



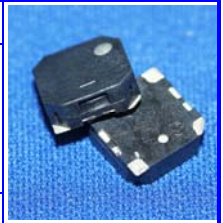
PRODUCT INFORMATION

PART #	CEET075R025-15-245-27MR	Revision: 3-2016
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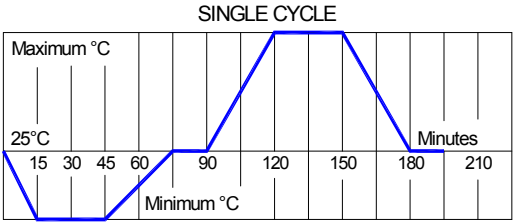


SMD Electro-Magnetic Sound Transducer

DESCRIPTION	FEATURES
Challenge Electronics Electro-Magnetic Transducer, 7.5 mm Long, 7.5 mm Wide, R style case (Square, Side Sound Port), 2.5 mm Height, 2.5 to 4.5 Vo-p operation 2,700 Hz Resonant Frequency, with a Minimum Sound Pressure output of 82 dB(A) at: 10 cm, Rated Voltage. M type SMD Termination, RoHS Lead Free compliant	<ul style="list-style-type: none"> • RoHS, Lead Free Compliant • ISO 9001 & TS16949 Certified • REACH Compliant



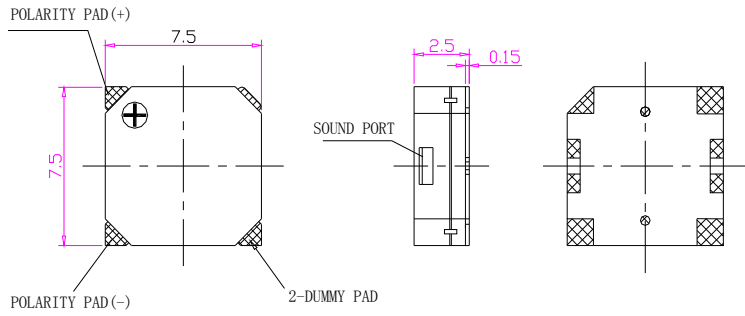
SPECIFICATIONS	
Resonant Frequency	2,700 Hz. Coil Impedance 15 ± 3 Ohms
Operating Voltage	2.5 – 4.5 Vop Nominal Rated Voltage 3.6 Vop
Sound Pressure Level	Minimum 82 dB(A), at: Nominal rated Voltage, 10 cm, Resonant Frequency, 50% Duty Cycle
Operating Current	Maximum 100 mA, at: Nominal rated Voltage, Resonant Frequency, 50% Duty Cycle
Operating Temperature	-30°C to + 80°C Storage Temperature -40°C to +85°C
Material	Case R Style, Plastic, LCP, Gray Sound Port Side
	Diaphragm Ni Alloy Disc N50 Encapsulation Plastic Cap
	Termination SMD, 4 soldering pads, Sn plated Brass
Physical Dimensions	Length or Diameter (L/D) 7.5 mm Width (W) 7.5 mm Height (H) 2.5 mm
Approximate Weight	0.5 grams Removable Washing Label No Compliance RoHS, Lead Free and REACH

RELIABILITY	
Thermal Operating Temperature Test	96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature * 96 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature *
Thermal Storage Temperature Test	96 hours storage at Maximum Rated Storage Temperatures * 96 hours storage at Minimum Rated Storage Temperatures *
Thermal Shock Test	5 cycles of Minimum and Maximum Operating Temperature Each cycle shall be set per diagram and is 3 hours long * 
Humidity Test	96 Hours at +40°C±2°C. 90-95% 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	2 Hours of at 0.75 mm with 10 to 55 Hz. vibration frequency to 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 750 mm height onto the surface of 40 mm wooden board, 3 axes (X,Y,Z) directions, 3 times (9 times total) *
Solderability	Terminal leads are immersed in rosin for 5 seconds and then immersed in solder-bath of +270°C for 3±1 seconds
Soldering Heat Resistance	Terminal leads are immersed, up to 1.5 mm from part case, in rosin for 5 seconds and then immersed in solder-bath of +350±5°C for 3±0.5 seconds or +260±5°C for 10±1 seconds
* Reliability Test Performance	Parts should conform to original performance within ±3dB, after 3 hours of recovery period
Life Test	Intermittent 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and maximum Rated Voltage
	Continuous 250 hours continuous operation at maximum Rated Voltage and maximum Operating Temperatures
Warranty	For a period of one (1) year from date of shipping under normal operations conditions This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair

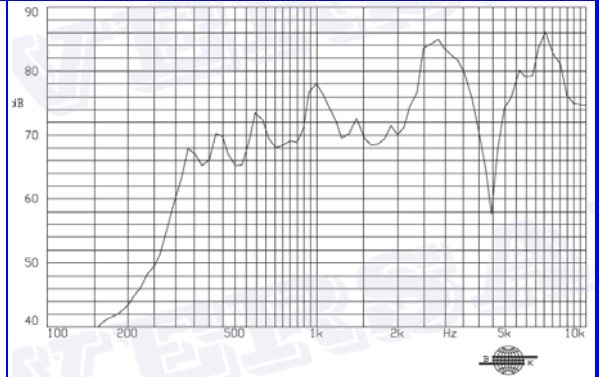


DIMENSIONS

Units in: mm, Tolerance: ± 0.5mm unless specified otherwise.

