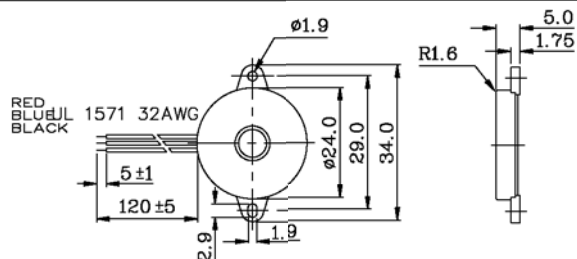


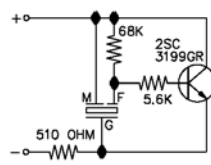
KPE-121



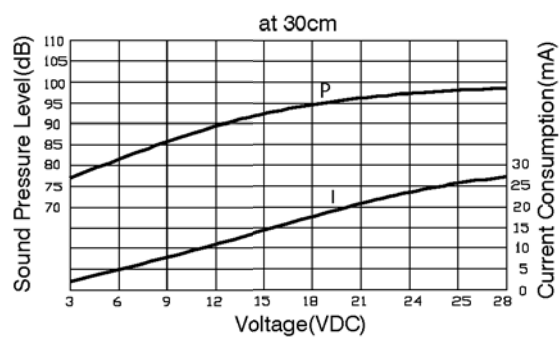
Rated Frequency (Hz)	4,500 ± 500
Operating Voltage Range (VDC)	3 ~ 28
Current Consumption (mA)	Max. 13@12VDC
Sound Pressure Level (dB)	Min. 83dB@30cm@12VDC
Tone	Continuous
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	7.4
Material	ABS UL-94 1/16" HB High Heat (Black)



The current consumption and the sound pressure level are measured by using the recommended driving circuit shown in the right.



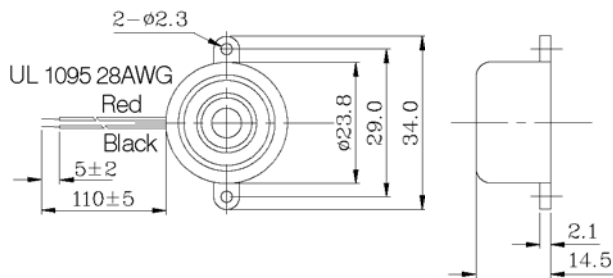
Tol : ±0.5 Unit : mm



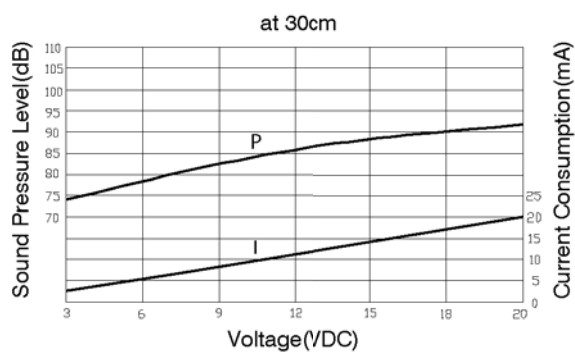
KPE-200



Rated Frequency (Hz)	3,100 ± 500
Operating Voltage Range (VDC)	3 ~ 20
Current Consumption (mA)	Max. 14@12VDC
Sound Pressure Level (dB)	Min. 73dB@30cm@12VDC
Tone	Continuous
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	4.5
Material	ABS UL-94 1/16" HB High Heat (Black)



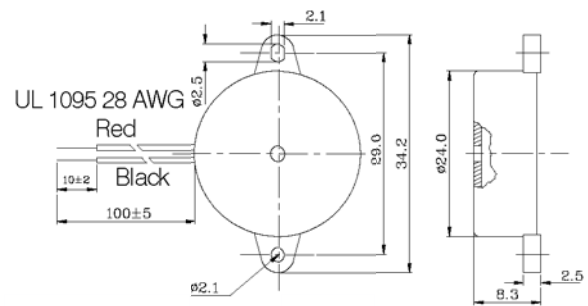
Tol: ±0.5 Unit: mm



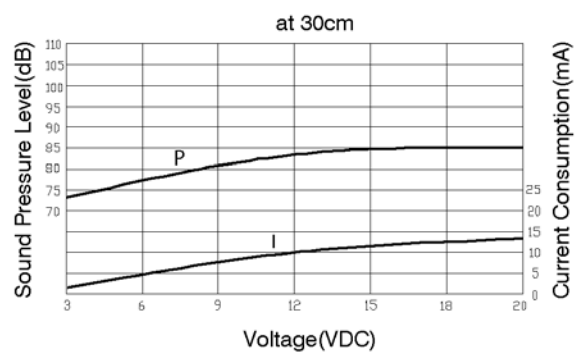
KPE-220



Rated Frequency (Hz)	2,700 ± 500
Operating Voltage Range (VDC)	3 ~ 20
Current Consumption (mA)	Max. 10@12VDC
Sound Pressure Level (dB)	Min. 76dB@30cm@12VDC
Tone	Continuous
Operating Temperature (°C)	-20 ~ +60
Storage Temperature (°C)	-30 ~ +70
Weight (Gram)	5.0
Material	Case: ABS PA-766 V0 (Black) PCB: XPC 94V0



Tol: ±0.5 Unit: mm



Shape

**KPE-250
KPE-250H**



Shape

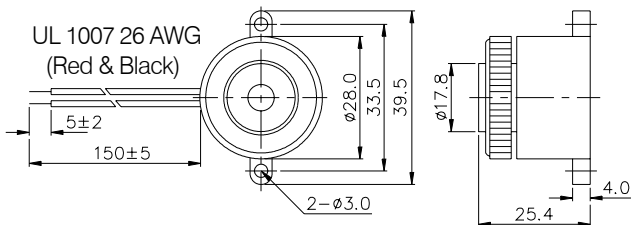
KPE-251



Model Number	KPE-250	KPE-250H
Rated Frequency (Hz)	3,500 ± 500	
Operating Voltage Range (VDC)	3 ~ 28	8 ~ 18
Current Consumption (mA)	Max. 6@12VDC	Max. 14@12VDC
Sound Pressure Level (dB)	Min. 85dB@30cm@12VDC	Min. 94dB@30cm@12VDC
Tone	Continuous	
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	9.5	
Material	ABS UL-94 1/16" HB High Heat (Black)	

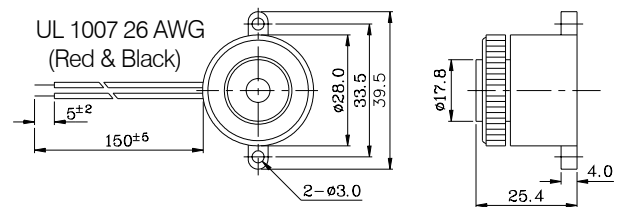
Model Number	KPE-251
Rated Frequency (Hz)	3,500 ± 500
Operating Voltage Range (VDC)	4 ~ 28
Current Consumption (mA)	Max. 5@12VDC
Sound Pressure Level (dB)	Min. 82dB@30cm@12VDC
Tone	Fast Pulse (3.0Hz±20%)@12VDC
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	10.1
Material	ABS UL-94 1/16" HB High Heat (Black)

Dimension



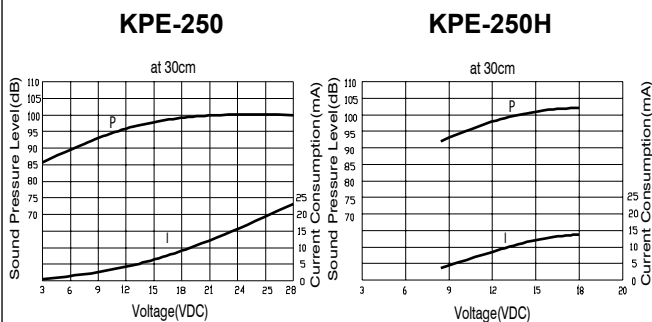
Tol : ±0.5 Unit : mm

Dimension

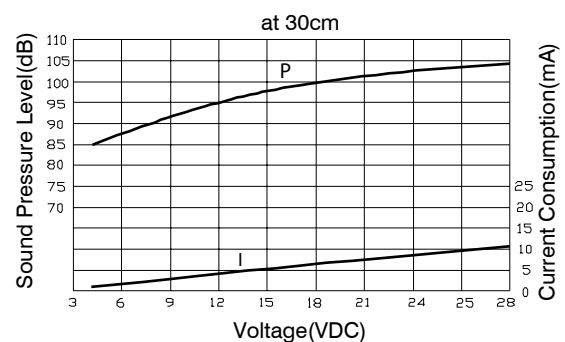


Tol : ±0.5 Unit : mm

Characteristic



Characteristic



PIEZO INDICATOR (Wire Type)

A

Shape

KPE-253



Shape

KPE-262
KPE-263

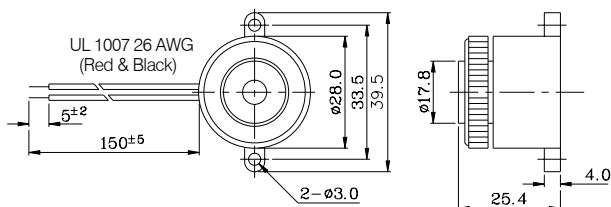
New



Model Number	KPE-253
Rated Frequency (Hz)	3,500 ± 500
Operating Voltage Range (VDC)	4 ~ 28
Current Consumption (mA)	Max. 6@12VDC
Sound Pressure Level (dB)	Min. 87dB@30cm@12VDC
Tone	Slow Pulse (1.2Hz±20%)@12VDC
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	10.2
Material	ABS UL-94 1/16" HB High Heat (Black)

