	mΩ	mA	mm [inch]
Symbol	Z	Freq.	DCR	Ir	T
HPCB-FDE1005T100-2R0F	0~30	100	45	2000	0.5±0.15 [.020±.006]
HPCB-FDE1005T300-1R7F	30±25%	100	50	1700	
HPCB-FDE1005T300-2R2F	30±25%	100	35	2200	
HPCB-FDE1005T600-1R5F	60±25%	100	75	1500	
HPCB-FDE1005T800-1R5F	80±25%	100	70	1500	
HPCB-FDE1005T121-1R3F	120±25%	100	90	1300	
HPCB-FDE1005T221-R90F	220±25%	100	160	900	

**HPCB-1608 TYPE**

Part Number	Impedance	Z Test Freq.	Max. DC Resistance	Max. Rated Current	Thickness
Units	Ω	MHz	mΩ	mA	mm [inch]
Symbol	Z	Freq.	DCR	Ir	T
HPCB-FGE1608T300-1R8F	30±25%	100	60	1800	0.8±0.15 [.031±.006]
HPCB-FGE1608T600-1R2F	60±25%	100	100	1200	
HPCB-FGE1608T101-1R0F	100±25%	100	150	1000	
HPCB-FUE1608T220-6R0F	22±25%	100	10	6000	
HPCB-FUE1608T280-6R0F	28±25%	100	10	6000	
HPCB-FUE1608T700-4R0F	70±25%	100	20	4000	
HPCB-FUE1608T221-2R2F	220±25%	100	50	2200	

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**SPECIFICATIONS**

**HPCB-1608 TYPE**

Part Number	Impedance	Z Test Freq.	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	m $\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	Ir	T
HPCB-FUE1608T331-1R5F	330 $\pm$ 25%	100	70	1500	0.8 $\pm$ 0.15 [.031 $\pm$ .006]
HPCB-FUE1608T391-1R5F	390 $\pm$ 25%	100	120	1500	
HPCB-FUE1608T471-1R5F	470 $\pm$ 25%	100	120	1500	
HPCB-FUE1608T601-1R3F	600 $\pm$ 25%	100	150	1300	
HPCB-FEE1608T300-5R0F	30 $\pm$ 25%	100	10	5000	
HPCB-FEE1608T600-3R5F	60 $\pm$ 25%	100	20	3500	
HPCB-FEE1608T101-3R0F	100 $\pm$ 25%	100	30	3000	
HPCB-FEE1608T181-2R2F	180 $\pm$ 25%	100	50	2200	
HPCB-FEE1608T221-2R2F	220 $\pm$ 25%	100	50	2200	
HPCB-FEE1608T331-1R7F	330 $\pm$ 25%	100	80	1700	
HPCB-FEE1608T601-1R0F	600 $\pm$ 25%	100	150	1000	
HPCB-FEE1608T260-6R0F	26 $\pm$ 25%	100	7	6000	

**HPCB-2012 TYPE**

Part Number	Impedance	Z Test Freq.	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	m $\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	Ir	T
HPCB-FDE2012T220-6R0F	22 $\pm$ 25%	100	10	6000	0.85 $\pm$ 0.2 [.033 $\pm$ .008]
HPCB-FDE2012T800-4R0F	80 $\pm$ 25%	100	20	4000	
HPCB-FUE2012T220-6R0F	22 $\pm$ 25%	100	10	6000	
HPCB-FUE2012T300-6R0F	30 $\pm$ 25%	100	10	6000	
HPCB-FUE2012T600-4R0F	60 $\pm$ 25%	100	20	4000	
HPCB-FUE2012T221-3R0F	220 $\pm$ 25%	100	40	3000	
HPCB-FEE2012T300-6R0F	30 $\pm$ 25%	100	10	6000	
HPCB-FEE2012T121-4R0F	120 $\pm$ 25%	100	20	4000	
HPCB-FEE2012T221-3R0F	220 $\pm$ 25%	100	40	3000	
HPCB-FEE2012T331-2R5F	330 $\pm$ 25%	100	50	2500	
HPCB-FEE2012T601-2R0F	600 $\pm$ 25%	100	90	2000	
HPCB-FEE2012T102-1R5F	1000 $\pm$ 25%	100	120	1500	

