

## High Q capacitors

MS range

The Syfer MS range offers a very stable, High Q material system that provides excellent, low loss performance in systems below 3GHz. Available in 0402 to 3640 case sizes with various termination options including FlexiCap™, this range of high frequency capacitors is suitable for many applications where economical, high performance is required.



### Operating Temperature

-55°C to +125°C

### Temperature Coefficient (Typical)

0 ± 30 ppm/°C

### Insulation resistance at +25°C

>100GΩ

### Insulation resistance at +125°C

>10GΩ

### High Q capacitors - capacitance values

Chip Size	0402	0603	0505	0805	1206	1111	1210	1812	2220	2225	3640
<b>Min Cap</b>	0.1pF	0.1pF	0.2pF	0.2pF	0.5pF	0.3pF	0.3pF	1.0pF	2.0pF	2.0pF	4.0pF
<b>50V 63V</b>	33pF	220pF	330pF	680pF	2.2nF						
<b>100V</b>	22pF	150pF	220pF	470pF	1.5nF	3.3nF	3.3nF	6.8nF	15nF	18nF	
<b>150V</b>	18pF	120pF	180pF	390pF	1.2nF	2.7nF	2.7nF	4.7nF	12nF	15nF	
<b>200V 250V</b>	15pF	100pF	150pF	330pF	1.0nF	2.2nF	2.2nF	3.9nF	10nF	10nF	
<b>300V</b>		56pF	100pF	220pF	680pF	1.5nF	1.5nF	3.3nF	6.8nF	8.2nF	
<b>500V</b>				100pF	330pF	820pF	820pF	2.2nF	4.7nF	5.6nF	15nF
<b>630V</b>					150pF	390pF	390pF	1.0nF	2.2nF	3.3nF	6.8nF
<b>1000V</b>					82pF	220pF	220pF	680pF	1.5nF	2.2nF	4.7nF
<b>2000V</b>					18pF	68pF	68pF	150pF	470pF	560pF	1.5nF
<b>3000V</b>								68pF	150pF	220pF	470pF
Tape quantities	7" reel 5000	7" reel 4000	7" reel 2500	7" reel 3000	7" reel 2500	7" reel 1000	7" reel 2000	7" reel 500 13" reel 2000	7" reel 500 13" reel 2000	7" reel 500 13" reel 2000	7" reel n/a 13" reel n/a
	13" reel quantities available on request										

Below 1pF capacitance values are available in 0.1pF steps.

Above 1pF capacitance values are available in E24 series values.

Other values and taping quantities may be available on request, consult the sales office for details.

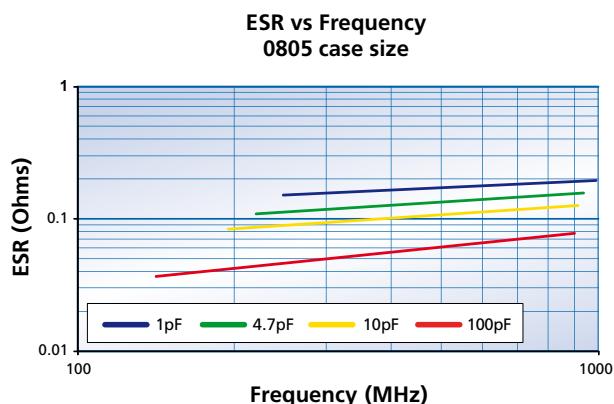
### Ordering information - High Q capacitors - MS range

0505	J	250	4P70	B	Q	T
Chip size	Termination	Voltage	Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric	Packaging
0402 0603 0505 0805 1206 1111 1210 1812 2220 2225 3640	<b>Y</b> = FlexiCap™ termination base with nickel barrier (100% matte tin plating). RoHS compliant. Lead free.  <b>H</b> = FlexiCap™ termination base with nickel barrier (Tin/lead plating with min. 10% lead).  <b>J</b> = Silver base with nickel barrier (100% matte tin plating). RoHS compliant. Lead free.  <b>A</b> = Silver base with nickel barrier (Tin/lead plating with min. 10% lead).	050 = 50V 063 = 63V 100 = 100V 150 = 150V 200 = 200V 250 = 250V 300 = 300V 500 = 500V 630 = 630V 1K0 = 1000V 2K0 = 2000V 3K0 = 3000V	<1.0pF Insert a P for the decimal point as the first character. eg. P300 = 0.3pF Values in 0.1pF steps  ≥1.0pF & <10pF Insert a P for the decimal point as the second character. eg. 8P20 = 8.2pF Values are E24 series  ≥10pF First digit is 0. Second and third digits are significant figures of capacitance code. Fourth digit is number of zeros eg. 0101 = 100pF Values are E24 series	<4.7pF H = ±0.05pF B = ±0.1pF C = ±0.25pF D = ±0.5pF  <10pF B = ±0.1pF C = ±0.25pF D = ±0.5pF  ≥10pF F = ±1% G = ±2% J = ±5% K = ±10%	<b>Q</b> = High Q Ceramic	<b>T</b> = 178mm (7") reel <b>R</b> = 330mm (13") reel <b>B</b> = Bulk pack - tubs