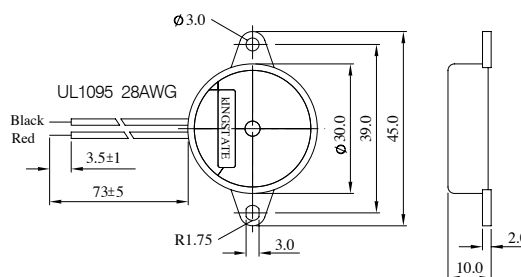
Model Number	KPE-262	KPE-263
Rated Frequency (Hz)	2,500 ± 500	3,500 ± 500
Operating Voltage Range (VDC)	3 ~ 30	
Current Consumption (mA)	Max. 13@9VDC	Max. 11@9VDC
Sound Pressure Level (dB)	Min. 85@30cm@9VDC	
Tone	Continuous	
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40~+90	
Weight (Gram)	6.0	
Material	PBT+15%GLASS (BLACK)	

Dimension



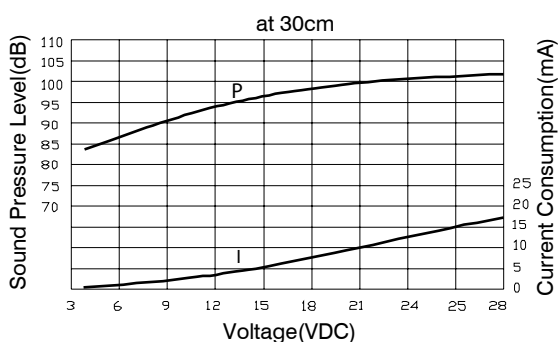
Tol : ±0.5 Unit : mm

Dimension

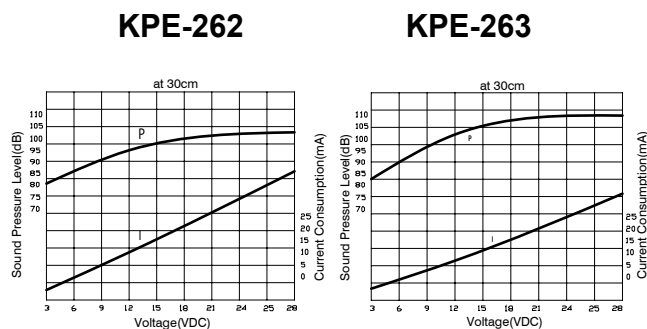


Tol : ±0.5 Unit : mm

Characteristic



Characteristic



KPE-260 KPE-260H

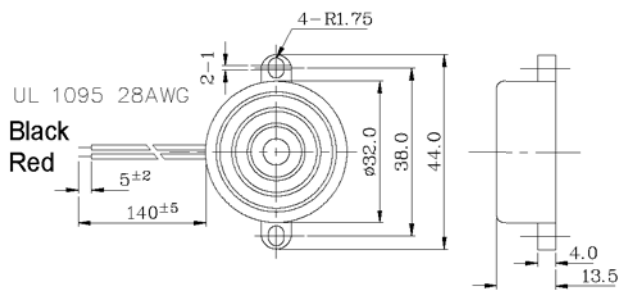


Rated Frequency (Hz)	3,500 ± 500	
Operating Voltage Range (VDC)	3 ~ 28	8 ~ 18
Current Consumption (mA)	Max. 4@12VDC	Max. 12@12VDC
Sound Pressure Level (dB)	Min. 85dB@30cm@12VDC	Min. 92dB@30cm@12VDC
Tone	Continuous	
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	8.0	10.0
Material	ABS UL-94 1/16" HB High Heat (Black)	

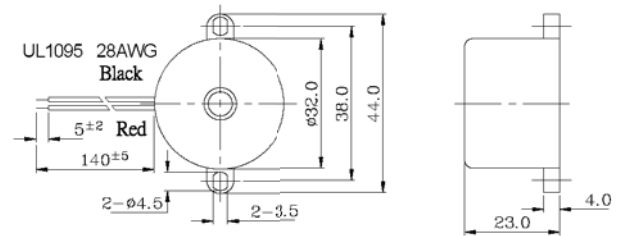
KPE-280



Frequency Range (Hz)	2,500 ~ 3,800
Operating Voltage Range (VDC)	6 ~ 18
Current Consumption (mA)	Max. 17@12VDC
Sound Pressure Level (dB)	Min. 88dB@30cm@12VDC
Tone	High / Low
Operating Temperature (°C)	-20 ~ +60
Storage Temperature (°C)	-30 ~ +70
Weight (Gram)	13.2
Material	ABS UL-94 1/16" HB (Black)



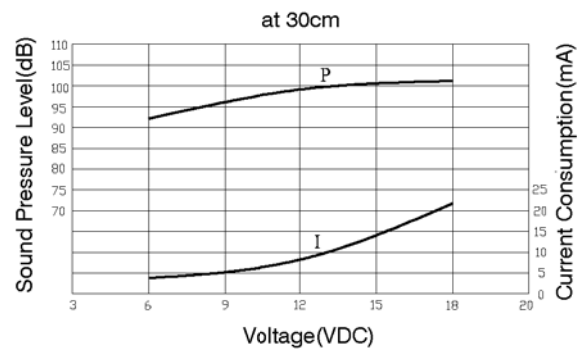
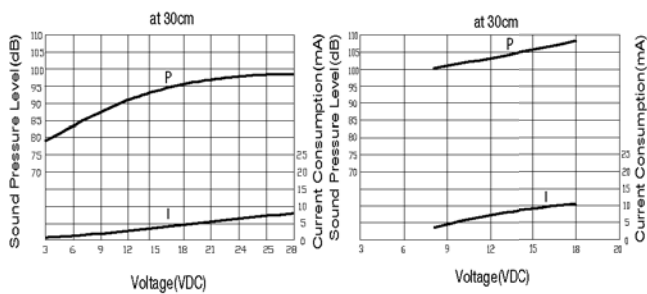
Tol : ±0.5 Unit : mm



Tol : ±0.5 Unit : mm

KPE-260

KPE-260H



KPE-270
KPE-270H

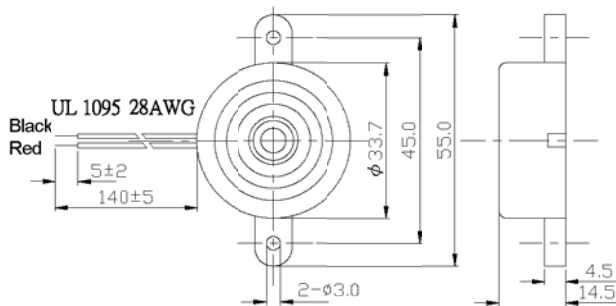


Rated Frequency (Hz)	3,500 ± 500	
Operating Voltage Range (VDC)	3 ~ 20	8 ~ 18
Current Consumption (mA)	Max. 5@12VDC	Max. 12@12VDC
Sound Pressure Level (dB)	Min. 86dB@30cm@12VDC	Min. 96dB@30cm@12VDC
Tone	Continuous	
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	7.0	
Material	ABS UL-94 1/16" HB High Heat (Black)	

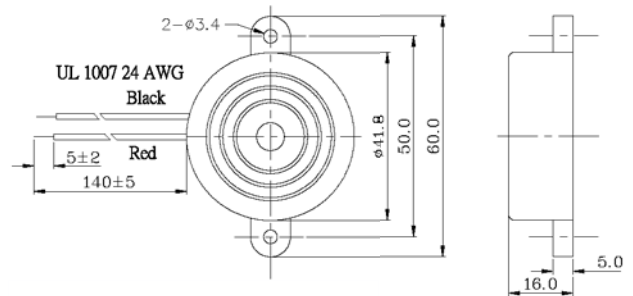
KPE-350
KPE-350H



Rated Frequency (Hz)	2,800 ± 500	
Operating Voltage Range (VDC)	3 ~ 28	8 ~ 18
Current Consumption (mA)	Max. 7@12VDC	Max. 15@12VDC
Sound Pressure Level (dB)	Min. 85dB@30cm@12VDC	Min. 95dB@30cm@12VDC
Tone	Continuous	
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	14.6	
Material	ABS UL-94 1/16" HB High Heat (Black)	



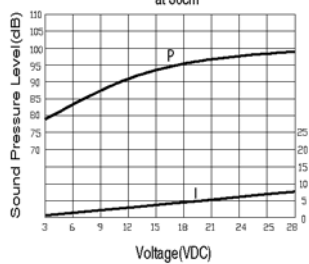
Tol:±0.5 Unit : mm



Tol:±0.5 Unit : mm

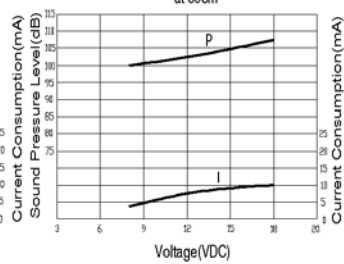
KPE-270

at 30cm



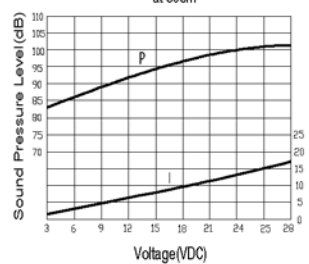
KPE-270H

at 30cm



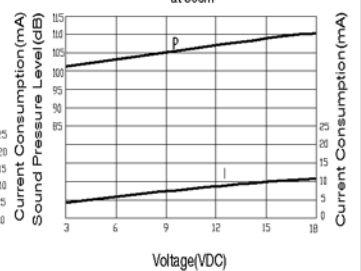
KPE-350

at 30cm



KPE-350H

at 30cm



KPE-351 **KPE-351H**

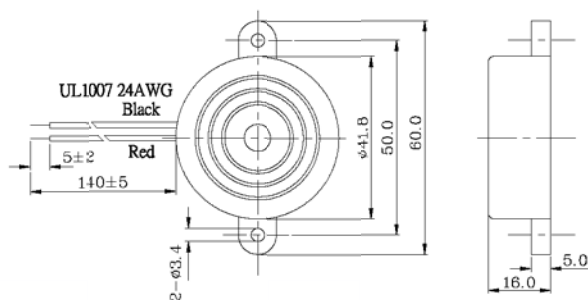


KPE-353 **KPE-353H**

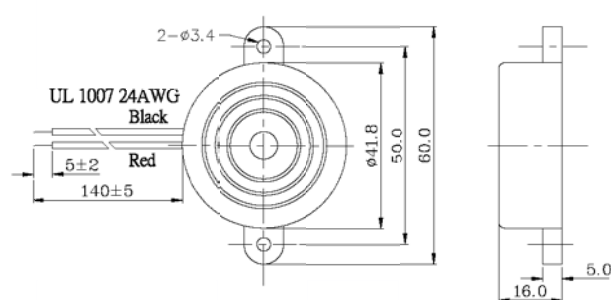


Rated Frequency (Hz)	2,800 ± 500	
Operating Voltage Range (VDC)	3 ~ 28	7 ~ 18
Current Consumption (mA)	Max. 6@12VDC	Max. 15@12VDC
Sound Pressure Level (dB)	Min. 81dB@30cm@12VDC	Min. 93dB@30cm@12VDC
Tone	Fast Pules@12VDC, (3.5Hz±20%)	Fast Pules@12VDC, (3.0Hz±20%)
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	14.6	
Material	ABS UL-94 1/16" HB High Heat (Black)	

