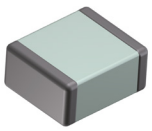
MLCC RF POWER HIGH Q
200V - 7200V

• Applications

- Lasers, CATV, RF Power Amplifiers
- Mixers, RF Instruments



RoHS compliant

• Electrical Parameters

Electrical Characteristics	at + 25°C unless otherwise specified
Operating Temperature	- 55°C, + 125°C
Temperature Coefficient	± 30ppm
Dissipation Factor	≤ 5.10^{-4} at 1Vrms and 1MHz for values ≤ 1000pF ≤ 5.10^{-4} at 1Vrms and 1KHz for values > 1000pF

Insulation Resistance (IR)
25°C/Un 10^5 MOhm or 1000 Ohm-Farad whichever is less
125°C/Un 10^4 MOhm or 100 Ohm-Farad whichever is less
Dielectric Strength Test
Performed per method 103 of EIA 198-2-E
Applied test voltages :
200Vdc-rated : 250% of rated voltage
500Vdc-rated : 200% of rated voltage

• Quick Reference Data

	0505	1111	2525	4040
200V	1pF - 100pF			
250V	1pF - 56pF		1pF - 2.2nF	
300V		1pF - 1nF		
500V		1pF - 680pF	1pF - 1.2nF	1pF - 4.7nF
630V		1pF - 470pf		
1000V		1pF - 180pF	1pF - 1.2nF	1pF - 2.2nF
1500V		1pF - 100pF		
2000V			1pF - 470pF	1pF - 1nF
3000V			1pF - 270pF	1pF - 470pF
4000V			1pF - 180pF	
5000V			1pF - 100pF	1pF - 180pF
7200V				1pF - 100pF

• Ordering Information

2525	Q	560	F	E	X	B	XX

SIZE
0505
1111
2525
4040

DIELECTRIC
Q = High Q

CAPACITANCE
Expressed in picofarads (pF).
The first two digits are significant, the third digit give the number of noughts.
Example :
102 = 1000pF

TOLERANCE
A = ± 0.05pF
B = ± 0.1pF
C = 0.25pF
D = ± 0.5pF
F = ± 1%
G = ± 2%
J = ± 5%
K = ± 10%

VOLTAGE
C = 200V
P = 250V
D = 300V
E = 500V
F = 630V
G = 1000V
R = 1500V
H = 2000V
I = 3000V
K = 4000V
L = 5000V
S = 7200V

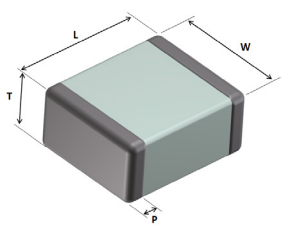
TERMINATION
X = Nickel with 100% Tin plated matte finish
C = Copper with 100% Tin plated matte finish
H = Ni banner with Tin (64%) Lcad (36%)

PACKAGING
B = 7'' reel
V = Bulk

SPECIAL REQUIREMENT

• Dimensions in millimeters

Designation		0505	1111	2525	4040
Length (L)		1.40 ± 0.6	3 ± 0.7	6.35 +0.5/-0.8	10.2 ± 1.00
Width (W)		1.40 ± 0.4	2.8 ± 0.8	6.35 ± 0.4	10.2 ± 1.00
Thickness (T)		1.45	2.6	2.6	6.00
Termination (P)	Min	0.10	0.30	0.25	0.80
	Max	0.40	0.50	0.80	1.50



For P termination (Polymer type) add 0.20mm to all dimensions.

