

## LCR Meter BS Home Calibration Test

Test Frequency:					
Test Frequency	Test Limits	ST2832 Result		ST42 Result	
20 Hz	19.99 - 20.01	19.999916			
50 Hz	49.99 - 50.01	49.99982			
100 Hz	99.99 - 100.01	99.999656			
1 kHz	999.9 - 1000.1	999.99612			
10 kHz	9.999 - 10.001	9.9999615			
100 kHz	99.99 - 100.01	99.999615			
200 kHz	199.98 - 200.02	199.99923			

Test Signal Level (1kHz):					
Signal Level	Test Limits	ST2832 Result		Alternate DMM	
20 mVrms	16.00 - 24.00	18.078		26.993	
0.1 Vrms	0.088 - 0.112	0.091227		0.103128	
0.3 Vrms	0.268 - 0.332	0.27454		0.30238	
1 Vrms	0.898 - 1.102	0.91953		1.01628	
2 Vrms	1.798 - 2.202	1.83716		2.02231	

DC Bias Level:					
Signal Level	Test Limits	ST2832 Result			
2V	1.975 - 2.025	2.01146			
5V	4.945 - 5.055	5.0069			

Resistance Measurements (Test Parameters Level: 1Vrms, Range: Auto, Speed: Slow):					
100Hz Resistance Measurement:					
Range		ST2832 Result		ST42 Result	
10 $\Omega$		10.0102			
100 $\Omega$		100.039			
1 k $\Omega$		0.999963			
10 k $\Omega$		10.0022			
100 k $\Omega$		100.049			
1 M $\Omega$		1.00036			
10 M $\Omega$		10.0658			

1 kHz Resistance Measurement:					
Range		ST2832 Result		ST42 Result	
10 $\Omega$		10.0102			
100 $\Omega$		100.038			
1 k $\Omega$		0.999964			
10 k $\Omega$		10.0021			
100 k $\Omega$		100.041			
1 M $\Omega$		0.999896			
10 M $\Omega$		9.88614			

10 kHz Resistance Measurement:					
Range		ST2832 Result		ST42 Result	
10 $\Omega$		10.0101			
100 $\Omega$		100.037			
1 k $\Omega$		0.999951			
10 k $\Omega$		10.001			
100 k $\Omega$		99.9108			
1 M $\Omega$		0.984786			

100 kHz Resistance Measurement:					
Range		ST2832 Result			
10 $\Omega$		10.0088			
100 $\Omega$		100.029			
1 k $\Omega$		0.998866			
10 k $\Omega$		9.88523			
100 k $\Omega$		97.5124			

200 kHz Resistance Measurement:					
Range		ST2832 Result			
10 $\Omega$		10.0044			
100 $\Omega$		99.9933			
1 k $\Omega$		0.994991			
10 k $\Omega$		9.93568			
100 k $\Omega$		95.7769			

DCR Measurement:					
Range		ST2832 Result		ST42 Result	
10 $\Omega$		10.009			
100 $\Omega$		100.081			
1 k $\Omega$		0.999988			
10 k $\Omega$		10.0022			
100 k $\Omega$		100.052			
1 M $\Omega$		1.00035			
10 M $\Omega$		10.0338			

Step Dissipation Factor (Cs=1nF,1kHz):					
Range		ST2832 Result			
0.0001		I			
0.0005		Don't			
0.001		Know			
0.005		How			
0.01		To			
0.1		Do			
1		This			

Capacitance Measurements (Upper Value: Capacitance (Cp), Lower Value: Dissipation Factor (D)):					
1 kHz Capacitance Measurement					
Range	Tolerance:	ST2832 Result		ST42 Result	
10 pF	1%	11.8236			
		0.00057			
100 pF	1%	102.037			
		0.00003			
1 nF	1%	1.00223			
		0.00016			
10 nF	1%	9.98357			
		0.00014			
100 nF	1%	100.683			
		0.00011			
1.0 µF	5%	1.01108			
		0.01628			
10 µF	5%	8.20601			
		0.01904			
100 µF	10%	66.7804			
		0.03675			

20 Hz Capacitance Measurement					
Range	Tolerance:	ST2832 Result			
10 nF	1%	9.9838			
		0.00007			
100 nF	1%	100.692			
		0.0005			
1.0 µF	5%	1.03996			
		0.01543			
10 µF	5%	10.5209			
		0.053			
100 µF	10%	93.986			
		0.06995			
1 mF	20%	1.03284			
		0.04155			

100 Hz Capacitance Measurement					
Range	Tolerance:	ST2832 Result		ST42 Result	
1 nF	1%	1.00254			
		0.00054			
10 nF	1%	9.98538			
		0.00015			
100 nF	1%	100.693			
		0.00021			
1.0 µF	5%	1.03446			
		0.01741			
10 µF	5%	10.2367			
		0.04786			
100 µF	10%	78.6332			
		0.05647			
1 mF	20%	0.993047			
		0.17174			

10 kHz Capacitance Measurement					
Range	Tolerance:	ST2832 Result		ST42 Result	
10 pF	1%	11.6442			
		0.00053			
100 pF	1%	101.949			
		0.00037			
1 nF	1%	1.00197			
		0.00029			
10 nF	1%	9.98269			
		0.00015			
100 nF	1%	100.674			
		0.00025			
1.0 µF	5%	0.965516			
		0.01302			
10 µF	5%	7.88534			
		0.02898			

100 kHz Capacitance Measurement					
Range	Tolerance:	ST2832 Result			
10 pF	1%	11.8506			
		0.00003			
100 pF	1%	103.098			
		0.00013			
1 nF	1%	1.00257			
		0.00048			
10 nF	1%	9.98208			
		0.00071			
100 nF	1%	100.694			
		0.00212			
1 µF	1%	0.952125			
		0.03282			

200 kHz Capacitance Measurement					
Range	Tolerance:	ST2832 Result			
10 pF	1%	11.7824			
		0.00169			
100 pF	1%	104.951			
		0.00036			
1 nF	1%	1.00202			
		0.00064			
10 nF	1%	9.98452			
		0.00073			
100 nF	1%	100.858			
		0.00449			
1 µF	1%	0.970061			
		0.05683			

1 kHz Inductance Measurement:					
Range		ST2832 Result		ST42 Result	
1 mH		0.958438			
10 mH		10.2399			
100 mH		101.895			
700 mH (Wah)		650.571			

10 kHz Inductance Measurement:					
Range		ST2832 Result		ST42 Result	
10 µH		10.9282			
100 µH		114.076			
1 mH		0.956116			
10 mH		10.2153			
100 mH		96.354			
700 mH (Wah)		753.263			

100 kHz Inductance Measurement:					
Range		ST2832 Result			
100 nH		97.04			
1 µH		1.03718			
10 µH		10.7527			
100 µH		111.373			
1 mH		0.912939			
10 mH		9.9915			

200 kHz Inductance Measurement:					
Range		ST2832 Result			
100 nH		95.09			
1 µH		1.02926			
10 µH		10.5553			
100 µH		107.884			
1 mH		0.890446			
10 mH		11.2309			

Test date:
1/12/2024

Warm up time:
1 hour

RH:
54%

Open/short correction:
Yes

Room Temp:
69F