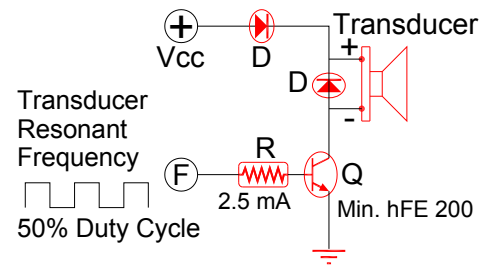


SPL vs. FREQUENCY RESPONSE



Recommended Land Pattern:

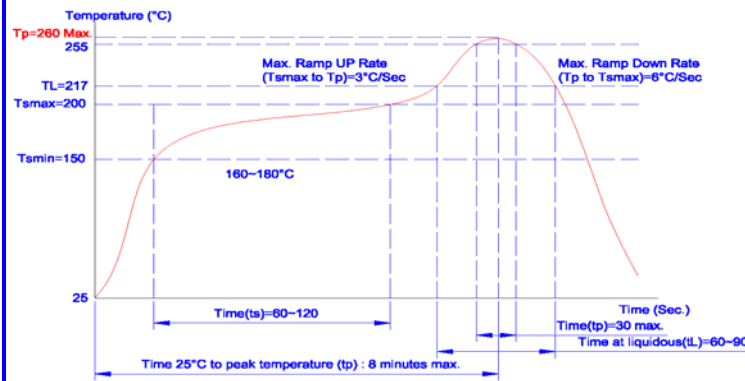
RECOMMENDED CIRCUIT DRIVE



STORAGE

- Shelf life:** Twelve (12) months when devices are to be stored in factory supplied unopened ESD moisture sensitive bag under maximum environmental conditions of 30°C, 70% R.H.
- Exposure:** Devices should not be exposed to high humidity high temperature environment. MSL (moisture sensitivity level) Class 2

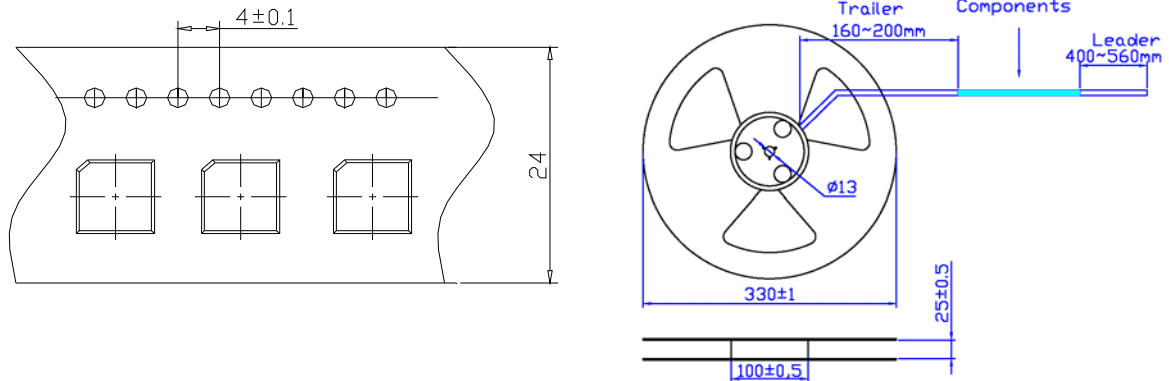
SOLDER REFLOW PROFILE per IPC/JEDEC J-STD-020D



Stage	Temperature Profile	Maximum Time
Pre-heat	170~230°C	120 sec
Solder Melt	Above 230°C	100 sec
Peak	260°C Maximum	
Cool Down		100 sec
Total Duration Period		6 Minutes Maximum

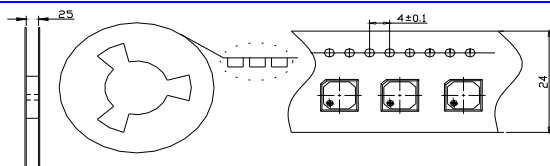


TAPE & REEL DIMENSIONS (Unit: mm)

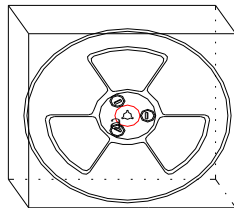


1. 10 pocket holes pitch cumulative tolerance ± 0.20 mm.
2. Carrier camber is 1 mm in 100 mm.
3. A0 and B0 measured on a plane on a place 0.30 mm above the bottom of the pocket.
4. K0 measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
5. All dimensions meet EIA-481-2-A requirements.
6. Reel Size 13"
7. Parts per Reel 1,000 parts

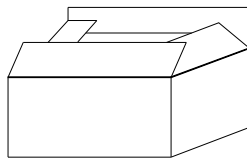
PACKAGING



1000PCS/CARRUER REEK; 每卷装1000只



1ROLL CARRIER REEL/INNER BOX; 1卷放一小包装



10000PCS/CTN 每箱放10000只

MARKING

REEL

Reel Box

PN	Dimensions	X1	cm
Quantity		Y1	cm
Lot and/or Date Code		Z1	cm
Quantity		1,000	

REEL BOX

Shipping Box

Customer Part Number	Dimensions	X2	cm
Other PN (if required)		Y2	cm
Quantity		Z2	cm
Quantity		Quantity	

SHIPPING BOX

Lot and/or Date Code	Dimensions	X3	cm
PO Number		Y3	cm
Net Weight		Z3	cm
Gross Weighjt	Number of Bundles		
Box Number	Quantity		10,000
of Number of Boxes	Approximate Weight		
Made in China			

Revision	Description	By	Date
1-2014	Updated Product Photo. Added REACH compliance	WS	2014-10-18
2-2016	Updated Number of contacts (termination)	WS	2016-02-10
3-2016	Corrected description - changed 'typical' to 'minimum' (SPL)	WS	2016-02-29