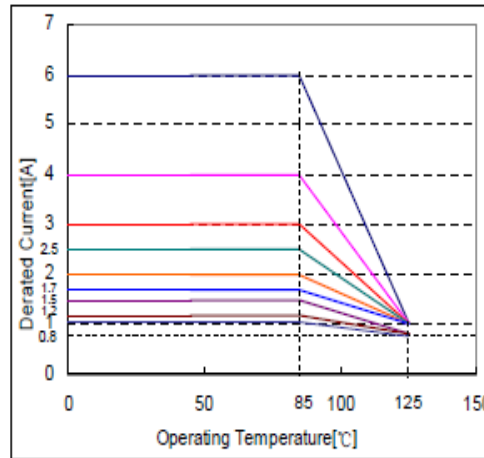
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## TYPICAL ELECTRICAL CHARACTERISTICS

### Rated Current

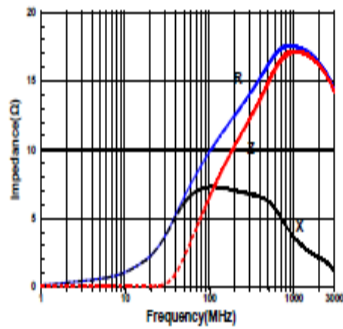
When operating temperatures exceed +85°C, derating of current is necessary for chip Ferrite beads for which rated current is 1000mA and over. Please apply the derating curve shown in chart according to the operating temperature.



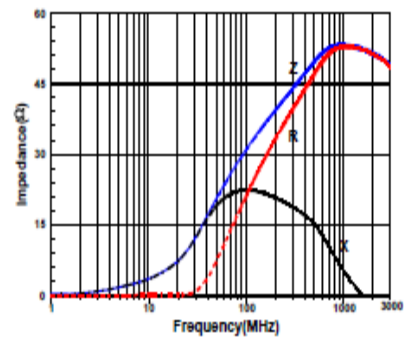
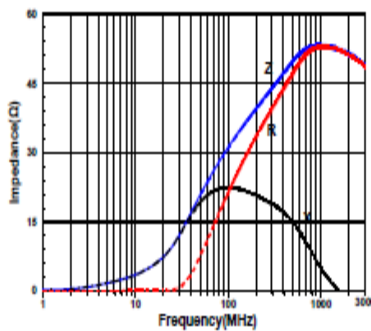
## DETAIL ELECTRICAL CHARACTERISTICS

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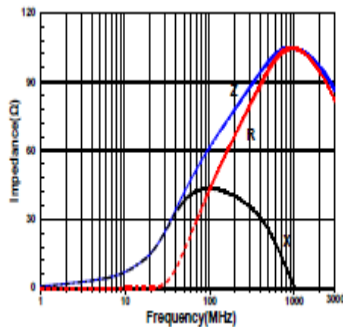
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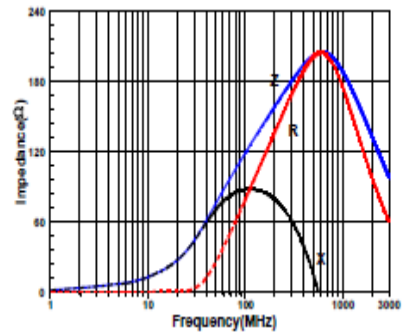
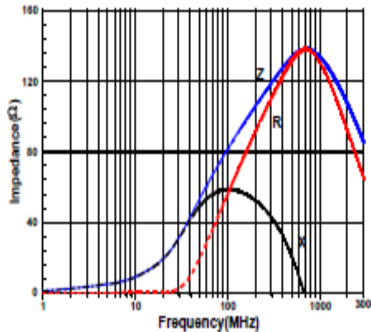
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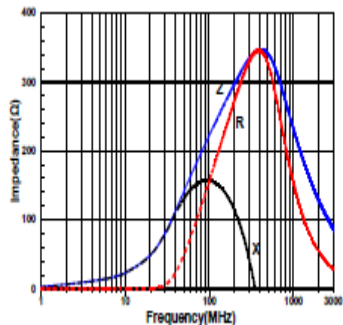
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HPCB-FDE1005T800-1R5 HPCB-FDE1005T121-1R3



HPCB-FDE1005T221-R90



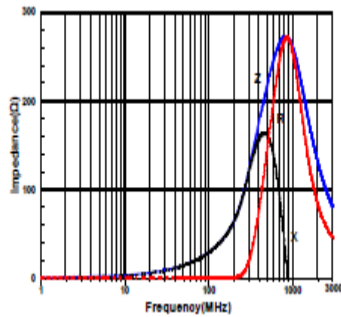
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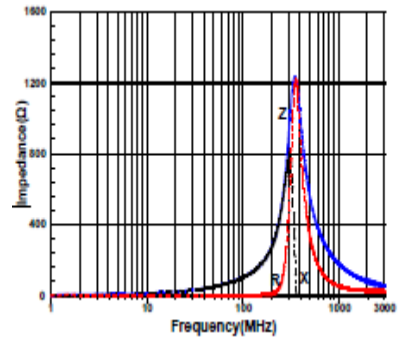
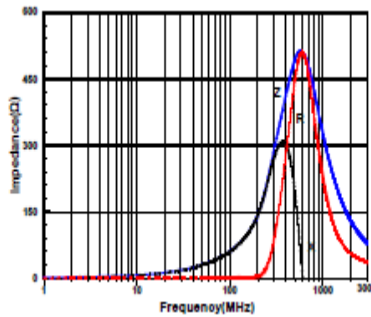
## DETAIL ELECTRICAL CHARACTERISTICS

### HPCB-1608 TYPE

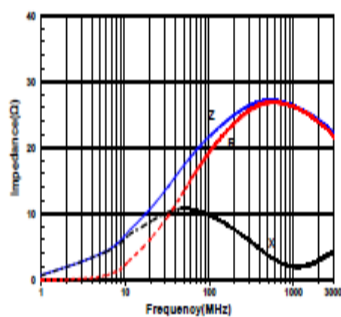
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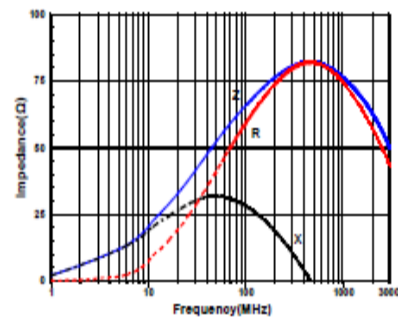
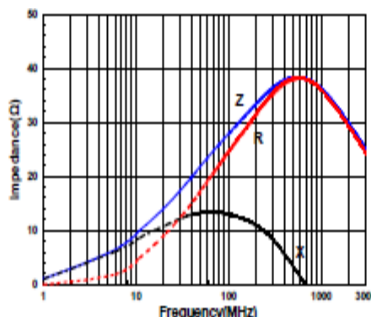
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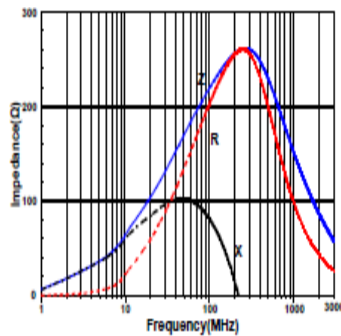
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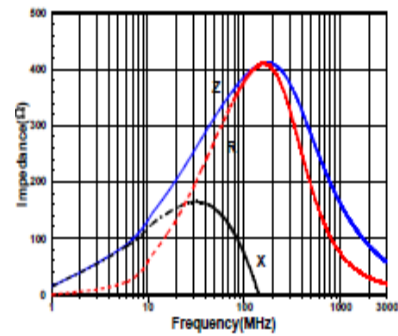
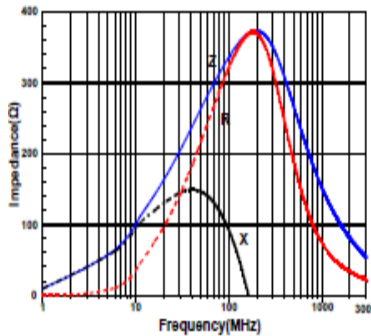
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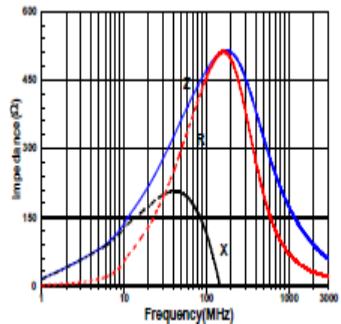
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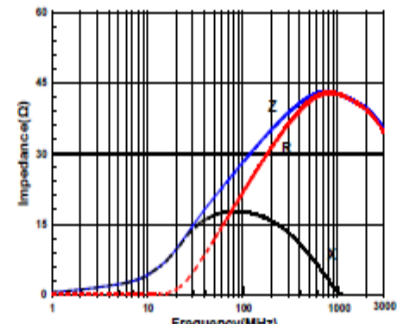
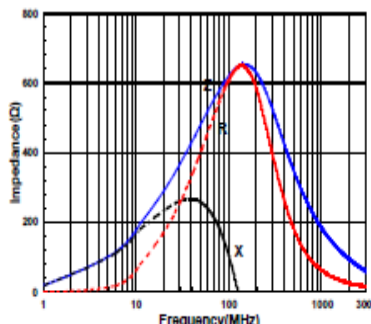
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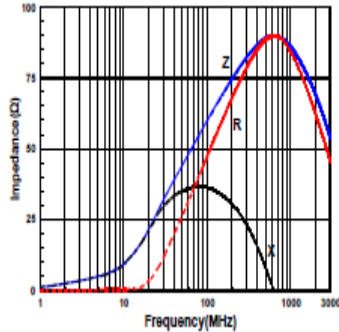
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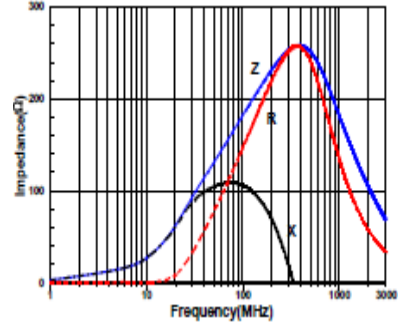
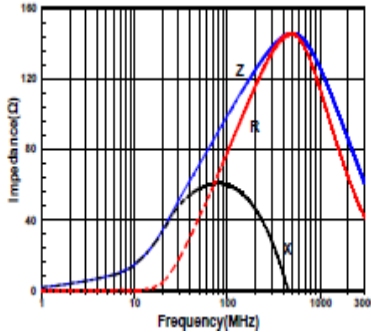
## DETAIL ELECTRICAL CHARACTERISTICS