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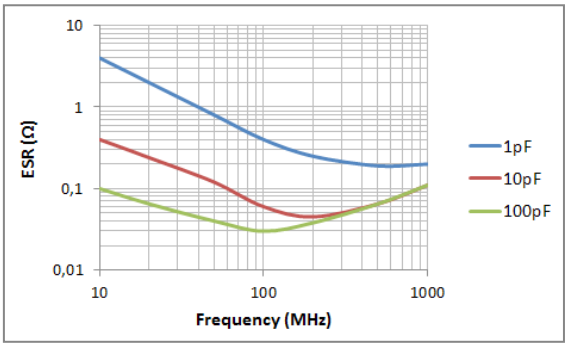
• Standard Sizes : 0505 to 4040

SIZE		0505		1111					2525							4040					
Voltage (KVdc)		0.2	0.25	0.3	0.5	0.63	1	1.5	0.25	0.5	1	2	3	4	5	0.5	1	2	3	5	7.2
Cap. Code	Capacitance																				
1R0	1pF																				
1R2	1.2pF																				
1R5	1.5pF																				
1R8	1.8pF																				
2R2	2.2pF																				
2R7	2.7pF																				
3R3	3.3pF																				
3R9	3.9pF																				
4R7	4.7pF																				
5R6	5.6pF																				
6R8	6.8pF																				
8R2	8.2pF																				
100	10pF																				
120	12pF																				
150	15pF																				
180	18pF																				
220	22pF																				
270	27pF																				
330	33pF																				
390	39pF																				
470	47pF																				
560	56pF																				
680	68pF																				
820	82pF																				
101	100pF																				
121	120pF																				
151	150pF																				
181	180pF																				
221	220pF																				
271	270pF																				
331	330pF																				
391	390pF																				
471	470pF																				
561	560pF																				
681	680pF																				
821	820pF																				
102	1nF																				
122	1.2nF																				
152	1.5nF																				
182	1.8nF																				
222	2.2nF																				
272	2.7nF																				
332	3.3nF																				
392	3.9nF																				
472	4.7nF																				
562	5.6nF																				
682	6.8nF																				
822	8.2nF																				

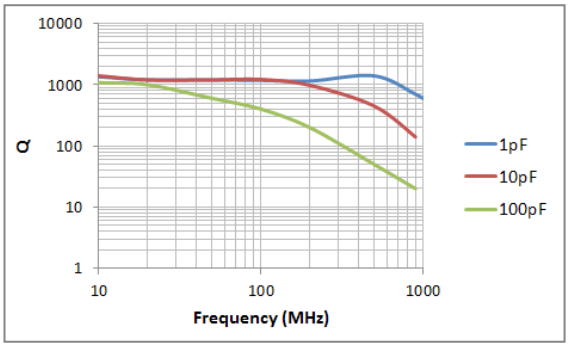
• Typical Characteristics : 0505 to 1111

0505

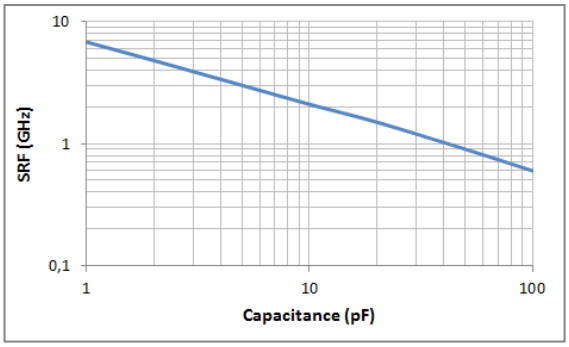
ESR = f(F_{MHz})



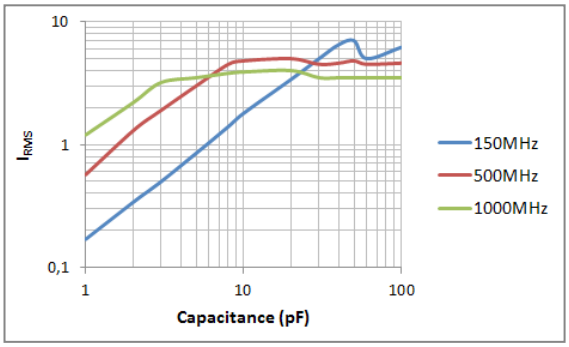
Q Value = f(F_{MHz})



Resonant Frequency = f(CAP_{pF})