Rated Frequency (Hz)	2,800 ± 500	
Operating Voltage Range (VDC)	3 ~ 28	7 ~ 18
Current Consumption (mA)	Max. 8@12VDC	Max. 15@12VDC
Sound Pressure Level (dB)	Min. 81dB@30cm@12VDC	Min. 93dB@30cm@12VDC
Tone	Slow Pulse@12VDC (1.5Hz±20%)	Slow Pulse@12VDC (1.2Hz±20%)
Operating Temperature (°C)	-30 ~ +85	
Storage Temperature (°C)	-40 ~ +95	
Weight (Gram)	14.6	
Material	ABS UL-94 1/16" HB High Heat (Black)	



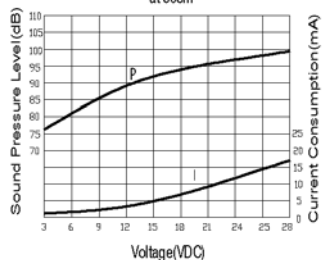
Tol:±0.5 Unit: mm



Tol:±0.5 Unit: mm

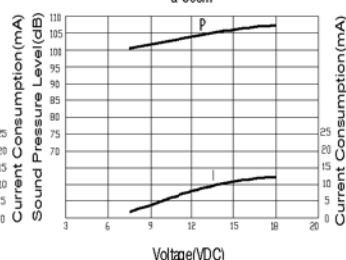
KPE-351

at 30cm



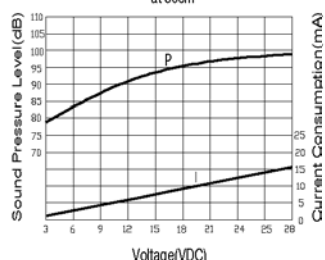
KPE-351H

at 30cm



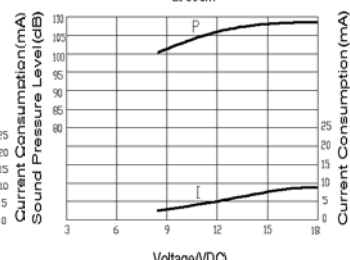
KPE-353

at 30cm



KPE-353H

at 30cm



Shape

KPE-420



Shape

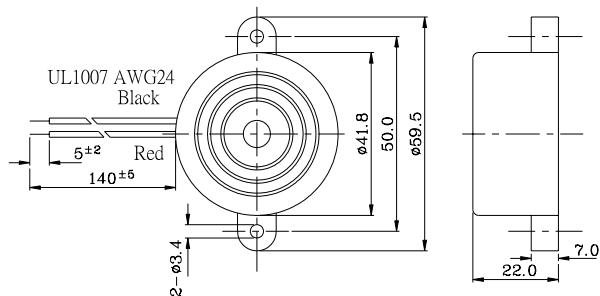
KPE-960 KPE-980



Model Number	KPE-420
Rated Frequency (Hz)	2,800 ± 500
Operating Voltage Range (VDC)	3 ~ 16
Current Consumption (mA)	Max. 40@12VDC
Sound Pressure Level (dB)	Min. 102dB@30cm@12VDC
Tone	Continuous
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	17.4
Material	ABS UL-94 1/16" HB (Black)

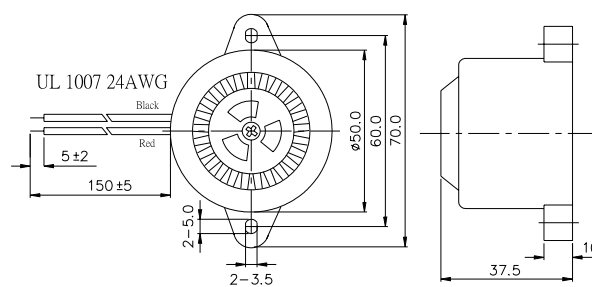
Model Number	KPE-960	KPE-980
Rated Frequency (Hz)	2,500 ± 500	1,100 ~ 2,800
Operating Voltage Range (VDC)	3 ~ 16	3 ~ 16
Current Consumption (mA)	Max. 58@12VDC	Max. 120@12VDC
Sound Pressure Level (dB)	Min. 100dB@30cm@12VDC	Min. 100dB@30cm@12VDC
Tone	Continuous	High/Low@12VDC
Operating Temperature (°C)	-30 ~ +80	
Storage Temperature (°C)	-40 ~ +80	
Weight (Gram)	35.0	49.0
Material	ABS UL-94 1/16" HB (Black)	

Dimension



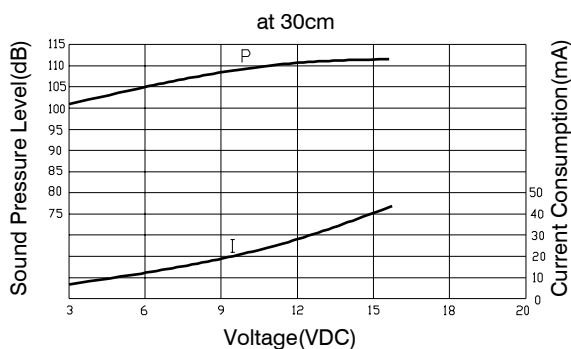
Tol: ±0.5 Unit: mm

Dimension

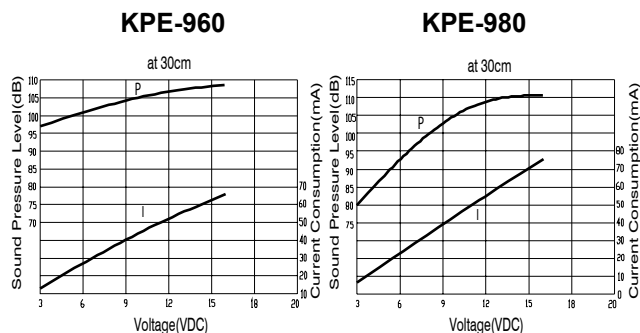


Tol: ±0.5 Unit: mm

Characteristic



Characteristic



Shape

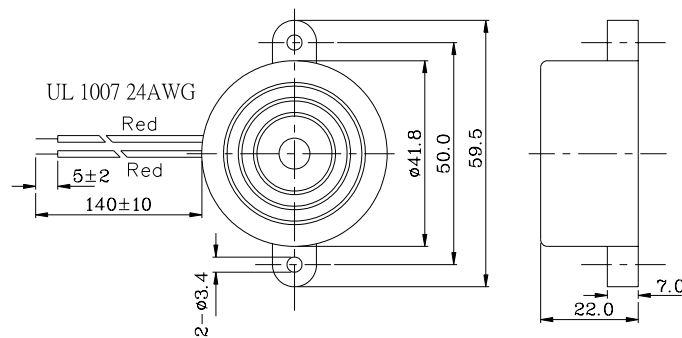
KPE-400AC
KPE-411AC
KPE-422AC



A

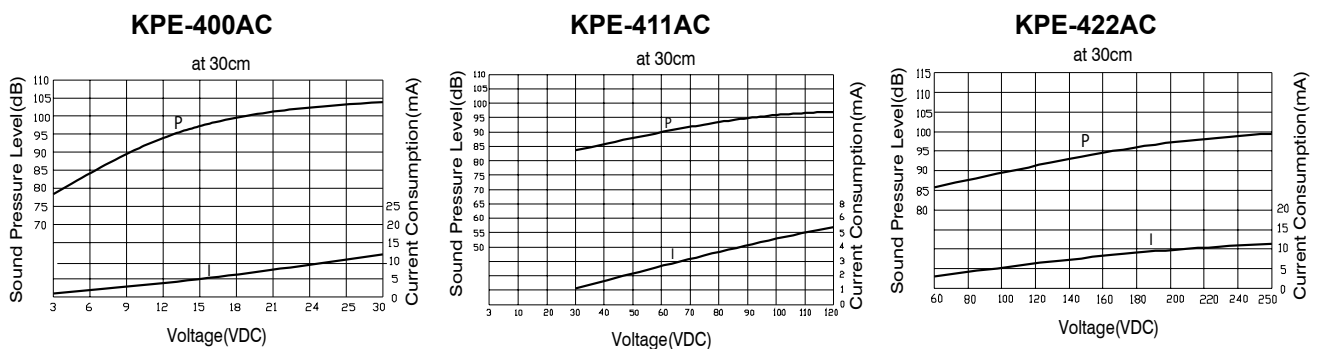
Model Number	KPE-400AC	KPE-411AC	KPE-422AC
Resonant Frequency (Hz)	3,100 ± 500	2,800 ± 500	3,000 ± 500
Operating Voltage (VDC)	3 ~ 30 AC / DC non-polar	30 ~ 120 AC / DC non-polar	60 ~ 250 AC / DC non-polar
Current Consumption (mA)	Max. 8@12VAC	Max. 7@110VAC	Max. 13@220VAC
Sound Pressure Level (dB)	Min. 89dB@30cm@12VAC	Min. 88dB@30cm@110VAC	Min. 92dB@30cm@220VAC
Tone	Continuous		
Operating Temperature (°C)	-30 ~ +85		
Storage Temperature (°C)	-40 ~ +95		
Weight (Gram)	15.7	22.2	22.5
Material	ABS UL-94 1/16" HB (Black)		