### HPCB-1608 TYPE

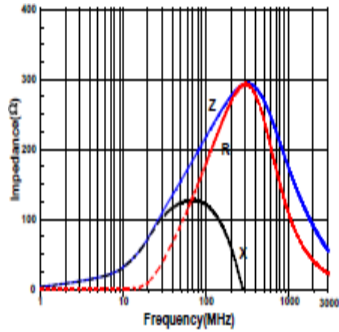
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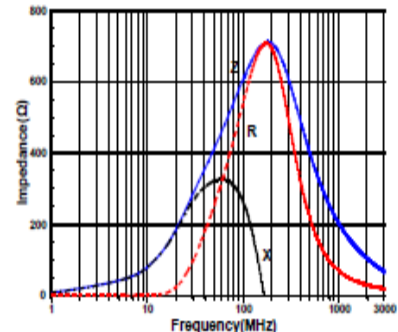
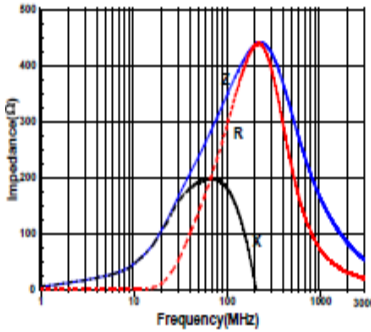
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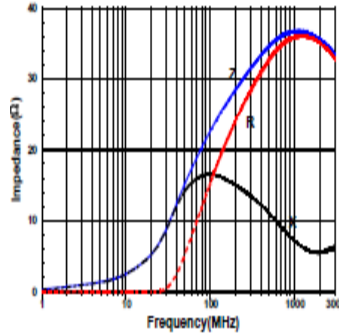


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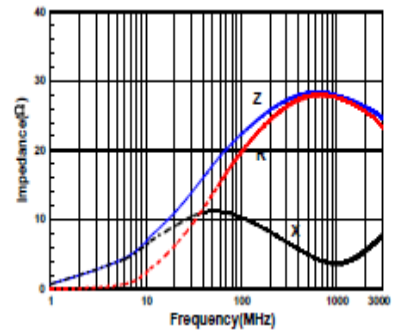
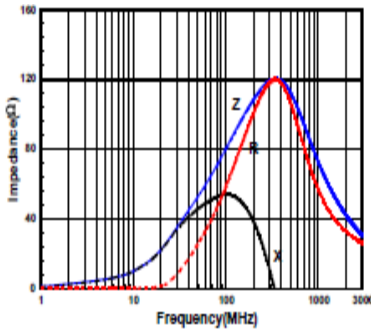


