

# Applications guides | Telephone

## for the acoustic components



The telephone is a telecommunications device that transmits and receives sounds, usually the human voice. Telephones are a point-to-point communication system whose most basic function is to allow two people separated by large distances to talk to each other.

The microphone converts the sound waves to electrical signals and then these are sent through the telephone network to the other phone and there converted by an earphone, or speaker, back into sound waves. Telephones are a duplex communications medium, meaning they allow the people on both ends to talk simultaneously. The telephone network, consisting of a worldwide net of telephone lines, fiberoptic cables, microwave transmission, cellular networks, communications satellites, and undersea telephone cables connected by switching centers, allows any telephone in the world to communicate with any other. Each telephone line has an identifying number called its telephone number.

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Receiver

| Suggested Item   | 28A        | 31A       | 35A         | 38A         |
|------------------|------------|-----------|-------------|-------------|
| Size(LxWxH) (mm) | ∅ 25 x 7.3 | ∅ 31 x 11 | ∅ 35 x 17.6 | ∅ 38 x 21.2 |
| Sensitivity (dB) | 93         | 93        | 93          | 96          |
| Impedance(Ω)     | 150        | 150       | 150         | 150         |



Speaker

| Suggested Item   | M20IA    | M28IA      | M30IA      | L40IA       | L45IE        | L50IL       |
|------------------|----------|------------|------------|-------------|--------------|-------------|
| Size(LxWxH) (mm) | ∅ 20 x 3 | ∅ 28 x 4.9 | ∅ 30 x 4.8 | ∅ 40 x 6.55 | ∅ 45.2 x 9.7 | ∅ 50 x 12.2 |
| Rated Power(W)   | 0.4      | 1          | 0.5        | 0.5         | 0.5          | 1           |
| Impedance(Ω)     | 8        | 8          | 8          | 8           | 8            | 8           |



Microphone

| Suggested Item | C6052     | C8052     | C9465       | C9745       | C9767       |
|----------------|-----------|-----------|-------------|-------------|-------------|
| Size (mm)      | ∅ 6 x 5.2 | ∅ 8 x 5.2 | ∅ 9.4 x 6.5 | ∅ 9.7 x 4.5 | ∅ 9.7 x 6.7 |
| Product Type   | ECM       | ECM       | ECM         | ECM         | ECM         |



Transducer

| Suggested Item             | DB105      | DB111      |
|----------------------------|------------|------------|
| Size (mm)                  | ∅ 12 x 5.4 | ∅ 12 x 8.5 |
| Sound Pressure Level (dBA) | 70         | 85         |
| Product Type               | Magnetic   | Magnetic   |
| Type                       | Pin        | Pin        |