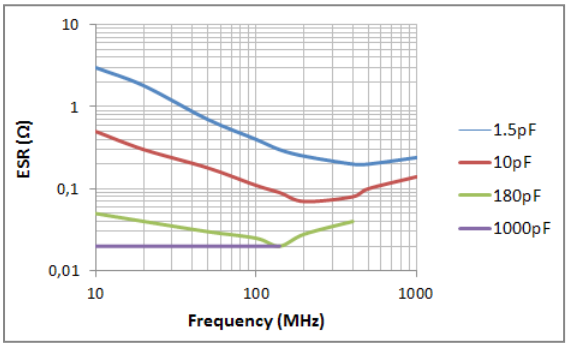


I_{RMS} = f(CAP_{pF})

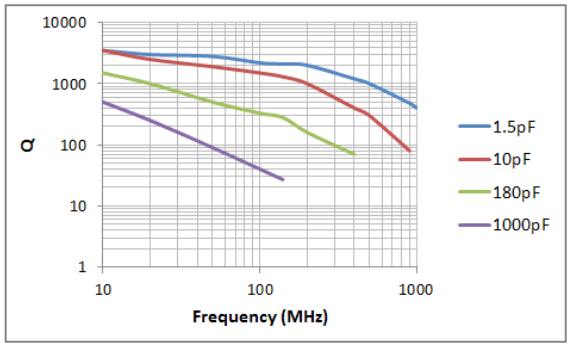


1111

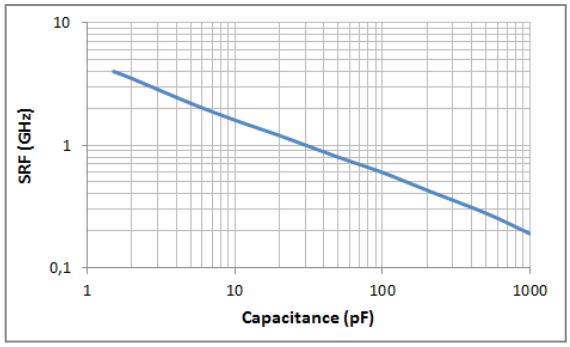
ESR = f(F_{MHz})



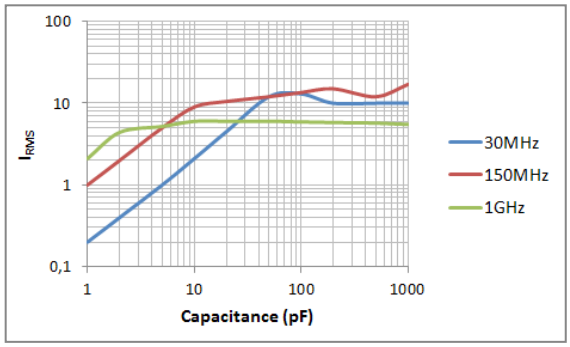
Q Value = f(F_{MHz})



Resonant Frequency = f(CAP_{pF})



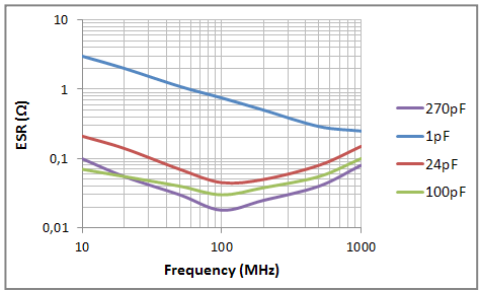
I_{RMS} = f(CAP_{pF})



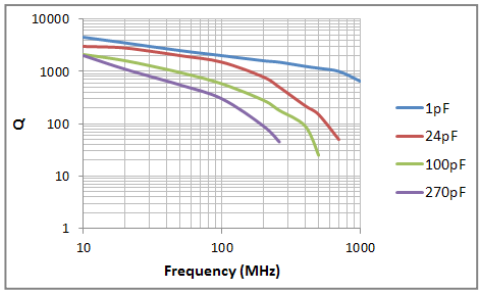
• Typical Characteristics : 2525 to 4040