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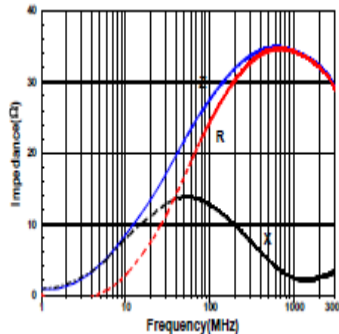
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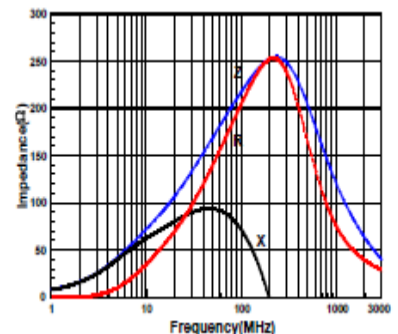
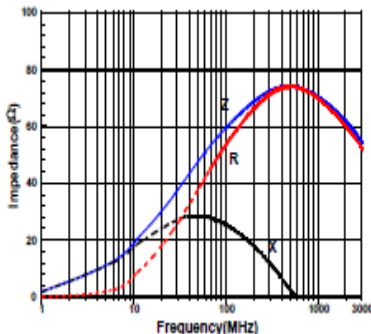
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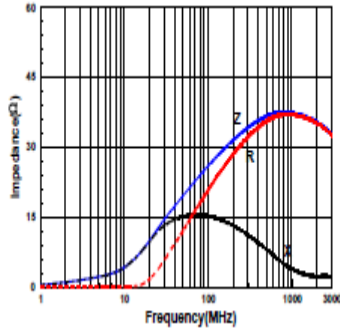
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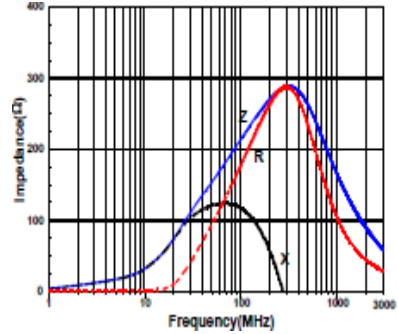
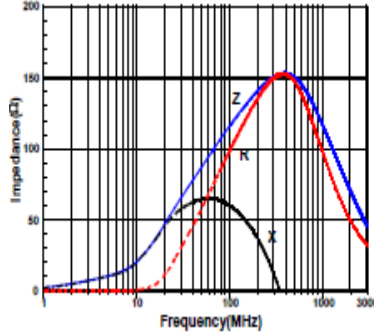
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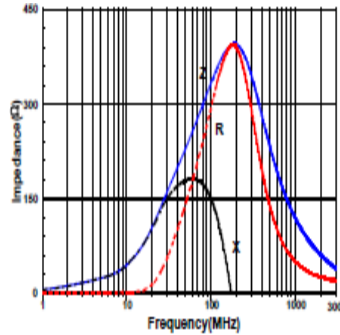
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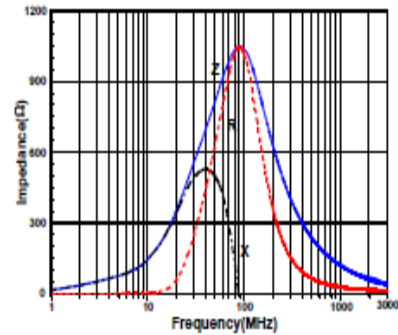
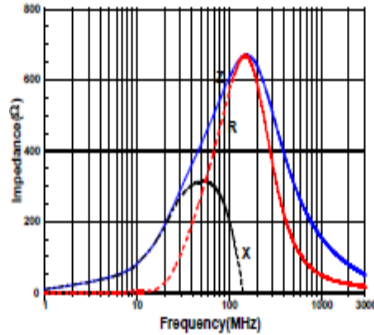
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HPCB-FEE2012T331-2R5



HPCB-FEE2012T601-2R0 HPCB-FEE2012T102-1R5



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