

# RF Shielding



**INNOVATIVE  
INSULATION**

## Radiant Barrier Blocks 99 Percent of EM Wave Frequencies

Super R Plus and Tempshield radiant barrier products are certified to reflect up to 99 percent of 10kHz to 1000MHz electromagnetic waves. Tempshield is the most popular and requested Radio Frequency (RF) shielding product in retail stores and distribution centers.



EMC Shielding  
Effectiveness  
Test Report of  
EMI Shielding  
Material  
TO IEEE-229  
Report No. 21068  
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Revision: 1

## Tempshield Test Results

Frequency	Dynamic Range (dB)	TEMP-SHIELD (SE) (dB)	SE Ratio	RF Leakage Ratio	RF Leakage %	% Attenuation
10kHz	106	104.5	167,880.402	0.000	0.001%	99.999%
20kHz	108	106.1	201,836.636	0.000	0.000%	100.000%
40kHz	108	106.5	211,348.904	0.000	0.000%	100.000%
80kHz	109	98.9	88,104.887	0.000	0.001%	99.999%
100kHz	109	94.6	53,703.180	0.000	0.002%	99.998%
200kHz	110	82.9	13,963.684	0.000	0.007%	99.993%
400kHz	110	71.6	3,801.894	0.000	0.026%	99.974%
800kHz	112	61.6	1,202.264	0.001	0.083%	99.917%
1MHz	112	52.3	412.098	0.002	0.243%	99.757%
10MHz	113	37.6	75.858	0.013	1.318%	98.682%
20MHz	120	33.1	45.186	0.022	2.213%	97.787%
30MHz	120	28.3	26.002	0.038	3.846%	96.154%
40MHz	130	31.6	38.019	0.026	2.630%	97.370%
60MHz	140	28.1	25.410	0.039	3.936%	96.064%
80MHz	150	38.6	85.114	0.012	1.175%	98.825%
100MHz	148	37.9	78.524	0.013	1.274%	98.726%
200MHz	150	56.8	691.831	0.001	0.145%	99.855%
400MHz	149	45.2	181.970	0.005	0.550%	99.450%
600MHz	150	44.6	169.824	0.006	0.589%	99.411%
800MHz	152	45.1	179.887	0.006	0.556%	99.444%
1000MHz	150	66.5	2,113.489	0.000	0.047%	99.953%
2000MHz	108	30	31.623	0.032	3.162%	96.838%
4000MHz	108	34.6	53.703	0.019	1.862%	98.138%
6000MHz	108	40.6	107.152	0.009	0.933%	99.067%
8000MHz	108	41.9	124.451	0.008	0.804%	99.196%
10000MHz	112	45.5	188.365	0.005	0.531%	99.469%

## Super R Plus Test Results

Frequency	Dynamic Range (dB)	Super R Plus (SE) (dB)	SE Ratio	RF Leakage Ratio	RF Leakage %	% Attenuation
10kHz	106	104.3	164,058.977	0.000	0.001%	99.999%
20kHz	108	105.9	197,242.274	0.000	0.001%	99.999%
40kHz	108	106.8	218,776.162	0.000	0.000%	100.000%
80kHz	109	100.1	101,157.945	0.000	0.001%	99.999%
100kHz	109	97.5	74,989.421	0.000	0.001%	99.999%
200kHz	110	83.8	15,488.166	0.000	0.006%	99.994%
400kHz	110	73.2	4,570.882	0.000	0.022%	99.978%
800kHz	112	64.4	1,659.587	0.001	0.060%	99.940%
1MHz	112	61.2	1,148.154	0.001	0.087%	99.913%
10MHz	113	43.8	154.882	0.006	0.646%	99.354%
20MHz	120	38.8	87.096	0.011	1.148%	98.852%
30MHz	120	33.9	49.545	0.020	2.018%	97.982%
40MHz	130	37.1	71.614	0.014	1.396%	98.604%
60MHz	140	30.9	35.075	0.029	2.851%	97.149%
80MHz	150	43.3	146.218	0.007	0.684%	99.316%
100MHz	148	42.8	138.038	0.007	0.724%	99.276%
200MHz	150	52.5	421.697	0.002	0.237%	99.763%
400MHz	149	49.2	288.403	0.003	0.347%	99.653%
600MHz	150	53.5	473.151	0.002	0.211%	99.789%
800MHz	152	45.3	184.077	0.005	0.543%	99.457%
1000MHz	150	42.5	133.352	0.007	0.750%	99.250%
2000MHz	108	48.3	260.016	0.004	0.385%	99.615%
4000MHz	108	41.7	121.619	0.008	0.822%	99.178%
6000MHz	108	51.8	389.045	0.003	0.257%	99.743%
8000MHz	108	62.6	1,348.963	0.001	0.074%	99.926%
10000MHz	112	66.6	2,137.962	0.000	0.047%	99.953%