



Equivalent Series Resistance Table

FREQUENCY RANGE		ESR (W) Max.							
FREQ. (MHz)	MODE	HC49/U	HC49/S	UM1	UM4	UM5	S3/S0	HC45/U	ST
< 2	Fund.	500	.	.	.	.	.	.	.
2-2.9	Fund.	350	.	.	.	.	.	.	.
3.0-3.2	Fund.	200	.	.	.	.	.	.	.
3.2-3.6	Fund.	150	.	.	.	.	.	.	.
3.6-4.0	Fund.	150	150	.	.	.	.	.	200
4.1-4.4	Fund.	100	120	.	.	.	.	.	150
4.5-4.9	Fund.	80	120	.	.	.	.	.	150
5.0-6.9	Fund.	50	80	.	.	.	.	.	150
7.0-8.0	Fund.	35	80	.	.	.	.	.	100
8.1-9.9	Fund.	35	70	.	.	.	.	.	100
10.0-11.9	Fund.	25	50	40	.	.	60	60	50
12.0-14.9	Fund.	25	50	30	30	35	60	60	50
15.0-19.9	Fund.	25	40	25	30	30	60	50	50
20.0-22.0	Fund.	25	40	25	25	30	60	50	50
22.1-25.0	Fund.	25	40	25	25	30	60	30	50
25.1-30.0	Fund.	25	.	25	25	30	60	30	50
30.1-32.0	Fund.	.	.	25	25	30	60	30	50
32.1-50.0	Fund.	.	.	25	25	30	.	60	50
28.0-34.9	3rd	40	100	.	.	.	60	.	60
35.0-44.9	3rd	40	100	50	.	.	60	.	60
45.0-54.9	3rd	40	100	45	.	50	60	45	60
55.0-59.9	3rd	40	100	40	45	50	60	40	60
60.0-70.0	3rd	40	100	35	40	45	60	35	60
70.1-84.0	3rd	40	.	35	40	45	60	35	.
84.1-120	3rd	.	.	35	40	40	.	35	.
80.0-83.9	5th	70	.	70	.	.	.	70	.
84.0-89.9	5th	70	.	70	.	.	80	70	.
90.0-100.0	5th	70	.	70	90	90	80	70	.
100.1-160.0	5th	70	.	70	90	90	.	70	.
150-180.0	7th	120	.	.	.	.	.	.	.

NOTES:

For frequencies lower than 23.999 MHz, fundamental mode is standard and a requirement for overtone should be specified.

For frequencies higher than 24.000 MHz, overtone mode is standard and a requirement for fundamental should be specified.

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