

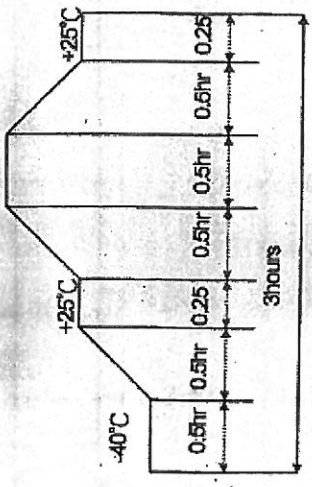
A. SCOPE

This specification applies piezo audio indicator, KPEG850SAN

B. SPECIFICATION

| No. | Item | Unit | Specification | Condition |
|-----|-------------------------------------|-------|---------------------------------------|--------------------------------------------------------------|
| 1 | Resonant frequency | KHz | 2.8 ± 0.5 | |
| 2 | Operating Volt. range | AC/DC | 6 ~ 28 | |
| 3 | Current consumption | mA | MAX 5 MAX 10 MAX 22 | at 6VAC/DC at 12VDC at 28VAC/DC |
| 4 | Sound pressure level | dB | MIN 68 MIN 74 MIN 80 | at 60cm, 6VAC/DC at 60cm, 28VAC/DC at 60cm, 12VDC |
| 5 | Rated Voltage | VDC | 12 | |
| 6 | Tone | | Continuous | |
| 7 | Operating temp. | °C | -30 ~ +85 | |
| 8 | Storage temp. | °C | -40 ~ +85 | |
| 9 | Dimension | mm | φ42.5 x H32.5 | See appearance drawing |
| 10 | Weight (MAX) | gram | 33.8 | |
| 11 | Material | | NYLON UL-94 V-0 (BLACK) | |
| 12 | Terminal | | Tin-Plated Tapped Screw Plating Sn | See appearance drawing |
| 13 | Environmental Protection Regulation | | RoHS | |
| 14 | Storage life | month | 6 | 6 months preservation at room temp. (25 ± 5°C), Humidity 40% |

F. ENVIRONMENT TEST

| No. | Item | Test Condition | Evaluation standard |
|-----|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | High temp. test | After being placed in a chamber at +85°C for 240 hours | Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one. |
| 2 | Low temp. test | After being placed in a chamber at -40°C for 240 hours | |
| 3 | Humidity test | After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours | |
| 4 | Temp. cycle test | The part shall be subjected to 5 cycles. One cycle shall be consist of:  | |

G. RELIABILITY TEST

| No. | Item | Test condition | Evaluation standard |
|-----|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Operating life test | 1. Continuous life test 250 hours continuous operation at +85°C with rated voltage applied. 2. Intermittent life test: A duty cycle of 1 minute on, 5 minutes off, a minimum of 10000 times at room temp. (+25±2°C) and rated voltage applied | Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones. The SPL should be in ±10dB compared with initial one. |

TEST CONDITION.

Standard Test Condition : a) Temperature : +5 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar

Judgment Test Condition : a) Temperature : +25 ± 2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar

E MECHANICAL CHARACTERISTICS

| No. | Item | Test condition | Evaluation standard |
|-----|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Solderability | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. | 90% min. lead terminals shall be wet with solder. (Except the edge of terminal) |
| 2 | Soldering Heat Resistance | Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of $+300\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds or $+260\pm 5^{\circ}\text{C}$ for 10 ± 1 seconds. | No interference in operation |
| 3 | Terminal Mechanical Strength | The force 10 seconds of 9.8N (1.0kg) is applied to each terminal in axial direction. | No damage and cutting off |
| 4 | Vibration | Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 perpendicular directions for 2 hours. | The value of oscillation frequency/ current consumption should be in 10% compared with initial ones. The SPL should be in $\pm 10\text{dB}$ compared with initial one. |
| 5 | Drop test | The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X,Y,Z). (a total of 9 times). | |