**PRODUCT INFORMATION**

**PART #:** CEET085L030-16-2545-27MHR  
**Revision:** 0-2015

**DESCRIPTION**
Challenge Electronics Electromagnetic Transducer; 8.5 mm Length; L style case (side port); 3.0 mm High; 2.5 to 4.5 Vo-p Operating Voltage; 2700 Hz. Resonant Frequency; minimum Sound output of 85 dB(A) min at 10 cm at Rated Voltage; SMD Termination, High/Extended Temp, RoHS, Lead Free, Reach Compliance

**FEATURES**
- RoHS, Lead Free Compliant
- REACH Compliant
- ISO 9001 Certified

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>2.5-4.5 Vo-p</td>
</tr>
<tr>
<td>Nominal Rated Voltage</td>
<td>3.6 Vo-p</td>
</tr>
<tr>
<td>Resonant Frequency</td>
<td>2,700 Hz</td>
</tr>
<tr>
<td>Sound Pressure Level</td>
<td>Minimum 85dB(A), at: 10 cm, Resonant Frequency, Nominal rated Voltage, Square Wave 50% Duty Cycle</td>
</tr>
<tr>
<td>Operating Current</td>
<td>Maximum 80 mA, at: Resonant Frequency, Nominal rated Voltage, Square Wave</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to + 90°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to + 90°C</td>
</tr>
<tr>
<td>Coil Impedance</td>
<td>16 ± 3 Ω</td>
</tr>
<tr>
<td>Housing</td>
<td>Nylon #46</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Ni Alloy Disc</td>
</tr>
<tr>
<td>Termination</td>
<td>SMD Gold-plated brass contacts</td>
</tr>
<tr>
<td>Physical Dimensions</td>
<td>Length (L) 8.5 mm ± 0.3 mm, Width (W) 8.5 mm ± 0.3 mm, Height (H) 3.0 mm ± 0.3 mm</td>
</tr>
<tr>
<td>Approximate Weight</td>
<td>0.4 grams</td>
</tr>
<tr>
<td>Removable Washing Label</td>
<td>No</td>
</tr>
<tr>
<td>Compliance</td>
<td>RoHS, Lead Free and REACH</td>
</tr>
</tbody>
</table>

**RELIABILITY**

- **Thermal Operating Temperature Test**: 96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature *
- **Thermal Storage Temperature Test**: 96 hours of Minimum and Maximum Storage Temperatures *
- **Thermal Shock Test**: 5 cycles of Minimum and Maximum Operating Temperature  
  Each cycle shell be set per diagram and is 3 hours long *
- **Humidity Test**: 72 Hours at +40°C±2°C, 95% RH *
- **Insulation Test**: A minimum of 10 MΩ, measured with 100 Vdc Insulation Resistance Meter, between the Electrical Terminals and the Transducer Case
- **Vibration Test**: 1 Hour at 1.5 mm with 55 Hz. and 150 Hz. vibration frequency for 20 minutes each of 3 perpendicular directions *
- **Termination Strength**: Maximum of 9.8 N (1.0 Kg) load pull test, applied to each terminal in axial direction for 10 seconds
- **Drop Test**: Dropped naturally from 50 cm height onto concrete floor 10 times *
- **Operation Life Test**: Two hundred fifty (250) hours of continuous operation, at Rated Voltage, each at Minimum & Maximum Rated Operating Temperatures
- **Intermittent**: One thousand (1,000) hours of: 1 minute ON 4 minutes OFF cycle, at Room Temperature, and Maximum Rated Voltage
- **Warranty**: For a period of one (1) year from date of shipping under normal operations conditions

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Hand Soldering Guidelines:
This part is designed for SMT soldering only. Working with manual iron is not recommended except sample test or rework.

In case of iron soldering, the iron tip temperature should be lower than 240 degree celsius and soldering time should be shorter than 15 seconds.

Washing Advisory:
This part is not washable type. So soaking into solvent or water will result in decrease of sound level.

TAPE and REEL INFORMATION

Unit : mm
General corner unless specified : R 0.25 mm
General tolerance : 0.1 mm
Reel and carrier specification refers to JIS C 0806
Quantity per a reel is 1,000 EA
50 pockets at both end are empty for leader purpose

SUBSTANCE OF VERY HIGH CONCERN
This product does NOT contain any of the REACH Substances of Very High Concern (SVHC), and is in compliance with European Union REACH Regulation No.1907/2006 regarding chemical substances which must be registered or disclosed.

MARKING
Reel
Reel Diameter
33 mm
Part Number
Quantity
1,000
Bundle
Lot and/or Date Code
X
33 cm
Shipping Box
Dimensions
Y
33 cm
Part Number
Z
cm
Customer PN (if required)
Quantity
5 Reels
Shipping Box
Quantity
Lot and/or Date Code
X
33 cm
PO Number
Dimensions
Y
33 cm
Net Weight
Z
15 cm
Gross Weight
Number of Bundles
1
Box Number of Boxes
Quantity
5,000
Approximate Weight
4.5 Kg

Made in
Korea

Revision

Description

By:

Date: