

SHA Series

RF & Microwave Capacitors, NP0, RoHS

DESCRIPTION

Lowest ESR in class
 Highest working voltage in class - 250V
 Laser Marked (optional)
 High Self Resonance Frequencies



APPLICATIONS

- Cellular Base Station Equipment
- Broadband Wireless Service
- Point to Point/Multipoint Radios
- RF Generators (NMR...)

CIRCUIT APPLICATIONS

- Filter Networks
- Matching Networks
- Tuning, Coupling and DC Blocking

I. ELECTRICAL SPECIFICATIONS

Parameter	Value
Capacitance	0.3 to 100 pF
Tolerances	A, B, C, D below 10 pF F, G, J, K above 10 pF
Working Voltage (WVDC)	see Capacitance Value chart
Temperature Coefficient	0 +/-30ppm/°C, -55°C to +125°C
Insulation Resistance	10 ⁵ MΩ min
Dielectric Withstanding	2.5 x WVDC for 5 seconds
Aging	none
Piezo Effects	none

II. MECHANICAL SPECIFICATIONS

Parameter	Value	Comment
Case Size	A	0505

NB:

- all the terminations are backward compatible and lead-free.
- the non-magnetic terminations are all Magnetism-free Rated.

MR certified®

ITAR Free®

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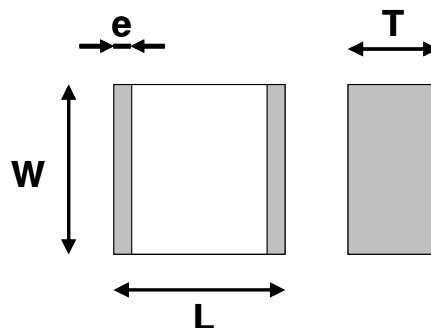
Termination Type	Code	SHA
Standard (tin-plated nickel)	S	AVAILABLE
Non-magnetic (silver-palladium)	A	AVAILABLE

III. ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Life Test	1'000 hours, +125°C at 2.0 x WVDC
Moisture Resistance Test 1	240 hours, 85% relative humidity at +85°C (ESA/SCC n°3009)
Moisture Resistance Test 2	56 days, 93% relative humidity at +40°C 0V, 5V, WVDC

IV. OUTLINE DIMENSIONS

Parameter	A (0505)
Length (L)	1.40 ±0.25mm
Width (W)	1.40 ±0.25mm
Thickness (T)	1.40 mm (max.)
End-Band (e)	0.25 ±0.15mm



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V. HOW TO ORDER

251	SH	A	100	J	S	L	E	ROHS
voltage	dielectric	case size	capacitance	tolerance code	termination code	marking code	tape and reel	
please refer to Volt.Code given in Capacitance Values chart			please refer to Cap. Code given in Capacitance Values chart	A=±0.05pF B=±0.1pF C=±0.25pF D=±0.5pF F=±1% G=±2% J=±5% K=±10%	please refer to Mechanical Termination chart	"L" means laser marking required leave blank if no marking requested	"E" means tape and reel required leave blank if no tape and reel requested	the RoHS tag is not part of the reference tag added at the end of P/N for information

NB:

- for capacitance values lower than 10pF, tolerances B, C and D apply. For capacitance values equal to or higher than 10pF, tolerances F, G, J and K apply.

VI. TAPE AND REEL

The following chart gives the number of components per reel.

	SHA
Parts per Reel	3'000

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VII. CAPACITANCE VALUES

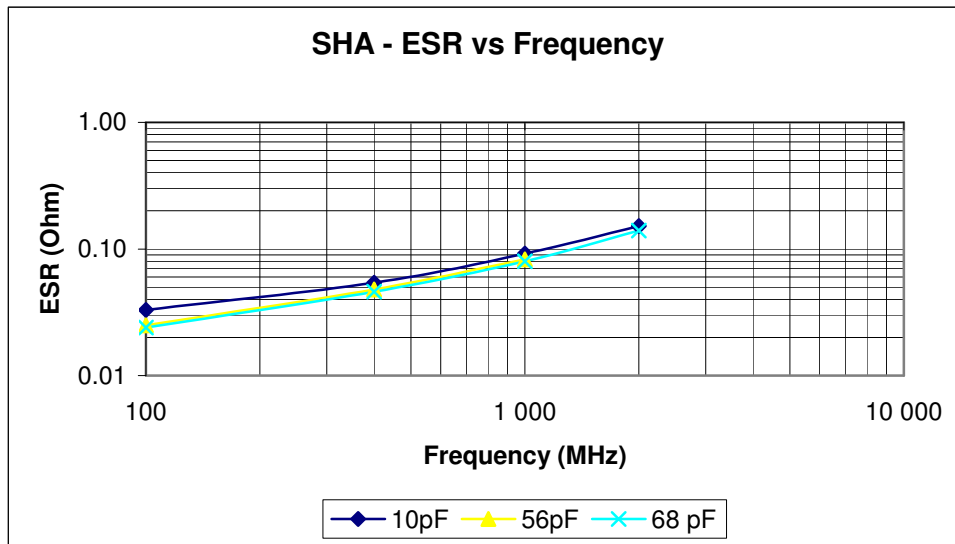
Value (pF)	Cap. Code	A (0505)	Value (pF)	Cap. Code	A (0505)
0.3	0R3	250V	6.2	6R2	250V
0.4	0R4		6.8	6R8	
0.5	0R5		7.5	7R5	
0.6	0R6		8.2	8R2	
0.7	0R7		9.1	9R1	
0.8	0R8		10	100	
0.9	0R9		11	110	
1.0	1R0		12	120	
1.1	1R1		13	130	
1.2	1R2		15	150	
1.3	1R3		16	160	
1.4	1R4		18	180	
1.5	1R5		20	200	
1.6	1R6		22	220	
1.7	1R7		24	240	
1.8	1R8		27	270	
1.9	1R9		30	300	
2.0	2R0		33	330	
2.1	2R1		36	360	
2.2	2R2		39	390	
2.4	2R4	43	430		
2.7	2R7	47	470		
3.0	3R0	51	510		
3.3	3R3	56	560		
3.6	3R6	62	620		
3.9	3R9	68	680		
4.3	4R3	75	750		
4.7	4R7	82	820		
5.1	5R1	91	910		
5.6	5R6	100	101		
					150V

NB: special values, tolerances, higher WVDC and matching available, please consult factory.

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VIII. TYPICAL PERFORMANCE DATA



TEMEX CERAMICS reserves the right to modify herein specifications and information at any time when necessary to provide optimum performance and cost.