Dimension



Tol : ±0.5 Unit : mm

Characteristic



PIEZO INDICATOR

(Panel Mounting Type)

A

Model No. (Quick disconnected tab)	Rated Frequency ±500(Hz)	Tone	Minimum Sound Pressure Level at 30 cm		Operating Voltage Range *AC/DC Non-polar All others DC only		Current Consumption (mA)		Case Style		Packing Quantity (Pcs/Box)
			At Min V	At Max V	Min V	Max V	At Min V	At Max V	Side View	Bottom View	
KPE-650	2800	Continuous	84	97	4	28	2	22	D	3	40
KPE-651	2900	Fast Pulse	70	82	6	28	2	11	D	4	40
KPE-653	2900	Slow Pulse	71	82	6	28	2	11	D	4	40
KPE-655	2800	Continuous + Fast Pulse	76/74	88/86	6	28	4/2	16/16	D	5	40
KPE-657	2800	Continuous + Slow Pulse	78/71	92/87	6	28	3/2	18/11	D	5	40
KPE-650A	2800	Continuous	88	98	6	28	5	22	D	3	40
KPE-651A	2800	Fast Pulse	80	97	6	28	2	12	D	4	40
KPE-653A	2800	Slow Pulse	80	92	6	28	4	32	D	4	40
KPE-655A	2800	Continuous + Fast Pulse	82/76	92/86	6	28	3/2	29/26	D	5	40
KPE-657A	2800	Continuous + Slow Pulse	84/77	97/92	6	28	5/3	17/18	D	5	40
KPE-650AN	2800	Continuous	70/70	87/87	*4	28	2/1	18/12	D	3	40
KPE-651AN	2800	Fast Pulse	70/67	85/83	*6	28	5/4	23/18	D	4	40
KPE-653AN	2800	Slow Pulse	70/67	85/83	*6	28	5/4	23/18	D	4	40
KPE-610AN	2800	Continuous	79/78	90/89	*30	120	4/3	15/14	D	3	40
KPE-611AN	2800	Fast Pulse	70/68	86/84	*30	120	5/5	20/17	D	4	40
KPE-613AN	2800	Slow Pulse	70/68	86/84	*30	120	5/5	20/17	D	4	40
KPE-648	2800	Continuous	66	86	10	48	3	16	D	3	40
KPE-620AN	2800	Continuous	76/75	87/86	*60	250	1/1	18/7	E	3	40
KPE-621AN	2800	Fast Pulse	68/68	77/77	*60	250	4/4	5/5	E	4	40
KPE-623AN	2800	Slow Pulse	71/72	85/86	*60	250	3/4	14/15	E	4	40
KPE-660	1500 ~ 4000	Siren	92	99	6	15	60	160	E	3	40
KPE-680	2000 / 2800	Hi-Low	74	99	6	15	10	90	E	3	40

KPE-650 series fit 1.125 inch (28.57 mm) diameter opening in panels to 0.125 inch (3.17 mm) thick.
Pulse Rate at 12 VDC: 3.0 ± 20% Hz (Fast pulse) 1.2 ± 20% Hz (Slow pulse)

Shape



KPE-650/650A
KPE-650AN/610AN
KPE-648



KPE-651/653
KPE-651A/653A
KPE-651AN/653AN
KPE-611AN/613AN



KPE-655/657
KPE-655A/657A

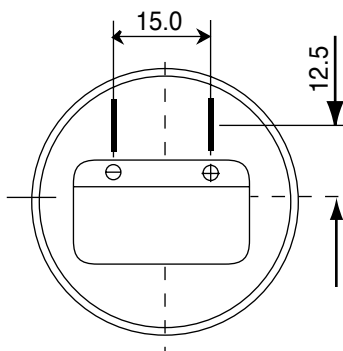


KPE-620AN
KPE-660/680

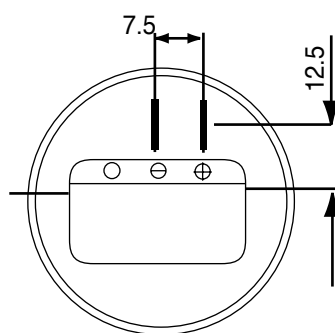


KPE-621AN
KPE-623AN

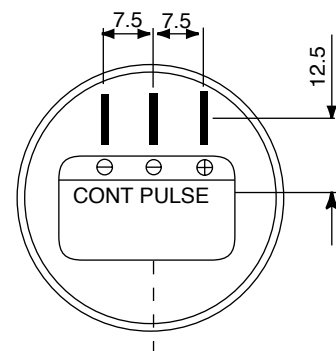
Dimension



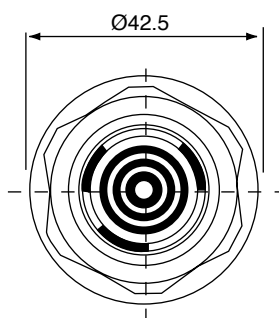
Bottom View 3



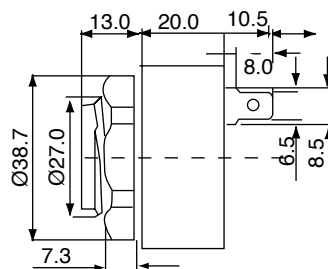
Bottom View 4



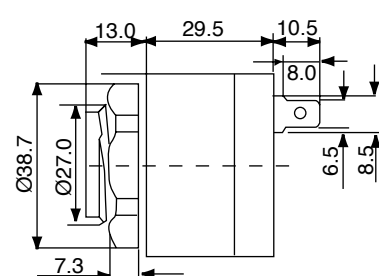
Bottom View 5



Top View



Side View D



Side View E

Tolerance: $\pm 0.5\text{mm}$ Unit: mm

PIEZO INDICATOR

(Panel Mounting Type)

A

Model No. (with tin-plated tapped screw)	Rated Frequency ±500(Hz)	Tone	Minimum Sound Pressure Level at 30 cm		Operating Voltage Range *AC/DC Non-polar All others DC only		Current Consumption (mA)		Case Style		Packing Quantity (Pcs/Box)
			At Min V	At Max V	Min V	Max V	At Min V	At Max V	Side View	Bottom View	
KPE-650S	2800	Continuous	84	98	4	28	2	22	A	1	40
KPE-651S	2900	Fast Pulse	70	82	6	28	2	11	A	1	40
KPE-653S	2900	Slow Pulse	70	83	6	28	2	11	A	1	40
KPE-655S	2900	Continuous + Fast Pulse	77/74	87/86	6	28	4/2	17/17	B	2	40
KPE-657S	2800	Continuous + Slow Pulse	78/71	91/87	6	28	3/2	18/16	B	2	40
KPE-650SA	2800	Continuous	88	98	6	28	5	22	A	1	40
KPE-651SA	2800	Fast Pulse	80	97	6	28	2	12	A	1	40
KPE-653SA	2800	Slow Pulse	80	93	6	28	4	32	A	1	40
KPE-655SA	2800	Continuous + Fast Pulse	82/76	92/86	6	28	3/2	28/26	B	2	40
KPE-657SA	2800	Continuous + Slow Pulse	84/76	97/91	6	28	5/3	18/18	B	2	40
KPE-650SAN	2800	Continuous	70/69	87/86	*4	28	2/1	18/12	A	1	40
KPE-651SAN	2800	Fast Pulse	69/67	85/78	*6	28	5/4	23/18	A	1	40
KPE-653SAN	2800	Slow Pulse	69/67	85/83	*6	28	5/4	23/18	A	1	40
KPE-610SAN	2800	Continuous	79/78	90/89	*30	120	4/3	15/14	A	1	40
KPE-611SAN	2800	Fast Pulse	69/67	85/84	*30	120	5/5	20/17	A	1	40
KPE-613SAN	2800	Slow Pulse	69/67	86/84	*30	120	5/5	20/16	A	1	40
KPE-648S	2800	Continuous	66	86	10	48	3	16	A	1	40
KPE-620SAN	2800	Continuous	76/78	87/86	*60	250	2/1	18/17	C	1	40
KPE-621SAN	2800	Fast Pulse	68/68	77/77	*60	250	3/3	15/15	C	1	40
KPE-623SAN	2800	Slow Pulse	68/67	86/84	*60	250	4/3	16/4	C	1	40
KPE-660S	1500 ~ 4000	Siren	92	99	6	15	60	100	C	1	40
KPE-680S	2000 / 2800	Hi-Low	86	96	6	15	18	65	C	1	40

KPE-650S series fit 1.125 inch (28.57 mm) diameter opening in panels to 0.125 inch (3.17 mm) thick.
Pulse Rate at 12 VDC: 3.0 ± 20% Hz (Fast pulse) 1.2 ± 20% Hz (Slow pulse)