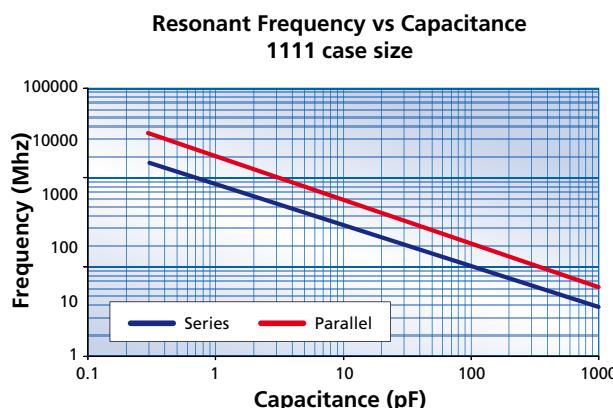
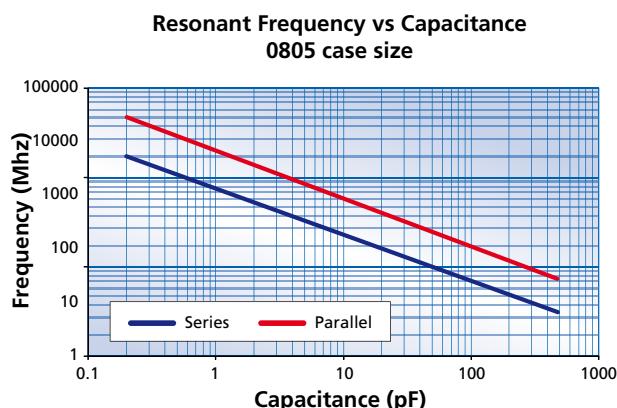
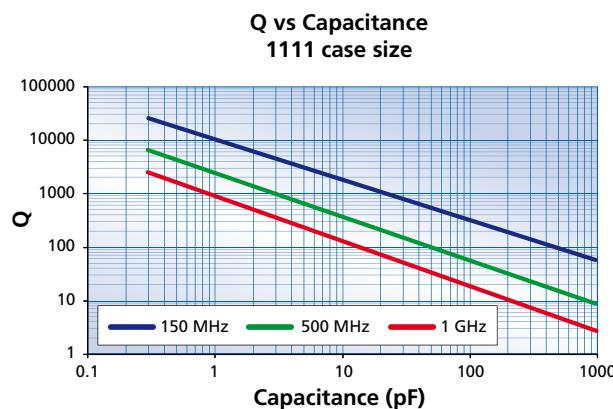
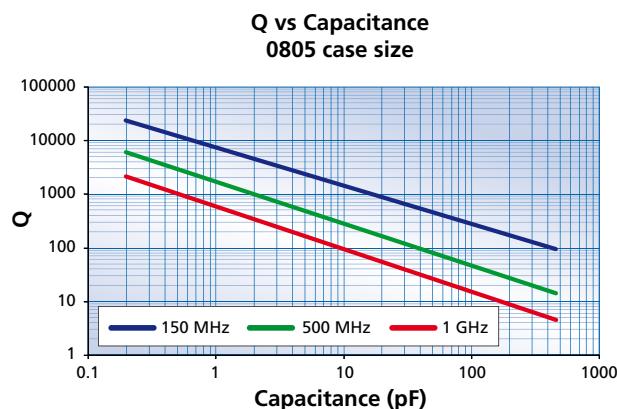
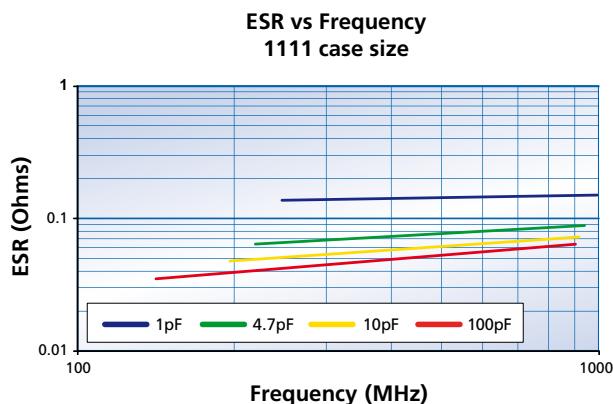
## MS range

## High Q capacitors

Typical performance data - 0805 chip size\*



Typical performance data - 1111 chip size\*



\* Refer to the Sales Office for other chip size electrical data.

High Q MS range.ver1

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