

Data Sheet

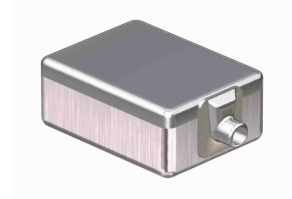


receiver 1878

3180 - 1100586
Version:2 17-NOV-2005

Description

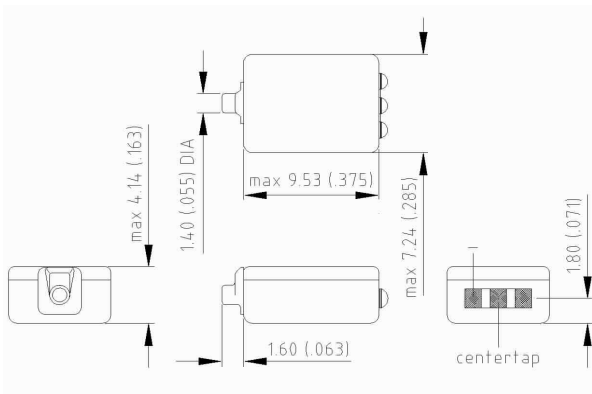
Miniature magnetic receiver (balanced armature type) for use in hearing aids with push-pull output stage.



Features

- Great BTE application
- Highest output, maximum peak output 140 dB

Dimensions in mm (inch)

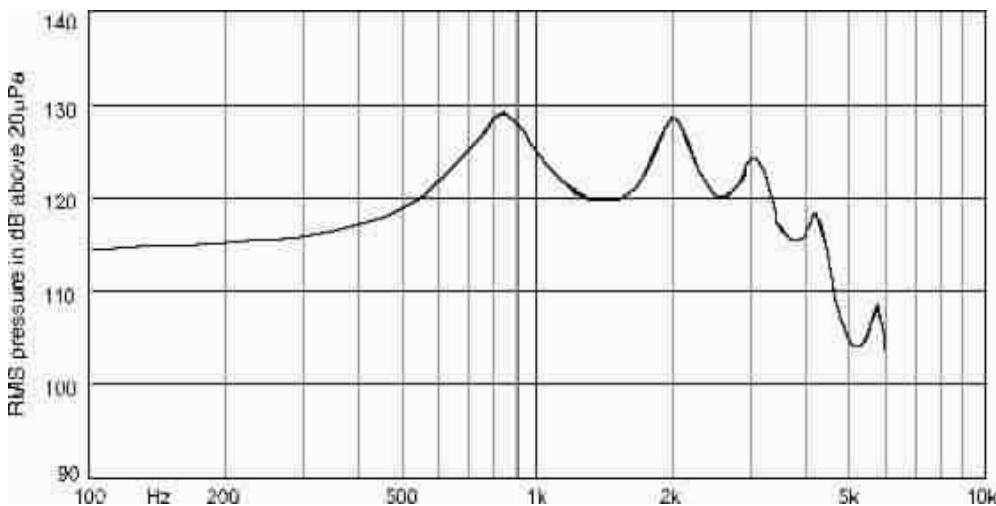


Mechanical Data

Weight	0.94 gr.
Case material	Ni80Fe20
Solder pad content	Sn96.5Ag3.0Cu0.5
Dimensions	Refer to outline drawing

Typical response curve

Refer to specifications section for measurement conditions.



Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible. Receivers series of this type can produce very high sound pressure levels. When such receivers are applied in hearing instruments or other communications equipment special attention should be paid to this capacity in order to prevent possible hearing damage.

Data Sheet



receiver 1878

3180 - 1100586
Version:2 17-NOV-2005

Specifications

The acoustic termination consists of: 8 mm x 1 mm ID + 28 mm x 1.5 mm ID + 25 mm x 2 mm ID + 18 mm x 3 mm ID + 2 cc coupler. The electrical input is a 2.18 mA RMS constant current signal from a high impedance source, applied to the total winding. Environmental conditions: 23 °C (73.4F), 50 % RH

Acoustic parameters		Min	Typ	Max	Unit	Comments
Sensitivity	@ 200 Hz	113	115	117	dB	
	@ 300 Hz	114	116	118	dB	
	@ 500 Hz	117	119	121	dB	
Peak 1	frequency	670	820	970	Hz	
	output	127.5	129.5	131.5	dB	
Valley 1	frequency	1300	1600	1900	Hz	
	output	118	120	122	dB	
Peak 2	frequency	1850	2000	2150	Hz	
	output	126.6	128.6	130.6	dB	
Valley 2	frequency	2300	2550	2800	Hz	
	output	117	120	123	dB	
Peak 3	frequency	2850	3000	3150	Hz	
	output	122	124	126	dB	
Valley 3	frequency	3500	3700	3900	Hz	
	output	113	116	119	dB	
Peak 4	frequency	4000	4150	4300	Hz	
	output	116.1	119.1	122.1	dB	
Valley 4	frequency	4800	5100	5400	Hz	
	output	101	105	109	dB	
Peak 5	frequency	5500	5700	5900	Hz	
	output	104	108.5	113	dB	
THD	@ 1/3 peak			9	%	
	@ 1/2 peak			9	%	
Maximum output @ peak frequency		137	140	143	dB	

Electric parameters	Min	Typ	Max	Unit	Comments
Impedance @ 1000 Hz	168	210	252	Ohm	
Impedance @ 500 Hz	104	131	156	Ohm	
DC resistance @ 20 °C	76	90	104	Ohm	
DC bias current range					

Additional parameters	Min	Typ	Max	Unit	Comments
Shock resistance	5500			g	90% survival rate with THD @ 1/2 peak freq. < 10%
Storage temperature range	-40		63	°C	

A positive voltage applied to the negative terminal (-) will result in an increase in pressure at the sound outlet.

Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible. Receivers series of this type can produce very high sound pressure levels. When such receivers are applied in hearing instruments or other communications equipment special attention should be paid to this capacity in order to prevent possible hearing damage.