

Panasonic® Electret Condenser Microphone Cartridge

Consists of a high voltage internal electret membrane, metal electrode and a Field Effect Transistor (FET). Doesn't need a high-voltage bias from the outside like ordinary condenser microphones. **Features:** Highly efficient electrical

specification, pressure type operating principle, low impedance (2.2k Ω), omnidirectional back directivity, and a high degree of reliability under adverse shock, vibration and environmental tests. **Applications:** Telephone and telephone answering

devices, tape recorders, intercoms, computer modems, completed microphones for recording, testing and monitoring, hearing aids, sonic controlled toys and sensors, and others. All buzzers and microphones are non-washable.

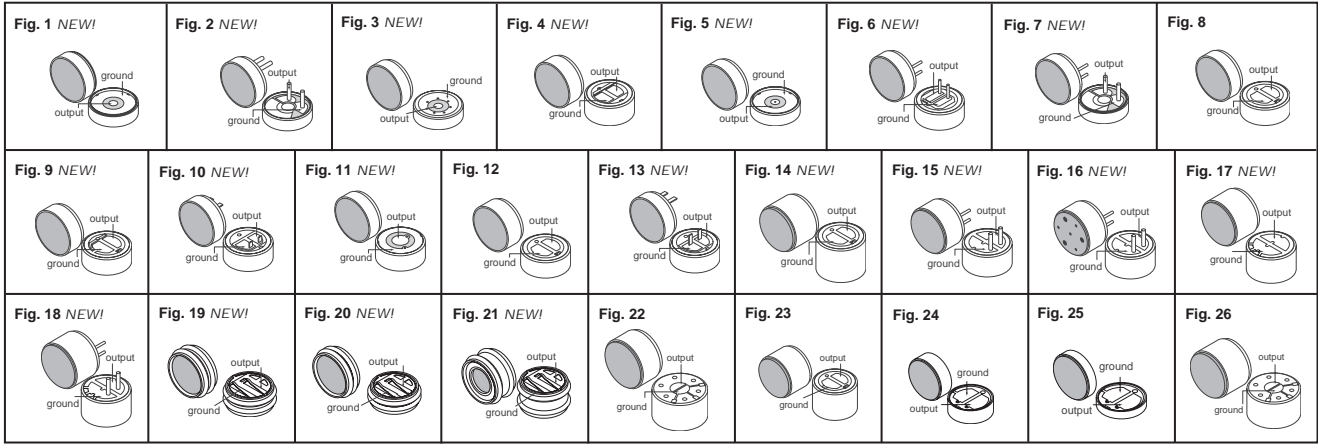
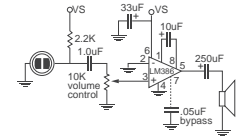


