

The OK83 is a high performance coaxial speaker with a mounted tweeter for full-range sound. Audio from this model achieves high dispersion within higher frequencies for speech and music—a perfect choice for paging systems, public communications, and background music applications.

- Coaxial speaker
- 8" (203 mm) stamped steel basket
- 3" (77 mm) tweeter
- 20 watts, 8 ohm, 97 dB SPL
- 1" copper voice coil, aluminum former
- Paper cone, ferrite magnet



### Primary Specifications

|  |             |
|--|-------------|
| <b>Size, Nominal (inch &amp; mm)</b>         | 8" (203 mm) |
| <b>Rated Impedance (<math>\Omega</math>)</b> | 8           |
| <b>Continuous Power (W)</b>                  | 20          |
| <b>Sensitivity (dB SPL) <sup>1</sup></b>     | 97          |
| <b>Frequency Range (Hz)</b>                  | 57 - 14,000 |
| <b>Resonant Frequency (Fs) (Hz) +/- 15%</b>  | 93          |

### More Specifications

|   |  |
|---|--|
| <b>Application</b>                              | Commercial, Indoor, Voice Communications |
| <b>RoHS Compliant</b>                           | Yes                                      |
| <b>DC Resistance (Re) (<math>\Omega</math>)</b> | 7.6                                      |
| <b>Program Power (W)</b>                        | 40                                       |
| <b>Continuous Power (W)</b>                     | 20                                       |

### Small Signal Parameters

|  |        |
|--|--------|
| <b>Nominal Impedance (Z) (<math>\Omega</math>)</b>     | 8      |
| <b>DC Resistance (Re) (<math>\Omega</math>)</b>        | 7.6    |
| <b>Voice Coil Inductance (Le) (mH)</b>                 | 0.24   |
| <b>Resonant Frequency (Fs) (Hz) +/- 15%</b>            | 93     |
| <b>Mechanical Q Factor (Qms)</b>                       | 5.94   |
| <b>Electrical Q Factor (Qes)</b>                       | 1.0    |
| <b>Total Q Factor (Qts)</b>                            | 0.86   |
| <b>Moving Mass (Mms) (gm)</b>                          | 7.70   |
| <b>Suspension Compliance (Cms) (mm/N)</b>              | 0.23   |
| <b>Mechanical Resistance (Rms) (kg/s)</b>              | 0.98   |
| <b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b> | 219.0  |
| <b>Compliance Equivalent Volume (Vas) (L)</b>          | 15.5   |
| <b>Maximum Linear Excursion (Xmax) (mm)</b>            | 0.6    |
| <b>Motor Force Factor (BL) (T•M)</b>                   | 6.6    |
| <b>Efficiency (<math>\eta_0</math>) (%)</b>            | 2.6    |
| <b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>     | 199.64 |

### Material Descriptions

|                                   |               |
|-----------------------------------|---------------|
| <b>Basket Type</b>                | Stamped steel |
| <b>Terminal Size (mm)</b>         | 4.8 x 0.5     |
| <b>Voice Coil Diameter (mm)</b>   | 25.4          |
| <b>Voice Coil Wire Material</b>   | Copper        |
| <b>Voice Coil Former Material</b> | Aluminum      |
| <b>Magnet Material</b>            | Ferrite       |
| <b>Magnet Weight (g)</b>          | 340           |
| <b>Cone Body Material</b>         | Paper         |
| <b>Spider Material</b>            | Cotton        |
| <b>Dust Cap Material</b>          | Felt          |

**Net Weight (kg)** 1.36

