

# Magnetic Transducer Drive Circuit Built-In

## Washable Type

						
PAC-WST-1201UX-P	PAC-WST-1203UX-P	PAC-WST-1206UX-P	PAC-WST-1212UX-P	PAC-WST-0903S-P	PAC-WST-0905S-P	
Ø12.0 x H7.5 mm 1.5 V 78 dB 2300 Hz	Ø12.0 x H7.5 mm 3.0 V 82 dB 2300 Hz	Ø12.0 x H7.5 mm 5.0 V 85 dB 2300 Hz	Ø12.0 x H7.5 mm 12.0 V 85 dB 2300 Hz	Ø9.6 x H5.0 mm 3.0 V 80 dB 2700 Hz	Ø9.6 x H5 mm 5.0 V 83 dB 2730 Hz	
						
PAC-WST-1201BX-P	PAC-WST-1203BX-P	PAC-WST-1206BX-P	PAC-WST-1212BX-P	PAC-WST-1205S-P	PAC-WST-1212S-P	PAC-WST-1310S-2-P
Ø12.0 x H7.5 mm 1.5 V 78 dB 3100 Hz	Ø12.0 x H7.5 mm 3.0 V 82 dB 3100 Hz	Ø12.0 x H7.5 mm 5.0 V 85 dB 3100 Hz	Ø12.0 x H7.5 mm 12.0 V 83 dB 3100 Hz	Ø12.0 x H9.5 mm 5.0 V 85 dB 2300 Hz	Ø12.0 x H9.5 mm 12.0 V 85 dB 2300 Hz	12.8 x 12.8 x H10.0 mm 5.0 V 85 dB 2300 Hz

# Electret Condenser Microphone

## Omni Directional

				
EM4015	EM6022	EM6027	EM6050	EM9767
Ø4.0 x H1.5 mm -42, -46, -50, -54 dB 2.0 V 2.2KΩ	Ø6.0 x H2.2 mm -42, -44, -46, -48 dB 2.0 V 2.2KΩ	Ø6.0 x H2.7 mm -38, -42, -46 dB 2.0 V 2.2KΩ	Ø6.0 x H5.0 mm -34, -38, -42, -46 dB 2.0 V 2.2KΩ	Ø9.7 x H6.7 mm -34, -38, -42, -46 dB 3.0 V 2.2KΩ

## Noise Canceling

	
EM6022N	EM6027N
Ø6.0 x H2.2 mm -48, -50, -52, -54 dB 2.0 V 2.2KΩ	Ø6.0 x H2.7 mm -42, -46, -50, -54 dB 2.0 V 2.2KΩ

## Uni Directional

	
EM6022U	EM6027U
Ø6.0 x H2.2 mm -48, -50, -52 dB 2.0 V 2.2KΩ	Ø6.0 x H2.7 mm -46, -48, -50, -52 dB 2.0 V 2.2KΩ

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溝通 的介面，  
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# PAC

Buzzer  
Piezo  
Speaker  
Microphone

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HUA-JIE GROUP

# Magnetic Transducer External Drive Circuit

## SMD Type

<b>PAC-ST-025BH-1-P</b>	<b>PAC-ST-03BL-P</b>	<b>PAC-ST-03BLA-P</b>	<b>PAC-ST-03BH-P</b>	<b>PAC-ST-03BT-P</b>	<b>PAC-ST-03CH-P</b>
7.5 x 7.5 x H2.5 mm 3.6 V 85 dB 2700 Hz 15 Ω	8.5 x 8.5 x H3.0 mm 3.6 V 83 dB 2300 Hz 16 Ω	8.5 x 8.5 x H3.0 mm 3.6 V 85 dB 2500 Hz 16 Ω	8.5 x 8.5 x H3.0 mm 3.6 V 88 dB 2730 Hz 16 Ω	8.5 x 8.5 x H3.0 mm 3.6 V 88 dB 3200 Hz 16 Ω	8.5 x 8.5 x H3.0 mm 5.0 V 88 dB 2730 Hz 30 Ω
<b>PAC-ST-0503-P</b>	<b>PAC-ST-04BL-P</b>	<b>PAC-ST-04BLA-P</b>	<b>PAC-ST-04BH-P</b>	<b>PAC-ST-04BT-P</b>	<b>PAC-ST-04CH-P</b>
5.0 x 5.0 x H3.0 mm 3.0 V 75 dB 4000 Hz 12 Ω	8.5 x 8.5 x H4.0 mm 3.6 V 83 dB 2300 Hz 16 Ω	8.5 x 8.5 x H4.0 mm 3.6 V 85 dB 2500 Hz 16 Ω	8.5 x 8.5 x H4.0 mm 3.6 V 88 dB 2730 Hz 16 Ω	8.5 x 8.5 x H4.0 mm 3.6 V 88 dB 3200 Hz 16 Ω	8.5 x 8.5 x H4.0 mm 5.0 V 88 dB 2730 Hz 30 Ω

