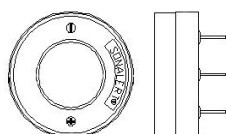


Product APPLICATION Guide



Piezoelectric- PC Pins

Piezoelectric Indicators- Continuous Tone

Non-RoHS Part No.	RoHS Part No.	UL	Min Sound Level dBa (2 ft)	Freq. (Hz)	Operating Voltage	Max Current (mA)	Size Dia x Len (in)
Medium Sound Level- Continuous Tone							
SBM2	SBM2R	■	55 - 68	2900	1 - 5	3 - 16	42.9 x 15.9
SBM428	SBM428R	■	64 - 76	2900	4 - 28	3 - 16	42.9 x 15.9

Piezoelectric Indicators- Fast & Slow Pulse Tone

Medium Sound Level- Fast Pulse Tone (2 - 10 pps)							
SBM616P			68 - 78	2900	6 - 16	3 - 12	42.9 x 15.9
Medium Sound Level- Slow Pulse Tone (0.5 - 2 pps)							
SBM616J			68 - 78	2900	6 - 16	3 - 12	42.9 x 15.9



Piezoelectric- PC Pins

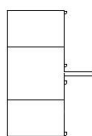
Piezoelectric Indicators- Continuous Tone

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	PC Pin Pitch (mm c/c)	Comment
Soft Sound Level- Continuous Tone							
MCP320Q	70	3100	3 - 20	5	24 x 17.5	15	Sealed
PK-12N40PQ	76	4100	3 - 15	10	13.8 x 7.5	7.6	
PK-12N40PEQ	76	4100	3 - 15	10	13.8 x 7.5	7.6	Sealed
Medium Sound Level- Continuous Tone							
PK-21N30PQ	80	3000	1.5 - 30	12	24 x 9.5	15	
PK-21N31PQ	80	3000	1.5 - 30	12	24 x 14	15	Sealed Back
MSO320R	81	3400	3 - 20	13	23 x 13.5	15	
MSO320SR	81	3400	3 - 20	13	23 x 13.5	15	Sealed
MSR320R	81	3500	3 - 20	13	23 x 10.5	15	
MSR320SR	81	3500	3 - 20	13	23 x 10.5	15	Sealed
PK-21A29PQ	85	3000	3 - 24	18	24 x 14	15	

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	PC Pin Pitch (mm c/c)	Comment
Medium Sound Level- Continuous Tone Con't							
PK-21A31PQ	85	3000	3 - 24	18	24 x 14	15	Sealed Back
PK-20N38PQ	85	3800	3 - 28	12	23 x 18	15	
PK-27N26PSQ	90	2500	3 - 28	15	30 x 10	15	
PK-27N36PSQ	90	3500	3 - 28	15	30 x 10	15	
Loud Sound Level- Continuous Tone							
MSR414NR	91	3900	4 - 14	12	23 x 10.5	15	
MSR414NSR	91	3900	4 - 14	12	23 x 10.5	15	Sealed
MSR516NR	91	3850	5 - 16	12	23 x 10.5	15	
MSR516NSR	91	3850	5 - 16	12	23 x 10.5	15	Sealed
MCP320B2Q	95	2500	3 - 20	20	23 x 18	15	
MAS800Q	95	2800	9 - 12	50	26 x 22	15	
MAS800SQ	95	2800	9 - 12	50	26 x 22	15	Sealed
MAS803Q	95 @ 6Vdc	2800	1.5 - 6	130@6Vdc	26 x 22	15	
MAS803SQ	95 @ 6Vdc	2800	1.5 - 6	130@6Vdc	26 x 22	15	Sealed
MAS806Q	95	2800	6 - 14	50	26 x 22	15	
MAS806SQ	95	2800	6 - 14	50	26 x 22	15	Sealed
PK-20A25PQ	95	2500	3 - 24	25	23 x 18	15	
PK-27A25PSQ	95	2500	3 - 24	10	30 x 16	15	
PK-27A35PSQ	95	3500	3 - 24	10	30 x 16	15	
PK-20A38PQ	95	3800	3 - 24	12	23 x 18	15	
PK-35H29P-6Q	100	2900	3 - 18	20	42 x 16	25	
MSO206NR	101	3300	2 - 6	30	23 x 13	15	
MSO206NLR	101	3300	2 - 6	30	23 x 13	N/A	Wires