2525

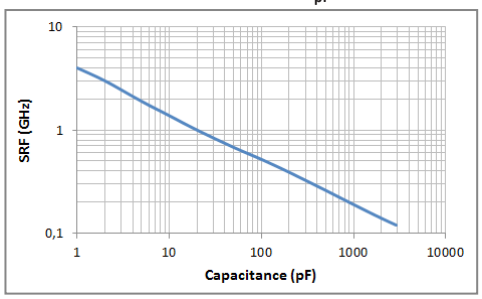
ESR = f(F_{MHz})



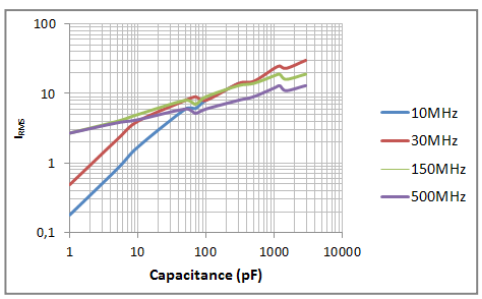
Q Value = f(F_{MHz})



Resonant Frequency = f(CAP_{pF})

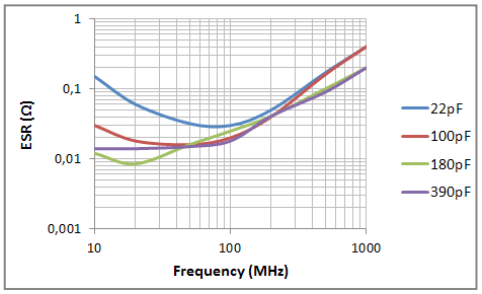


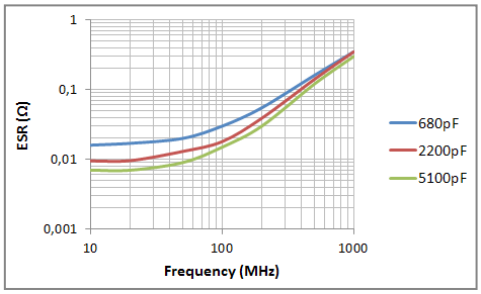
I_{RMS} = f(CAP_{pF})



4040

ESR = f(F_{MHz})





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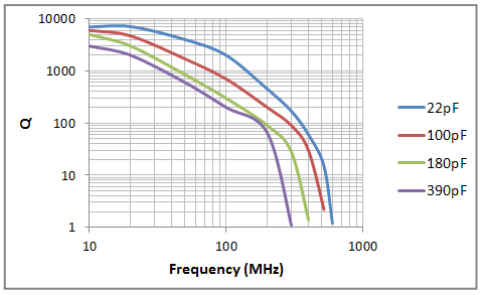
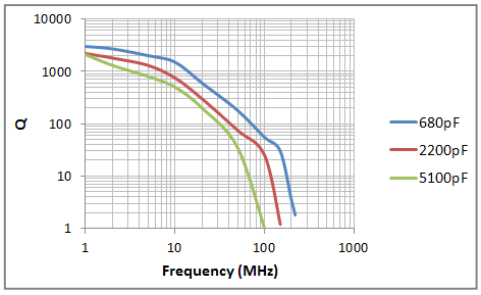
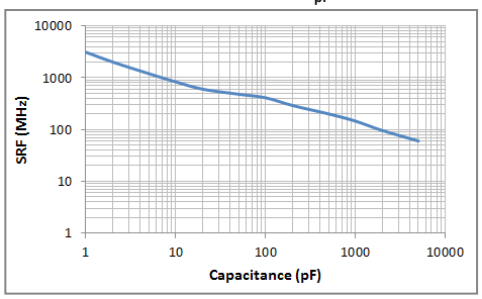




Resonant Frequency = f(CAP_{pF})



I_{RMS} = f(CAP_{pF})