Shape



KPE-650S/651S/653S
KPE-650SA/651SA/653SA
KPE-650SAN/651SAN/653SAN
KPE-610SAN/611SAN/613SAN
KPE-648S

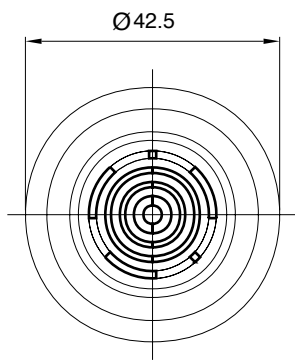


KPE-655S/657S
KPE-655SA/657SA

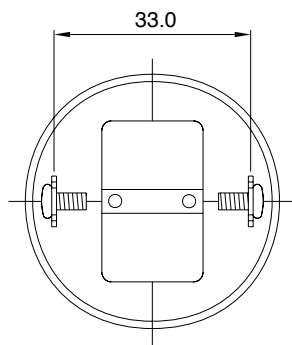


KPE-620SAN/621SAN/623SAN
KPE-660S/680S

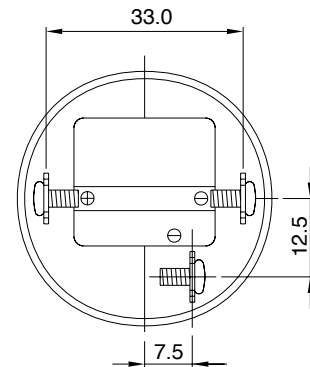
Dimension



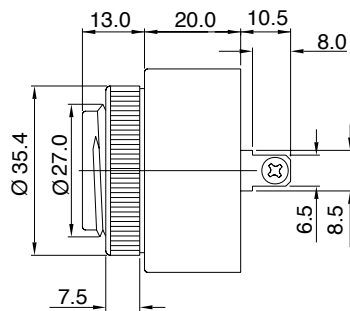
Top View



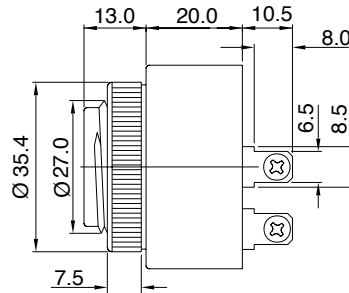
Bottom View 1



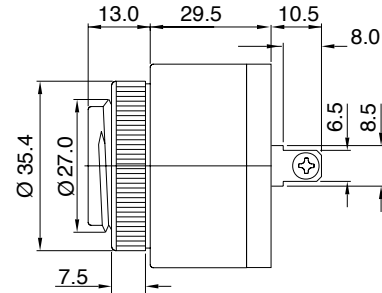
Bottom View 2



Side View A



Side View B



Side View C

Tolerance: $\pm 0.5\text{mm}$ Unit: mm

PIEZO INDICATOR

(Panel Mounting Type)

A

Model No.	Rated Frequency ±500(Hz)	Tone	Minimum Sound Pressure Level at 30 cm		Operating Voltage Range (VDC)		Current Consumption (mA)		Case Style		Packing Quantity (Pcs/Box)
			At Min V	At Max V	Min V	Max V	At Min V	At Max V	Side View	Bottom View	
KPE-750	3600	Continuous	70	85	4	28	2	15	F	6	50
KPE-751	3600	Fast Pulse	72	87	6	28	1	14	F	7	50
KPE-753	3600	Slow Pulse	76	92	6	28	2	17	F	7	50
KPE-755	3600	Continuous + Fast Pulse	80/75	97/87	6	28	3/2	15/13	F	8	50
KPE-757	3600	Continuous + Slow Pulse	78/75	88/87	6	28	3/3	16/14	F	8	50
KPE-750S	3600	Continuous	70	86	4	28	2	16	G	9	50
KPE-751S	3600	Fast Pulse	72	87	6	28	1	14	G	9	50
KPE-753S	3600	Slow Pulse	76	92	6	28	2	17	G	9	50
KPE-755S	3600	Continuous + Fast Pulse	79/75	92/87	6	28	3/2	16/13	H	10	50
KPE-757S	3600	Continuous + Slow Pulse	78/75	88/87	6	28	3/3	16/14	H	10	50
KPE-750P	3600	Continuous	72	88	4	28	1	15	I	11	50
KPE-751P	3600	Fast Pulse	72	87	6	28	1	14	I	11	50
KPE-753P	3600	Slow Pulse	76	92	6	28	2	17	I	11	50
KPE-755P	3600	Continuous + Fast Pulse	80/75	92/87	6	28	3/2	15/14	J	12	50
KPE-757P	3600	Continuous + Slow Pulse	78/75	88/87	6	28	3/3	15/14	J	12	50
KPE-750A	3600	Continuous	76	101	0.7	15	1	14	F	6	50
KPE-750SA	3600	Continuous	76	101	0.7	15	1	14	G	9	50
KPE-750PA	3600	Continuous	76	101	0.7	15	1	14	I	11	50

KPE-750 series fit 1.125 inch diameter opening in panels to 0.50" thick.
Or PC board mounting.

Shape



KPE-750
KPE-750A



KPE-751
KPE-753



KPE-755
KPE-757



KPE-750S/751S
KPE-753S/750SA



KPE-755S
KPE-757S

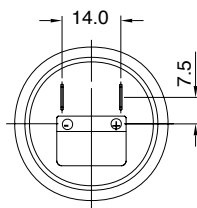


KPE-750P/751P
KPE-753P/750PA

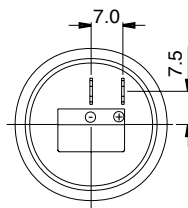


KPE-755P
KPE-757P

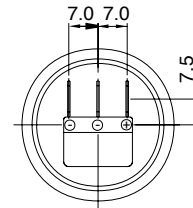
Dimension



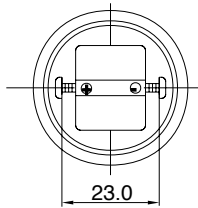
Bottom View 6



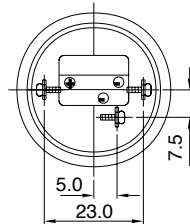
Bottom View 7



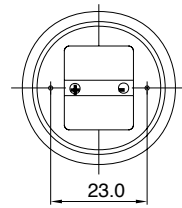
Bottom View 8



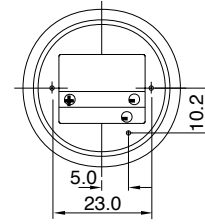
Bottom View 9



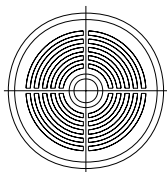
Bottom View 10



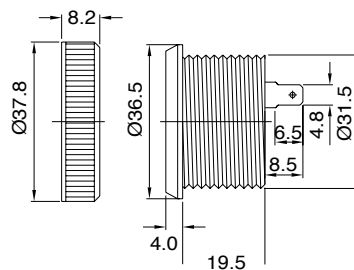
Bottom View 11



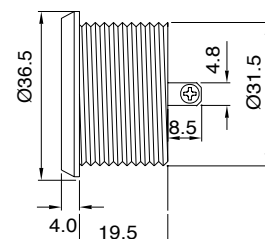
Bottom View 12



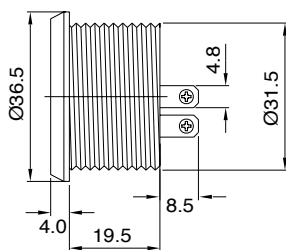
Top View



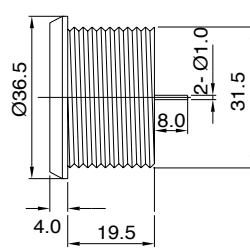
Side View F



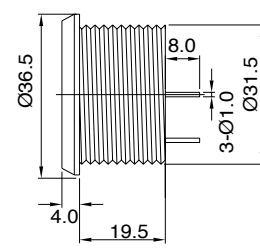
Side View G



Side View H



Side View I



Side View J

Tolerance: $\pm 0.5\text{mm}$

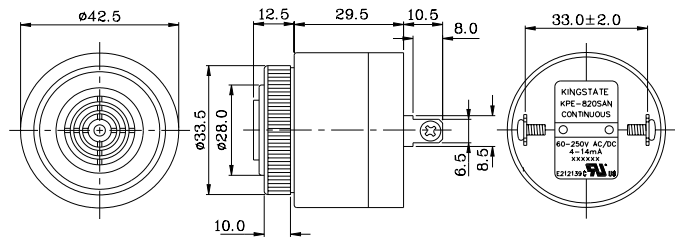
Unit: mm

A

Shape



Dimension



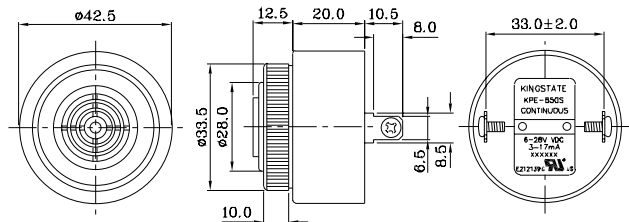
Tol : ± 0.5 Unit : mm

Model No. (with tin-plated tapped screw)	Resonant Frequency ± 500 (Hz)	Operating Voltage *AC/DC Non-polar All others DC only	Max. Current Consumption (mA)		Min. Sound Pressure Level at 60cm (dB)		Tone	Mounting Method	Loudness Category
			At Min V	At Max V	Min V	Max V			
KPE-820SAN	2800	*60-250V	6	25	68	80	Continuous	Panel	Medium
KPE-821SAN	2800	*60-250V	6	25	68	78	Fast Pulse	Panel	Medium
KPE-823SAN	2800	*60-250V	5	25	68	80	Slow Pulse	Panel	Medium