Piezoelectric Indicators- Fast & Slow Pulse Tone

Medium Sound Level- Fast Pulse Tone (3 pps)							
PF-21N30PQ	80	3000	3 - 30	12	24 x 9.5	15	
PF-21N31PQ	80	3000	3 - 30	12	24 x 14	15	Sealed Back
PF-21A29PQ	85	3000	3 - 24	18	24 x 9.5	15	
PF-21A31PQ	85	3000	3 - 24	18	24 x 14	15	Sealed Back
PF-27N26PSQ	90	2500	3 - 28	15	30 x 10	15	
PF-27N36PSQ	90	3500	3 - 28	15	30 x 10	15	
Loud Sound Level- Fast Pulse Tone (3 pps)							
MSR516NPR	91	3900	5 - 16	12	23 x 10.5	15	
MSR516NPSR	91	3900	5 - 16	12	23 x 10.5	15	Sealed
PF-27A25PSQ	95	2500	3 - 24	15	30 x 16	15	
PF-27A35PSQ	95	3500	3 - 24	15	30 x 16	15	
Medium Sound Level- Slow Pulse Tone (1.2 pps)							
PL-21N30PQ	80	3000	3 - 28	12	24 x 9.5	15	
PL-21N31PQ	80	3000	3 - 28	12	24 x 14	15	Sealed Back
PL-21A29PQ	85	3000	3 - 24	18	24 x 14	15	
PL-21A31PQ	85	3000	3 - 24	18	24 x 14	15	Sealed Back
PL-27N26PSQ	90	2500	3 - 28	15	30 x 16	15	
PL-27N36PSQ	90	3500	3 - 28	15	30 x 16	15	
Loud Sound Level- Slow Pulse Tone (3 pps)							
MSR516NJR	91	3900	5 - 16	12	23 x 10.5	15	
MSR516NJSR	91	3900	5 - 16	12	23 x 10.5	15	Sealed
PL-27A25PSQ	95	2500	3 - 24	15	30 x 16	15	
PL-27A35PSQ	95	3500	3 - 24	15	30 x 16	15	