Fig.	Type	Physical Size (mm)	Sensitivity (0dB = 1V/Pa)	Frequency Range (Hz)	Operating Voltage Max./Std.	Current Consumption Max.	Sensitivity Reduction	S/N Ratio	Digi-Key Part No.	Price Each	1	10	100	Panasonic Part No.
1	Omnidirectional	ø6.0 X 1.3	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11957-ND† NEW!	2.83	2.51	2.03	WM-63GCT	
2	Omnidirectional	ø6.0 X 1.3	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11958-ND† NEW!	2.93	2.60	2.10	WM-63GNT	
3	Omnidirectional	ø6.0 X 1.3	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11961-ND NEW!	3.36	2.99	2.42	WM-E3PRT	
4	Omnidirectional	ø6.0 X 1.5	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11962-ND NEW!	2.77	2.46	1.99	WM-E15BT	
4	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11963-ND NEW!	2.04	1.82	1.47	WM-64AT	
4	Omnidirectional	ø6.0 X 2.2	-45dB \pm 4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9955-ND†	2.05	1.82	1.48	WM-64C	
4	Omnidirectional	ø6.0 X 2.2	-45dB \pm 4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9958-ND†	2.03	1.81	1.46	WM-64K	
5	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11964-ND† NEW!	1.99	1.77	1.43	WM-64MCT	
5	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11965-ND† NEW!	2.01	1.79	1.45	WM-64MNT	
6	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11967-ND† NEW!	2.40	2.13	1.72	WM-64PCT	
6	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11968-ND† NEW!	2.41	2.14	1.73	WM-64PKT	
7	Omnidirectional	ø6.0 X 2.2	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11969-ND† NEW!	2.74	2.43	1.97	WM-64PNT	
8	Omnidirectional	ø6.0 X 2.7	-45dB \pm 4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9933-ND	1.69	1.50	1.22	WM-62A	
9	Omnidirectional	ø6.0 X 2.7	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11971-ND NEW!	2.03	1.80	1.46	WM-62CT	
9	Omnidirectional	ø6.0 X 2.7	-45dB \pm 4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9926-ND†	2.04	1.81	1.47	WM-62CC	
9	Omnidirectional	ø6.0 X 2.7	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11972-ND† NEW!	2.03	1.81	1.46	WM-62KT	
10	Omnidirectional	ø6.0 X 2.7	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11973-ND NEW!	2.15	1.91	1.55	WM-62BT	
11	Omnidirectional	ø6.0 X 2.7	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11970-ND† NEW!	2.04	1.81	1.47	WM-62HNT	
12	Omnidirectional	ø6.0 X 3.4	-35dB \pm 4dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>62dB	P9925-ND	1.83	1.63	1.31	WM-61A	
13	Omnidirectional	ø6.0 X 3.4	-35dB \pm 4dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>62dB	P11974-ND NEW!	2.08	1.85	1.50	WM-61BT	
14	Omnidirectional	ø6.0 X 5.0	-44dB \pm 3dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11975-ND NEW!	1.71	1.52	1.23	WM-60AT	
14	Omnidirectional	ø6.0 X 5.0	-42dB \pm 3dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9959-ND	2.64	2.35	1.90	WM-60AY	
15	Omnidirectional	ø9.7 X 4.5	-42dB \pm 3dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1.1V	>60dB	P11977-ND NEW!	1.01	.90	.73	WM-52BH	
15	Omnidirectional	ø9.7 X 4.5	-44dB \pm 3dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1.1V	>60dB	P9970-ND	1.06	.95	.77	WM-52BM	
15	Omnidirectional	ø9.7 X 4.5	-42dB \pm 3dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1.1V	>60dB	P11976-ND NEW!	1.01	.90	.73	WM-52BY	
16	Omnidirectional	ø9.7 X 4.5	-44dB \pm 3dB	20-16k	10V/2.5V	0.6mA	within -3dB @ 2V	>60dB	P11978-ND NEW!	.83	.74	.60	WM-54BM	
16	Omnidirectional	ø9.7 X 4.5	-44dB \pm 3dB	20-16k	10V/2.5V	0.6mA	within -3dB @ 2V	>60dB	P9949-ND	.82	.73	.59	WM-54BT	
17	Omnidirectional	ø9.7 X 6.7	-42dB \pm 3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9956-ND	1.09	.97	.79	WM-034CY	
17	Omnidirectional	ø9.7 X 6.7	-42dB \pm 3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9962-ND*	2.77	2.46	1.99	WM-034CY195M	
17	Omnidirectional	ø9.7 X 6.7	-42dB \pm 3dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1V	>60dB	P11979-ND NEW!	.93	.83	.67	WM-034DH	
18	Omnidirectional	ø9.7 X 6.7	-42dB \pm 3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9931-ND	1.26	1.12	.91	WM-034BY	
18	Omnidirectional	ø9.7 X 6.7	-42dB \pm 3dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1V	>60dB	P11980-ND NEW!	1.63	1.45	1.17	WM-034DBH	
19	Omnidirectional	ø7.7 X 3.0	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11959-ND NEW!	4.78	4.24	3.43	WM-63GNT330	
20	Omnidirectional	ø7.5 X 2.4	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11960-ND NEW!	5.01	4.44	3.59	WM-63GNT335	
21	Omnidirectional	ø7.7 X 4.0	-44dB \pm 3dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P11966-ND NEW!	3.76	3.34	2.70	WM-64MNT330A	
22	Unidirectional	ø9.7 X 5.0	-47dB \pm 4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>60dB	P9961-ND	2.58	2.30	1.86	WM-55A103	
22	Unidirectional	ø9.7 X 5.0	-50dB \pm 4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9963-ND	1.86	1.66	1.34	WM-56A103	
23	Unidirectional	ø9.0 X 5.0	-50dB \pm 4dB	100-12k	10V/2V	0.5mA	within -3dB @ 1.5V	>55dB	P9964-ND	2.08	1.85	1.50	WM-65A103	
24	Noise Canceling	ø6.0 X 2.7	-51dB \pm 4.5dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9896-ND	1.95	1.74	1.40	WM-66D103	
24	Noise Canceling	ø6.0 X 2.7	-45dB \pm 4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9968-ND†	2.48	2.20	1.78	WM-66DC103	
25	Noise Canceling	ø6.0 X 2.2	-51dB \pm 4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9973-ND	2.19	1.95	1.58	WM-67D103	
26	Noise Canceling	ø9.7 X 5.0	-54dB \pm 4dB	100-10k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9897-ND	2.66	2.37	1.91	WM-55D103	

* Has 18mm long leads. † With built-in cap.

Microphone Holders

Fig.	Digi-Key Part No.	Price Each	1	10	100	500	Panasonic Part No.	Use With Panasonic Part No.
1	P9950-ND	.59	.50	.39	.28	.28	M3CA0208A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
2	P9952-ND	.59	.50	.39	.28	.28	M3CA0207A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
3	P9974-ND	.59	.50	.39	.28	.28	YPM-CH022A44	WM-034 Series
4	P9953-ND	.59	.50	.39	.28	.28	M3CA0082A4	WM-034 Series
5	P9968-ND	.51	.44	.34	.24	.24	YPMCH008	WM-034 Series
6	P9899-ND	.59	.50	.39	.28	.28	YPM-CH009A44	WM-034 Series
7	P9898-ND	.59	.50	.39	.28	.28	YPM-CH021A44	WM-063T, WM60AT, WM60AY, WM65A103

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