Shape



Dimension



Tol : ± 0.5 Unit : mm

Model No. (with tin-plated tapped screw)	Resonant Frequency ± 500 (Hz)	Operating Voltage *AC/DC Non-polar All others DC only	Max. Current Consumption (mA)		Min. Sound Pressure Level at 60cm (dB)		Tone	Mounting Method	Loudness Category
			At Min V	At Max V	Min V	Max V			
KPE-848S	2800	10-48V	2.5	11	68	80	Continuous	Panel	Medium
KPE-850S	2800	6-28V	4	22	68	80	Continuous	Panel	Medium
KPE-851S	2800	6-28V	2	15	68	80	Fast Pulse	Panel	Medium
KPE-853S	2800	6-28V	3	30	68	80	Slow Pulse	Panel	Medium
KPE-810SAN	2800	* 30-120V	5	25	68	80	Continuous	Panel	Medium
KPE-811SAN	2800	* 30-120V	6	25	68	80	Fast Pulse	Panel	Medium
KPE-813SAN	2800	* 30-120V	6	25	68	80	Slow Pulse	Panel	Medium
KPE-850SAN	2800	* 6-28V	5	22	68	80	Continuous	Panel	Medium
KPE-851SAN	2800	* 6-28V	5	26	68	80	Fast Pulse	Panel	Medium
KPE-853SAN	2800	* 6-28V	5	28	68	84	Slow Pulse	Panel	Medium
KPE-850SH	2900	7-18V	8	32	80	95	Continuous	Panel	Loud
KPE-851SH	2900	7-18V	8	32	80	95	Fast Pulse	Panel	Loud
KPE-853SH	2900	7-18V	8	32	80	95	Slow Pulse	Panel	Loud
KPE-848SD	1900	10-48V	8	29	60	75	Continuous	Panel	Medium
KPE-850SD	1900	6-28V	8	29	60	75	Continuous	Panel	Medium
KPE-810SAND	1900	* 30-120V	8	29	60	75	Continuous	Panel	Medium
KPE-850SCP	2900	6-16V	4	12	68	78	Chime	Panel	Medium

KPE-850 series fit 1.125 inch (28.57mm) diameter opening in panels to 0.125 inch (3.17mm) thick.

Pulse Rate at 12 VDC : $3.0 \pm 20\%$ Hz (Fast pulse) $1.2 \pm 20\%$ Hz (Slow pulse)

Volume Controllable

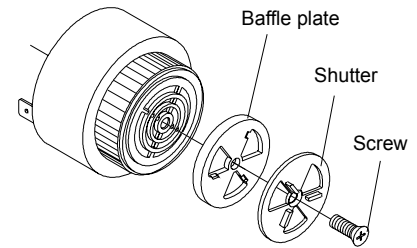
This volume control offers variable attenuation from 0 to 10 dB typically from sound pressure level shown in the specification. It can be assembled with any KPE-810, 820, 840, 850S series and an abbreviation "R" will be added on the model number to distinguish.

Features:

- UL Recognition
- Volume Controllable
- Various types of tones are available
- Case made from nylon UL-94V-0

Application:

- Medical Equipment
- Automatic Control System
- Transportation Control
- Automobile

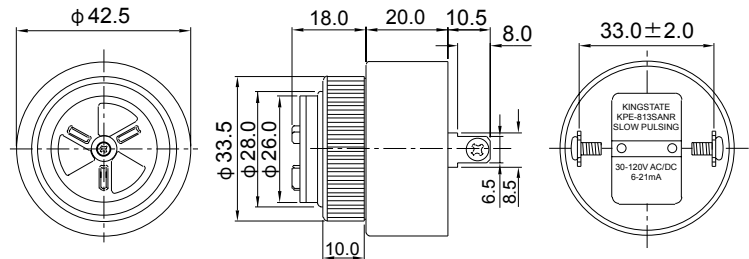


Anatomization process

Shape



Dimension



Sample of Piezo Audio Indicator with
Volume control-KPE-813SANR

Tol : ±0.5 Unit : mm

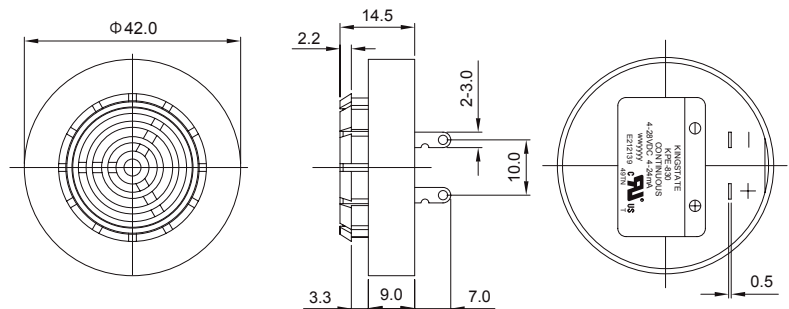
Piezo Audio Indicator



Shape



Dimension



Tol : ±0.5 Unit : mm

Model No. (with pc pins)	Resonant Frequency ±500(Hz)	Operating Voltage	Current Consumption (mA)		Sound Pressure Level at 60cm (dB)		Tone	Mounting Method	Loudness Category
			At Min V	At Max V	Min V	Max V			
KPE-830	2900	4-28V	4	24	65	75	Continuous	Snap-in Panel	Medium
KPE-831	2900	6-16V	4	13	65	75	Fast Pulse	Snap-in Panel	Medium
KPE-833	2900	6-16V	4	13	65	75	Slow Pulse	Snap-in Panel	Medium

PIEZO INDICATOR

A

Shape

KPE-209



K[®]
US
E212139 & UE114

Shape

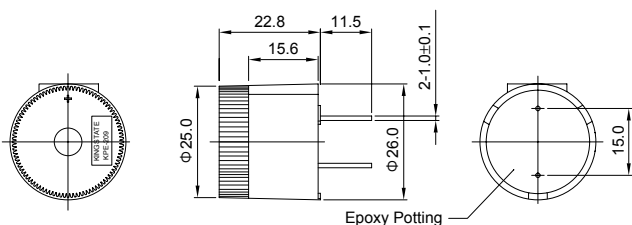
KPE-637



Model Number	KPE-209
Rated Frequency (Hz)	2,900 ± 500
Operating Voltage Range (VDC)	9 ~ 12
Current Consumption (mA)	Max. 35@12VDC
Sound Pressure Level (dB)	Min. 91dB@60cm@12VDC
Tone	Continuous
Operating Temperature (°C)	-20 ~ +65
Storage Temperature (°C)	-40 ~ +80
Weight (Gram)	41.0
Material	Noryl 94 V-0 (Black)

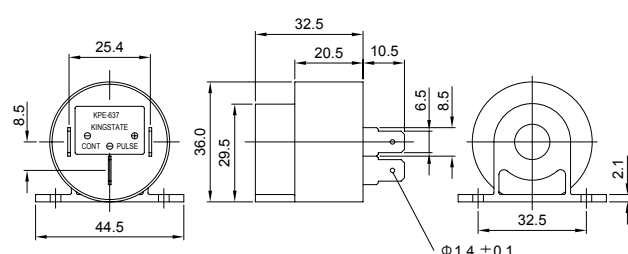
Model Number	KPE-637
Rated Frequency (Hz)	2,800 ± 500
Operating Voltage Range (VDC)	9 ~ 48
Current consumption (mA)	MAX 22 @ 48VDC
Sound Pressure Level (dB)	MIN 88dB@ 60cm@48VDC
Rated Voltage (VDC)	48
Tone	Continuous / Slow Pulse (1.2Hz ± 20%)
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	27.0
Material	ABS UL-94 1/16" HB High Heat (Black)

Dimension



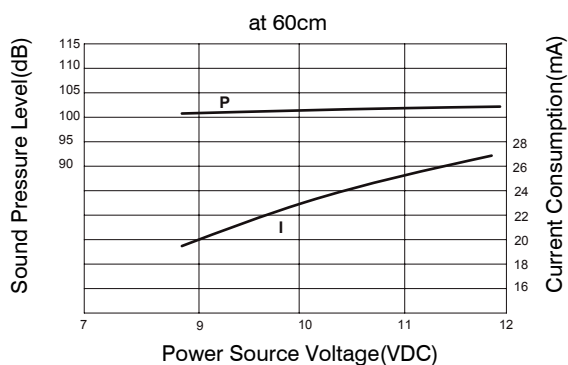
Tol : ±0.5 Unit : mm

Dimension

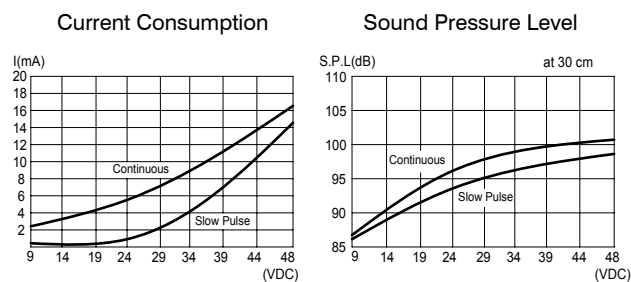


Tol : ±0.5 Unit : mm

Characteristic



Characteristic



KPE-243



Waterproof

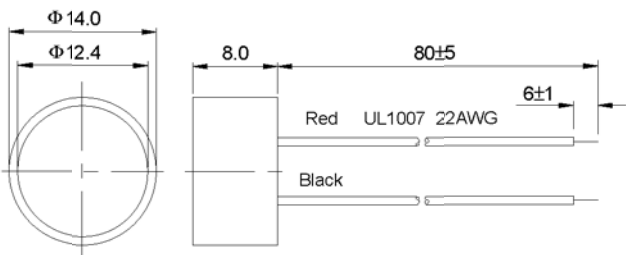
Rated Frequency (Hz)	5,000 ± 500
Operating Voltage Range (VDC)	9 ~ 16
Current Consumption (mA)	Max. 35@12VDC
Sound Pressure Level (dB)	Min. 80@30cm@12VDC
Rated Voltage(VDC)	12
Tone	Continuous
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	30.0
Material	ABS UL-94 1/16" HB HIGH HEAT

KPE-267

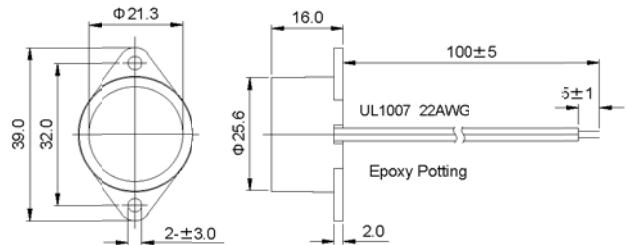


Waterproof IP 67

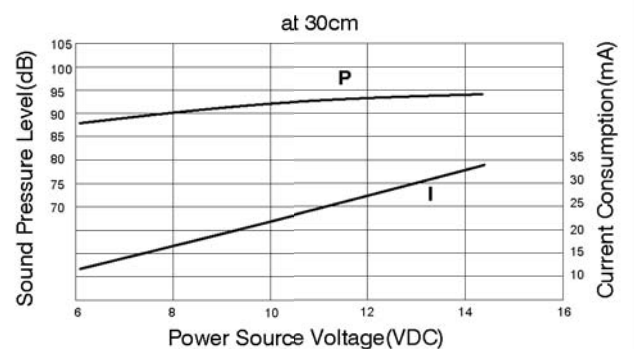
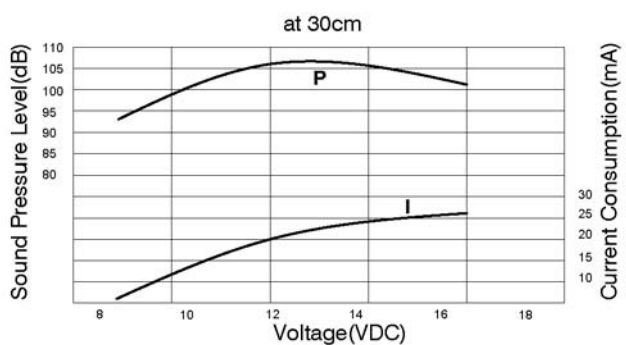
Rated Frequency (Hz)	2,800 ± 500
Operating Voltage Range (VDC)	6 ~ 14
Current Consumption (mA)	Max. 35@12VDC
Sound Pressure Level (dB)	Min. 85dB@30cm@12VDC
Rated Voltage(VDC)	12
Tone	Continuous
Operating Temperature (°C)	-30 ~ +85
Storage Temperature (°C)	-40 ~ +95
Weight (Gram)	41.0
Material	ABS UL-94 1/16" HB High Heat



Tol: ± 0.5 Unit: mm



Tol: ± 0.5 Unit: mm

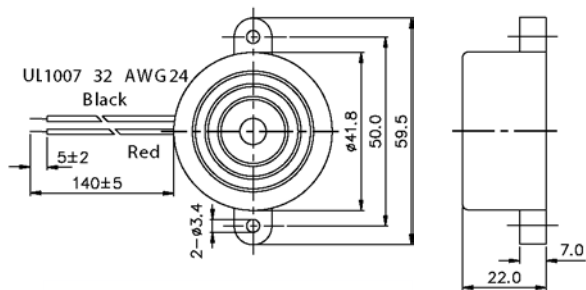


KPE-460 KPE-463



Lowest Frequency

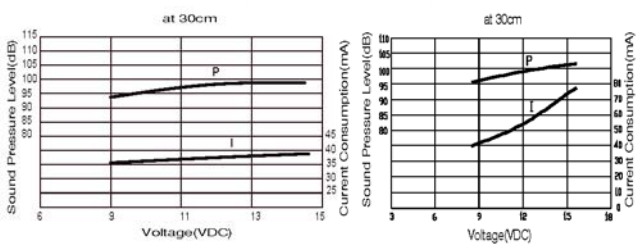
Rated Frequency (Hz)	30C ± 50	
Operating Voltage Range (VDC)	9 ~ 14	9 ~ 16
Current Consumption (mA)	Max. 70@12VDC	Max. 150@12VDC
Sound Pressure Level (dB)	Min. 89dB@30cm@12VDC	Min. 87dB@30cm@12VDC
Tone	Continuous	Slow Pulse@12VDC(1.0Hz±20%)
Operating Temperature (°C)	-20 ~ +60	-30 ~ +85
Storage Temperature (°C)	-30 ~ +70	-40 ~ +95
Weight (Gram)	17.4	
Material	ABS UL-94 1/16" HB (Black)	



Tol : ±0.5 Unit : mm

KPE-460

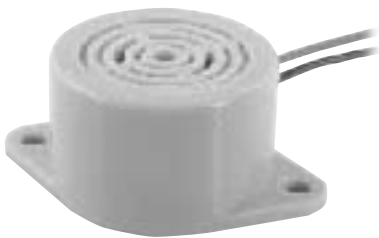
KPE-463



ELECTRONIC SOLID STATE AUDIO INDICATOR

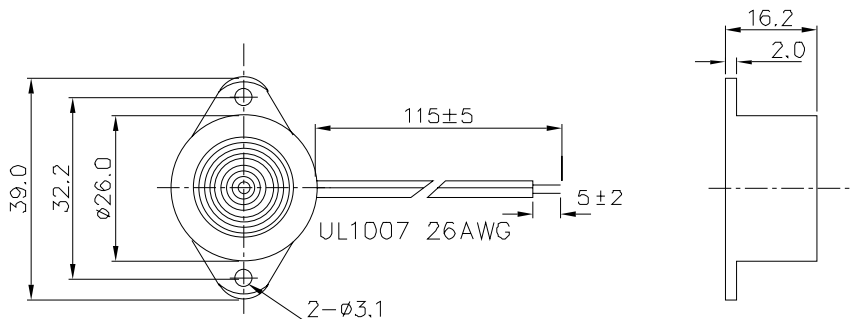
Shape

KS-6606
KS-6612
KS-6624



Model Number	KS-6606	KS-6612	KS-6624
Operating Voltage Range (VDC)	4 ~ 8	8 ~ 16	20 ~ 28
Current Consumption (mA)	Max. 22@6VDC	Max. 25@12VDC	Max. 25@24VDC
Sound Pressure Level (dBA)	Min. 79dBA@30cm@6VDC	Min. 79dBA@30cm@12VDC	Min. 82dBA@30cm@24VDC
Tone	Continuous		
Operating Temperature (°C)	-20 ~ +60		
Storage Temperature (°C)	-30 ~ +70		
Weight (Gram)	10.7		
Material	ABS		

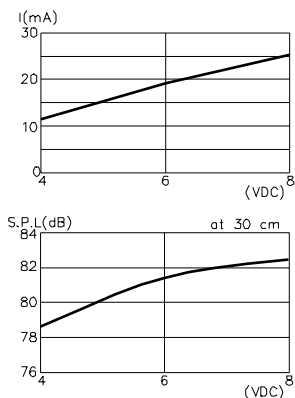
Dimension



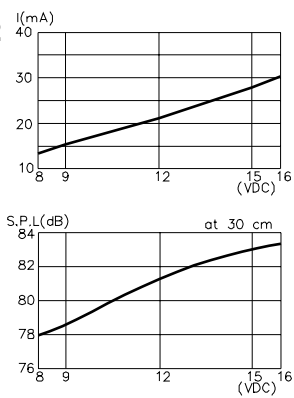
Tol: ±0.5 Unit: mm

Characteristic

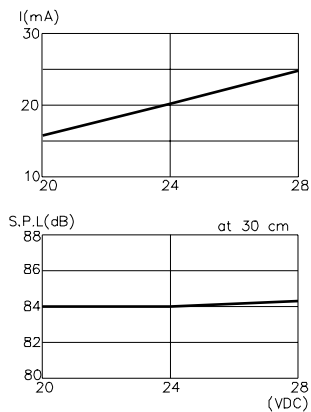
KS-6606



KS-6612



KS-6624



ELECTRONIC SOLID STATE AUDIO INDICATOR

Shape

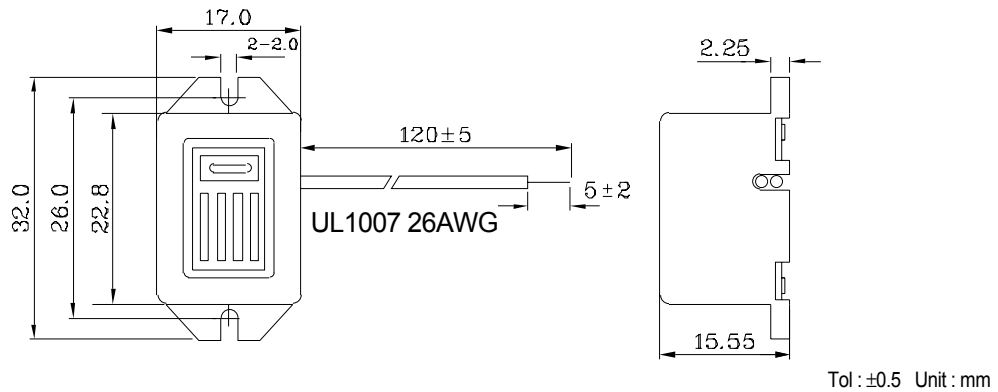
KS-3603
KS-3606
KS-3612
KS-3624



B

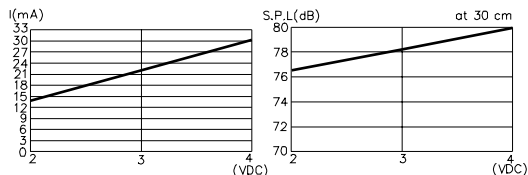
Model Number	KS-3603	KS-3606	KS-3612	KS-3624
Operating Voltage Range (VDC)	2 ~ 4	4 ~ 8	8 ~ 16	20 ~ 28
Current Consumption (mA)	Max. 50@3VDC	Max. 45@6VDC	Max. 30@12VDC	Max. 24@24VDC
Sound Pressure Level (dBA)	Min. 75dBA@30cm@3VDC	Min. 75dBA@30cm@6VDC	Min. 79dBA@30cm@12VDC	Min. 76dBA@30cm@24VDC
Tone	Continuous			
Operating Temperature (°C)	-20 ~ +60			
Storage Temperature (°C)	-30 ~ +70			
Weight (Gram)	9.7			
Material	ABS			