Piezoelectric- PC Pins

Piezoelectric Indicators- Distinctive & Unique Tone

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	PC Pin Pitch (mm c/c)	Sound Type	Comment
Medium Sound Level								
MSE14MCH2	80	3500	7 – 14	50	23 x 14	15	Bird Chirp	
MSE14MCH2S	80	3500	7 – 14	50	23 x 14	15	Bird Chirp	Sealed
MSE14MCM1	80	3500	7 – 14	50	23 x 14	15	Slow Chime	
MSE14MCM1S	80	3500	7 – 14	50	23 x 14	15	Slow Chime	Sealed
MSE14MCM3	80	3500	7 – 14	50	23 x 14	15	Fast Chime	
MSE14MCM3S	80	3500	7 – 14	50	23 x 14	15	Fast Chime	Sealed
MSE14MDD7	80	3500	7 – 14	50	23 x 14	15	Ding Dong	
MSE14MDD7S	80	3500	7 – 14	50	23 x 14	15	Ding Dong	Sealed
MSE14MDP2	80	3500	7 – 14	50	23 x 14	15	Fast Double Pulse	
MSE14MDP2S	80	3500	7 – 14	50	23 x 14	15	Fast Double Pulse	Sealed
MSE14MDP3	80	3500	7 – 14	50	23 x 14	15	Slow Double Pulse	
MSE14MDP3S	80	3500	7 – 14	50	23 x 14	15	Slow Double Pulse	Sealed
MSE14MDT7	80	3500	7 – 14	50	23 x 14	15	Fast Warble	
MSE14MDT7S	80	3500	7 – 14	50	23 x 14	15	Fast Warble	Sealed
MSE14MDT8	80	3500	7 – 14	50	23 x 14	15	Slow Warble	
MSE14MDT8S	80	3500	7 – 14	50	23 x 14	15	Slow Warble	Sealed
MSE14MPS1	80	3500	7 – 14	50	23 x 14	15	Short Pulse	
MSE14MPS1S	80	3500	7 – 14	50	23 x 14	15	Short Pulse	Sealed
MSE14MSN2	80	3500	7 – 14	50	23 x 14	15	Slow Siren	
MSE14MSN2S	80	3500	7 – 14	50	23 x 14	15	Slow Siren	Sealed
MSE14MSN3	80	3500	7 – 14	50	23 x 14	15	Fast Siren	
MSE14MSN3S	80	3500	7 – 14	50	23 x 14	15	Fast Siren	Sealed
MSE14MSU2	80	3500	7 – 14	50	23 x 14	15	Slow Speed-Up	
MSE14MSU2S	80	3500	7 – 14	50	23 x 14	15	Slow Speed-Up	Sealed
MSE14MTT3	80	3500	7 – 14	50	23 x 14	15	Tele Ringer	
MSE14MTT3S	80	3500	7 – 14	50	23 x 14	15	Tele Ringer	Sealed
MSE14MWH1	80	3500	7 – 14	50	23 x 14	15	Fast Whoop	
MSE14MWH1S	80	3500	7 – 14	50	23 x 14	15	Fast Whoop	Sealed
MSE14MWH2	80	3500	7 – 14	50	23 x 14	15	Slow Whoop	
MSE14MWH2S	80	3500	7 – 14	50	23 x 14	15	Slow Whoop	Sealed
MSE28MCH2	80	3500	16 - 28	50	23 x 14	15	Bird Chirp	
MSE28MCH2S	80	3500	16 - 28	50	23 x 14	15	Bird Chirp	Sealed
MSE28MCM1	80	3500	16 - 28	50	23 x 14	15	Slow Chime	
MSE28MCM1S	80	3500	16 - 28	50	23 x 14	15	Slow Chime	Sealed
MSE28MCM3	80	3500	16 - 28	50	23 x 14	15	Fast Chime	
MSE28MCM3S	80	3500	16 - 28	50	23 x 14	15	Fast Chime	Sealed
MSE28MDD7	80	3500	16 - 28	50	23 x 14	15	Ding Dong	
MSE28MDD7S	80	3500	16 - 28	50	23 x 14	15	Ding Dong	Sealed
MSE28MDP2	80	3500	16 - 28	50	23 x 14	15	Fast Double Pulse	
MSE28MDP2S	80	3500	16 - 28	50	23 x 14	15	Fast Double Pulse	Sealed
MSE28MDP3	80	3500	16 - 28	50	23 x 14	15	Slow Double Pulse	
MSE28MDP3S	80	3500	16 - 28	50	23 x 14	15	Slow Double Pulse	Sealed
MSE28MDT7	80	3500	16 - 28	50	23 x 14	15	Fast Warble	
MSE28MDT7S	80	3500	16 - 28	50	23 x 14	15	Fast Warble	Sealed