## General Type

<b>PAC-GT-0930RP2-P</b>	<b>PAC-GT-0950RP2-P</b>	<b>PAC-GT-0930RP3-P</b>	<b>PAC-GT-0950RP3-P</b>	<b>PAC-GT-0903A-P</b>	<b>PAC-GT-0905A-P</b>
Ø9.0 x H4.3 mm 3.0 V 87 dB 2730 Hz 15 Ω	Ø9.0 x H4.3 mm 3.0 V 89 dB 2730 Hz 30 Ω	Ø9.0 x H4.3 mm 3.0 V 87 dB 2730 Hz 6 Ω	Ø9.0 x H4.3 mm 3.0 V 89 dB 2730 Hz 6 Ω	Ø9.0 x H4.5 mm 5.0 V 89 dB 2730 Hz 15 Ω	Ø9.0 x H4.5 mm 5.0 V 89 dB 2730 Hz 30 Ω
<b>PAC-GT-11P-P</b>	<b>PAC-GT-11P-P</b>	<b>PAC-GT-11PS-P</b>	<b>PAC-GT-11PS-P</b>		
Ø12.0 x H8.5 mm 1.5 V 85 dB 2048 Hz 16 Ω	Ø12.0 x H8.5 mm 1.5 V 80 dB 2048 Hz 50 Ω	Ø12.0 x H5.4 mm 1.5 V 75 dB 2048 Hz 16 Ω	Ø12.0 x H5.4 mm 1.5 V 75 dB 2048 Hz 50 Ω		

# Piezoelectric Ceramic Buzzer

## Drive Circuit Built-In

<b>PAC-PB-1408-1-P</b>	<b>PAC-PB-2211-P</b>	<b>PAC-PB-2310-P</b>	<b>PAC-PB-2317-P</b>
Ø13.8 x H7.5 mm 12.0 V 80 dB 4000 Hz	Ø22.0 x H10.8 mm 12.0 V 90 dB 4500 Hz	Ø23.0 x H9.8 mm 12.0 V 85 dB 3500 Hz	Ø23.0 x H17.0 mm 12.0 V 90 dB 3700 Hz

# Magnetic Transducer External Drive Circuit

## Washable Type

<b>PAC-WT-1201-P</b>	<b>PAC-WT-1205-P</b>	<b>PAC-WT-1212-P</b>	<b>PAC-WT-1307-P</b>	<b>PAC-WT-1310-P</b>	<b>PAC-WT-1606-P</b>	<b>PAC-WT-1612-P</b>
Ø12.0xH9.5mm 1.5 V 85 dB 2400 Hz 16 Ω	Ø12.0xH9.8mm 5.0 V 87 dB 2400 Hz 47 Ω	Ø12.0xH9.8mm 12.0 V 87 dB 2400 Hz 140 Ω	12.8 x 12.8 x H7.1 mm 5.0 V 85 dB 2400 Hz 47 Ω	12.8 x 12.8 x H10.0 mm 5.0 V 85 dB 2400 Hz 47 Ω	Ø16.0 x H14.0 mm 6.0 V 85 dB 2048 Hz 50 Ω	Ø16.0 x H14.0 mm 12.0 V 85 dB 2048 Hz 115 Ω

# Piezoelectric Ceramic Transducer

## External Drive Circuit

<b>PAC-PT-1203-P</b>	<b>PAC-PT-1303-P</b>	<b>PAC-PT-1307-P</b>	<b>PAC-PT-1403-P</b>	<b>PAC-PT-1407-P</b>
12.0 x 12.0 x H 3.0 mm 3.0 V 75 dB 4000 Hz 16000 pF	Ø13.0 x H2.5 mm 10.0 V 80 dB 4800 Hz 15000 pF	Ø12.6 x H6.9 mm 3.0 V 70 dB 4000 Hz 12000 pF	Ø14.0 x H2.5 mm 9.0 V 80 dB 5200 Hz 9400 pF	Ø13.8 x H6.8 mm 5.0 V 80 dB 4000 Hz 15000 pF
<b>PAC-PT-1625-P</b>	<b>PAC-PT-1704-P</b>	<b>PAC-PT-1707-P</b>	<b>PAC-PT-2207-P</b>	<b>PAC-PT-2211-P</b>
16.0 x 16.0 x H2.5 mm 3.0 V 70 dB 4000 Hz 15000 pF	Ø17.0 x H4.0 mm 3.0 V 75 dB 4000 Hz 15000 pF	Ø17.0 x H7.0 mm 5.0 V 78 dB 4000 Hz 15000 pF	Ø22.0 x H8.0 mm 10.0 V 85 dB 4000 Hz 15000 pF	Ø22.0 x H10.6 mm 3.0 V 80 dB 2000 Hz 19000 pF

<b>PAC-PT-2309-P</b>	<b>PAC-PT-2404-P</b>	<b>PAC-PT-2405-2-P</b>	<b>PAC-PT-2707-P</b>	<b>PAC-PT-4020-P</b>
Ø23.0 x H9.0 mm 10.0 V 85 dB 2048 Hz 24000 pF	Ø24.0 x H4.0 mm 15.0 V 83 dB 5500 Hz 18000 pF	Ø23.7 x H4.6 mm 12 V 90 dB 4800 Hz 20000 pF	26.5 x 22.0 x 7.0 mm 3.0 V 70 dB 2000 Hz 18000 pF	Ø40.0 x H20.0 mm 5.0 V 100 dB 3000 Hz 45000 pF

# Speaker

## Micro Speaker

<b>PAC-SP-1003-1-P</b>	<b>PAC-SP-1303</b>	<b>PAC-SP-1503</b>	<b>PAC-SP-1504</b>	<b>PAC-SP-1603</b>	<b>PAC-SP-1704</b>
Ø10.0 x H2.9 mm 8 Ω 0.3 (0.5) W 80 dB 1400 Hz	Ø13.0 x H3.0 mm 8 Ω 0.2 (0.3) W 81 dB 1050 Hz	Ø15.0 x H3.0 mm 8 Ω 0.5 (0.8) W 86 dB 900 Hz	Ø15.0 x H4.0 mm 8 Ω 0.5 (0.8) W 85 dB 1000 Hz	Ø16.0 x H3.5 mm 8 Ω 0.8 (1.0) W 85 dB 900 Hz	Ø17.0 x H4.0 mm 8 Ω 0.8 (1.0) W 88 dB 1000 Hz

<b>PAC-SP-1510</b>	<b>PAC-SP-1810</b>	<b>PAC-SP-1813</b>	<b>PAC-SP-2004</b>	<b>PAC-SP-2209</b>
15.0 x 10.0 x H4.0 mm 8 Ω 0.8 (1.0) W 85 dB 1400 Hz	18.0 x 10.0 x H4.0 mm 8 Ω 0.8 (1.0) W 86 dB 1250 Hz	15.0 x 10.0 x H4.0 mm 8 Ω 0.8 (1.0) W 85 dB 1400 Hz	Ø20.0 x H4.0 mm 8 Ω 0.5 (1.0) W 90 dB 750 Hz	22.0 x 9.0 x H4.6 mm 8 Ω 0.8 (1.0) W 90 dB 900 Hz

<b>PAC-SP-2005</b>	<b>PAC-SP-2415</b>	<b>PAC-SP-2305-P</b>	<b>PAC-SP-1635</b>	<b>PAC-SP-2040(1)</b>
Ø20.0 x H5.0 mm 8 Ω 0.8 (1.0) W 90 dB 800 Hz	24.0 x 15.0 x H 4.0 mm 8 Ω 0.8 (1.0) W 94 dB 800 Hz	Ø23.0 x H5.0 mm 8 Ω 0.5 (0.8) W 85 dB 500 Hz	35 x 16 x H5.0 mm 8 Ω 1.0 (2.0) W 82 dB 600 Hz	40 x 20 x H8.5 mm 8 Ω 1.0 (1.5) W 86 dB 560 Hz

# Receiver

<b>PAC-RC-1107</b>	<b>PAC-RC-1206</b>	<b>PAC-RC-1506 (1)</b>	<b>PAC-RC-1506 (2)</b>
11.0 x 7.5 x H3.5 mm 32 Ω 10 (20) mW 88 dB 300 ~ 3400 Hz	12.0 x 6.0 x H3.0 mm 32 Ω 10 (20) mW 88 dB 300 ~ 3400 Hz	15.0 x 6.0 x H3.0 mm 32 Ω 10 (20) mW 112 dB 300 ~ 3400 Hz	15.0 x 6.0 x H4.0 mm 32 Ω 10 (20) mW 113 dB 750 ~ 3400 Hz