Dimension

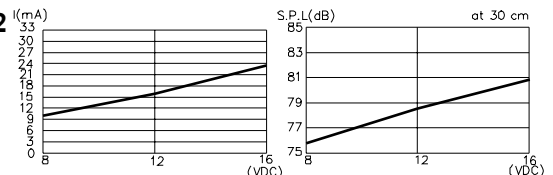


Characteristic

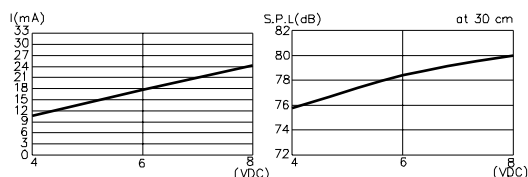
KS-3603



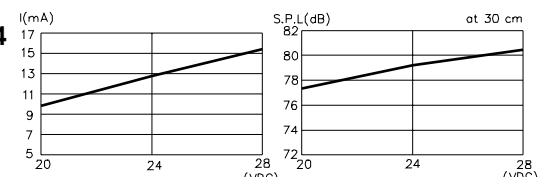
KS-3612



KS-3606



KS-3624

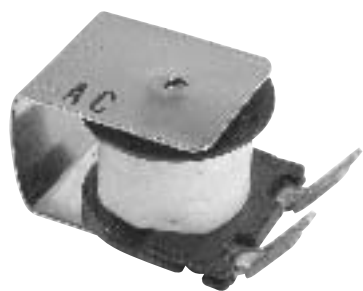


AC AUDIO INDICATOR

B

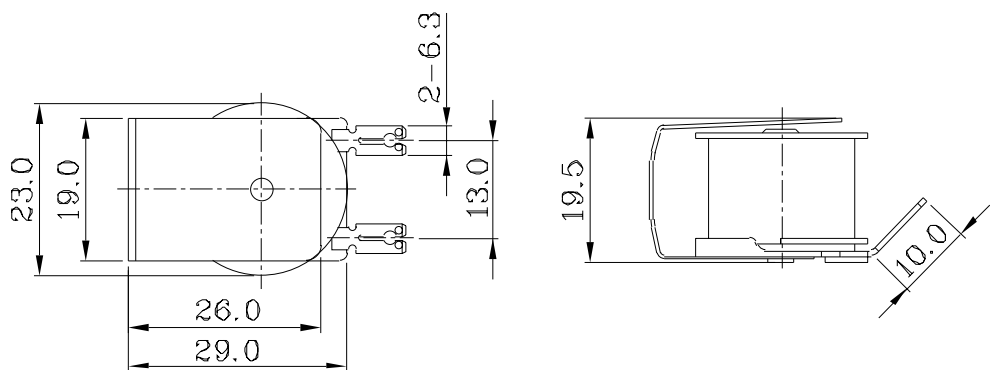
Shape

KAC-06
KAC-12
KAC-24
KAC-110
KAC-220



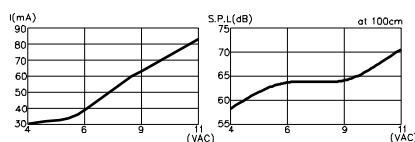
Model Number	KAC-06	KAC-12	KAC-24	KAC-110	KAC-220
Operating Voltage Range (VAC)	4 ~ 12	8 ~ 18	19 ~ 32	60 ~ 150	160 ~ 260
Rated Voltage (VAC)	6	12	24	110	220
Current Consumption (mA)	Max. 45@6VAC	Max. 35@12VAC	Max. 35@24VAC	Max. 45@110VAC	Max. 30@220VAC
Sound Pressure Level (dBA)	Min. 64dBA@100cm@6VAC	Min. 66dBA@100cm@12VAC	Min. 68dBA@100cm@24VAC	Min. 70dBA@100cm@110VAC	Min. 70dBA@100cm@220VAC
Operating Temperature (°C)	-20 ~ +60				
Storage Temperature (°C)	-30 ~ +70				
Weight (Gram)	27.0			25.0	
Material	Metal				

Dimension

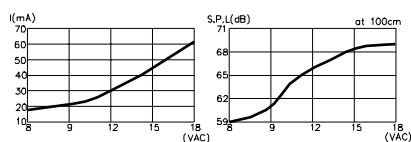


Characteristic

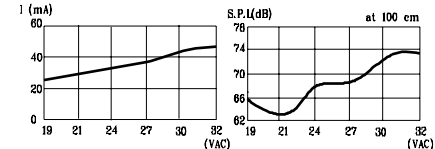
KAC-06



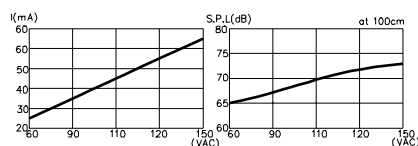
KAC-12



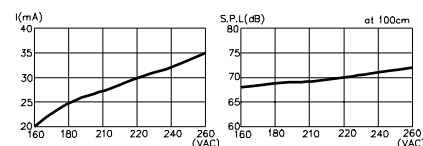
KAC-24



KAC-110



KAC-220



Shape

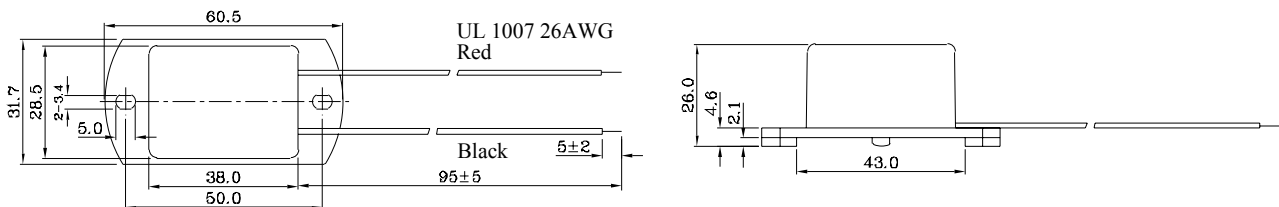
KAC-06H
KAC-12H
KAC-24H
KAC-110H
KAC-220H



B

Model Number	KAC-06H	KAC-12H	KAC-24H	KAC-110H	KAC-220H
Operating Voltage Range (VAC)	4 ~ 11	8 ~ 18	19 ~ 32	60 ~ 150	160 ~ 360
Rated Voltage (VAC)	6	12	24	110	220
Current Consumption (mA)	Max. 50@6VAC	Max. 40@12VAC	Max. 33@24VAC	Max. 45@110VAC	Max. 40@220VAC
Sound Pressure Level (dBA)	Min. 64dBA@100cm@6VAC	Min. 66dBA@100cm@12VAC	Min. 68dBA@100cm@24VAC	Min. 68dBA@100cm@110VAC	Min. 70dBA@100cm@220VAC
Operating Temperature (°C)	-20 ~ +60				
Storage Temperature (°C)	-30 ~ +70				
Weight (Gram)	31.5				
Material	ABS				

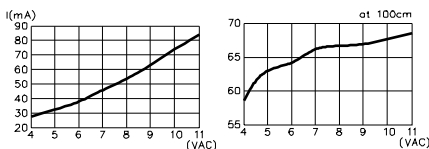
Dimension



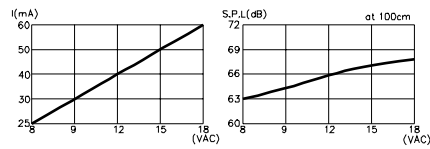
Tol: ±0.5 Unit: mm

Characteristic

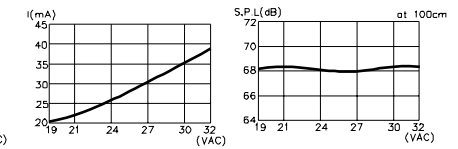
KAC-06H



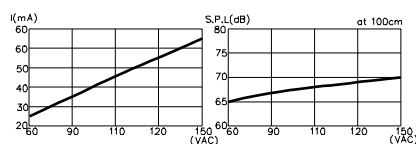
KAC-12H



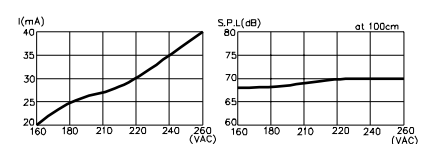
KAC-24H



KAC-110H



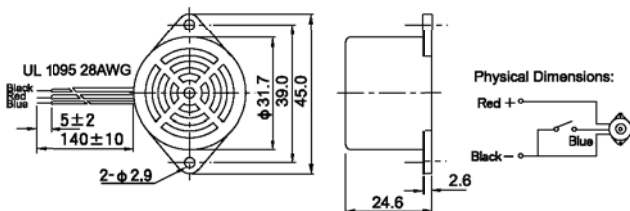
KAC-220H



KMP-666



Rated Frequency (Hz)	1230 / 1010 $\pm$ 80
Operating Voltage Range (VDC)	6 ~ 18
Current Consumption (mA)	Max. 90@6VDC / Max. 125@12VDC / Max. 155@18VDC
Sound Pressure Level (dB)	Min. 75dB@6VDC / Min. 80dB@12VDC / Min. 82dB@18VDC@30cm
Standby Current (mA)	2.0@6VDC / 5.0@12VDC / 9.0@18VDC
Tone	Ding Dong
Operating Temperature (°C)	-20 ~ +55
Storage Temperature (°C)	-25 ~ +60
Weight (Gram)	18.0
Material	ABS UL-94 1/16" HB (Black)



Tol : ± 0.5 Unit : mm