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	PC Pin Pitch (mm c/c)	Sound Type	Comment
MSE28MDT8	80	3500	16 - 28	50	23 x 14	15	Slow Warble	
MSE28MDT8S	80	3500	16 - 28	50	23 x 14	15	Slow Warble	Sealed
MSE28MPS1	80	3500	16 - 28	50	23 x 14	15	Short Pulse	
MSE28MPS1S	80	3500	16 - 28	50	23 x 14	15	Short Pulse	Sealed
MSE28MSN2	80	3500	16 - 28	50	23 x 14	15	Slow Siren	
MSE28MSN2S	80	3500	16 - 28	50	23 x 14	15	Slow Siren	Sealed
MSE28MSN3	80	3500	16 - 28	50	23 x 14	15	Fast Siren	
MSE28MSN3S	80	3500	16 - 28	50	23 x 14	15	Fast Siren	Sealed
MSE28MSU2	80	3500	16 - 28	50	23 x 14	15	Slow Speed-Up	
MSE28MSU2S	80	3500	16 - 28	50	23 x 14	15	Slow Speed-Up	Sealed
MSE28MTT3	80	3500	16 - 28	50	23 x 14	15	Tele Ringer	
MSE28MTT3S	80	3500	16 - 28	50	23 x 14	15	Tele Ringer	Sealed
MSE28MWH1	80	3500	16 - 28	50	23 x 14	15	Fast Whoop	
MSE28MWH1S	80	3500	16 - 28	50	23 x 14	15	Fast Whoop	Sealed
MSE28MWH2	80	3500	16 - 28	50	23 x 14	15	Slow Whoop	
MSE28MWH2S	80	3500	16 - 28	50	23 x 14	15	Slow Whoop	Sealed
Loud Sound Level								
MSE14LCH2	90	3500	7 - 14	50	23 x 14	15	Bird Chirp	
MSE14LCH2S	90	3500	7 - 14	50	23 x 14	15	Bird Chirp	Sealed
MSE14LCM1	90	3500	7 - 14	50	23 x 14	15	Slow Chime	
MSE14LCM1S	90	3500	7 - 14	50	23 x 14	15	Slow Chime	Sealed
MSE14LCM3	90	3500	7 - 14	50	23 x 14	15	Fast Chime	
MSE14LCM3S	90	3500	7 - 14	50	23 x 14	15	Fast Chime	Sealed
MSE14LDD7	90	3500	7 - 14	50	23 x 14	15	Ding Dong	
MSE14LDD7S	90	3500	7 - 14	50	23 x 14	15	Ding Dong	Sealed
MSE14LDP2	90	3500	7 - 14	50	23 x 14	15	Fast Double Pulse	
MSE14LDP2S	90	3500	7 - 14	50	23 x 14	15	Fast Double Pulse	Sealed
MSE14LDP3	90	3500	7 - 14	50	23 x 14	15	Slow Double Pulse	
MSE14LDP3S	90	3500	7 - 14	50	23 x 14	15	Slow Double Pulse	Sealed
MSE14LDT7	90	3500	7 - 14	50	23 x 14	15	Fast Warble	
MSE14LDT7S	90	3500	7 - 14	50	23 x 14	15	Fast Warble	Sealed
MSE14LDT8	90	3500	7 - 14	50	23 x 14	15	Slow Warble	
MSE14LDT8S	90	3500	7 - 14	50	23 x 14	15	Slow Warble	Sealed
MSE14LPS1	90	3500	7 - 14	50	23 x 14	15	Short Pulse	
MSE14LPS1S	90	3500	7 - 14	50	23 x 14	15	Short Pulse	Sealed
MSE14LSN2	90	3500	7 - 14	50	23 x 14	15	Slow Siren	
MSE14LSN2S	90	3500	7 - 14	50	23 x 14	15	Slow Siren	Sealed
MSE14LSN3	90	3500	7 - 14	50	23 x 14	15	Fast Siren	
MSE14LSN3S	90	3500	7 - 14	50	23 x 14	15	Fast Siren	Sealed
MSE14LSU2	90	3500	7 - 14	50	23 x 14	15	Slow Speed-Up	
MSE14LSU2S	90	3500	7 - 14	50	23 x 14	15	Slow Speed-Up	Sealed
MSE14LTT3	90	3500	7 - 14	50	23 x 14	15	Tele Ringer	
MSE14LTT3S	90	3500	7 - 14	50	23 x 14	15	Tele Ringer	Sealed
MSE14LWH1	90	3500	7 - 14	50	23 x 14	15	Fast Whoop	
MSE14LWH1S	90	3500	7 - 14	50	23 x 14	15	Fast Whoop	Sealed
MSE14LWH2	90	3500	7 - 14	50	23 x 14	15	Slow Whoop	
MSE14LWH2S	90	3500	7 - 14	50	23 x 14	15	Slow Whoop	Sealed
MSE28LCH2	90	3500	16 - 28	50	23 x 14	15	Bird Chirp	
MSE28LCH2S	90	3500	16 - 28	50	23 x 14	15	Bird Chirp	Sealed
MSE28LCM1	90	3500	16 - 28	50	23 x 14	15	Slow Chime	
MSE28LCM1S	90	3500	16 - 28	50	23 x 14	15	Slow Chime	Sealed

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	PC Pin Pitch (mm c/c)	Sound Type	Comment
MSE28LCM3	90	3500	16 - 28	50	23 x 14	15	Fast Chime	
MSE28LCM3S	90	3500	16 - 28	50	23 x 14	15	Fast Chime	Sealed
MSE28LDD7	90	3500	16 - 28	50	23 x 14	15	Ding Dong	
MSE28LDD7S	90	3500	16 - 28	50	23 x 14	15	Ding Dong	Sealed
MSE28LDP2	90	3500	16 - 28	50	23 x 14	15	Fast Double Pulse	
MSE28LDP2S	90	3500	16 - 28	50	23 x 14	15	Fast Double Pulse	Sealed
MSE28LDP3	90	3500	16 - 28	50	23 x 14	15	Slow Double Pulse	
MSE28LDP3S	90	3500	16 - 28	50	23 x 14	15	Slow Double Pulse	Sealed
MSE28LDT7	90	3500	16 - 28	50	23 x 14	15	Fast Warble	
MSE28LDT7S	90	3500	16 - 28	50	23 x 14	15	Fast Warble	Sealed
MSE28LDT8	90	3500	16 - 28	50	23 x 14	15	Slow Warble	
MSE28LDT8S	90	3500	16 - 28	50	23 x 14	15	Slow Warble	Sealed
MSE28LPS1	90	3500	16 - 28	50	23 x 14	15	Short Pulse	
MSE28LPS1S	90	3500	16 - 28	50	23 x 14	15	Short Pulse	Sealed
MSE28LSN2	90	3500	16 - 28	50	23 x 14	15	Slow Siren	
MSE28LSN2S	90	3500	16 - 28	50	23 x 14	15	Slow Siren	Sealed
MSE28LSN3	90	3500	16 - 28	50	23 x 14	15	Fast Siren	
MSE28LSN3S	90	3500	16 - 28	50	23 x 14	15	Fast Siren	Sealed
MSE28LSU2	90	3500	16 - 28	50	23 x 14	15	Slow Speed-Up	
MSE28LSU2S	90	3500	16 - 28	50	23 x 14	15	Slow Speed-Up	Sealed
MSE28LTT3	90	3500	16 - 28	50	23 x 14	15	Tele Ringer	
MSE28LTT3S	90	3500	16 - 28	50	23 x 14	15	Tele Ringer	Sealed
MSE28LWH1	90	3500	16 - 28	50	23 x 14	15	Fast Whoop	
MSE28LWH1S	90	3500	16 - 28	50	23 x 14	15	Fast Whoop	Sealed
MSE28LWH2	90	3500	16 - 28	50	23 x 14	15	Slow Whoop	
MSE28LWH2S	90	3500	16 - 28	50	23 x 14	15	Slow Whoop	Sealed

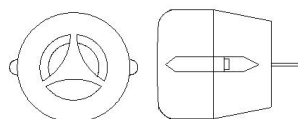


Piezoelectric- 3 PC Pins

Piezoelectric Indicators- Dual Tone

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	Comment
Medium Sound Level- Continuous or Fast Pulse Tone (3 pps)						
PFD-21N30PQ	80	3000	3 - 30	12	24 x 9.5	
PFD-27N36PQ	90	3500	3 - 28	15	30 x 10	
Loud Sound Level- Continuous or Fast Pulse Tone (3 pps)						
PFD-27A35PQ	95	3500	3 - 24	10	30 x 16	
Medium Sound Level- Continuous or Slow Pulse Tone (1.2 pps)						
PLD-21N30PQ	80	3000	3 - 30	12	24 x 9.5	
PLD-27N36PQ	90	3500	3 - 28	15	30 x 10	
Loud Sound Level- Continuous or Slow Pulse Tone (1.2 pps)						
PLD-27A35PQ	95	3500	3 - 24	10	30 x 16	

Note: See individual data sheets for pc pin spacing

**Piezoelectric- PC Pins**

Piezoelectric Indicators- Extra Loud Siren Tone

Part Number	Sound Level @ 12Vdc @ 30 cm	Freq. (Hz)	Operating Voltage (Vdc)	Current @ 12Vdc (mA)	Dia x Hgt (mm)	Comment
Extra Loud Sound Level- Siren Tone (3.3 Hz Sweep Rate)						
PS-953Q	114	2500	5 - 15	150	33 x 33	

Call 317-612-1000 or Visit www.mallory-sonalert.com for More Details