



Data Sheet

SMT-0540-S-2-R

Features:

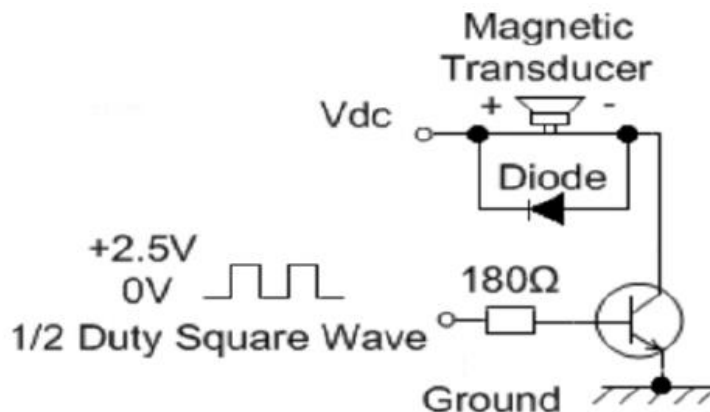
- 5x5mm SMT magnetic transducer
- 3V0-p, 4kHz

Specifications

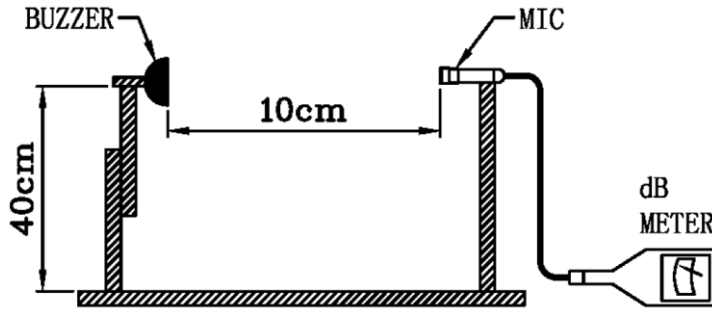
Parameters	Values	Units
Rated Voltage	3	V0-p
Operating Voltage Range	2 ~ 4	V0-p
Current Draw at Rated Voltage*	100	mA
Coil Resistance	12 ± 2	Ohms
Minimum SPL @ 10cm*	78	dBa
Resonant Frequency	4,000 ± 500	Hz
Housing Material	LCP	-
Terminal Material	Tin-Plated Brass	-
Weight	0.1	Grams
Moisture Sensitivity Level (MSL)	2A	-
Acceptable Soldering Methods	Hand Solder @ 350C for 5s, Reflow Solder	See page 3 for reflow solder information
Environmental Compliances	RoHS/REACH	-
Operating Temperature	-40 ~ +85	°C
Storage Temperature	-40 ~ +85	°C

*At rated voltage with 50% duty cycle 4 kHz positive biased square-wave

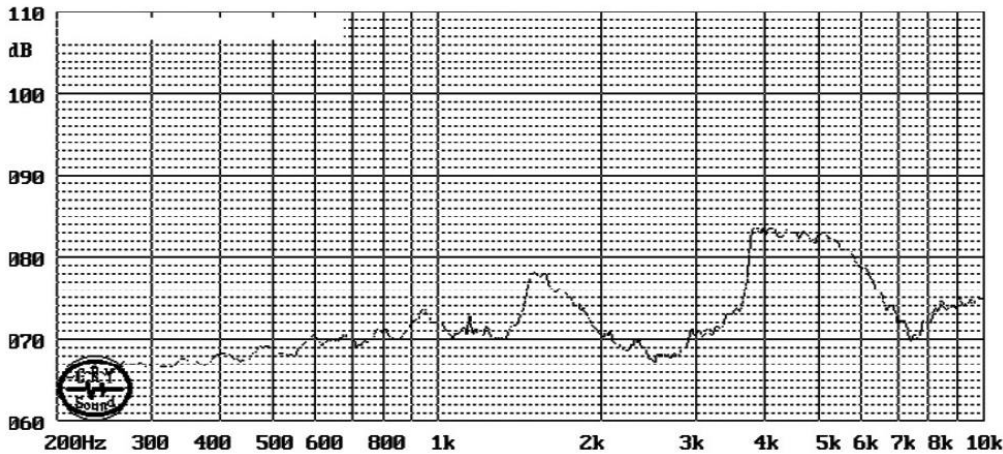
Recommended Drive Circuit (Transistor should have a $V_{ce} \leq 0.15V$ and $h_{FE} \geq 200$)



Test Condition



Typical Frequency Response (3Vpk input measured at 10cm)

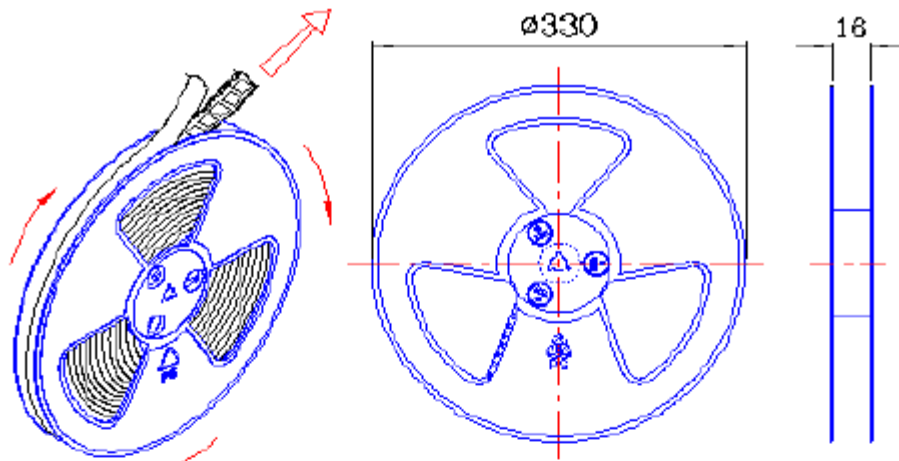


Reliability Testing

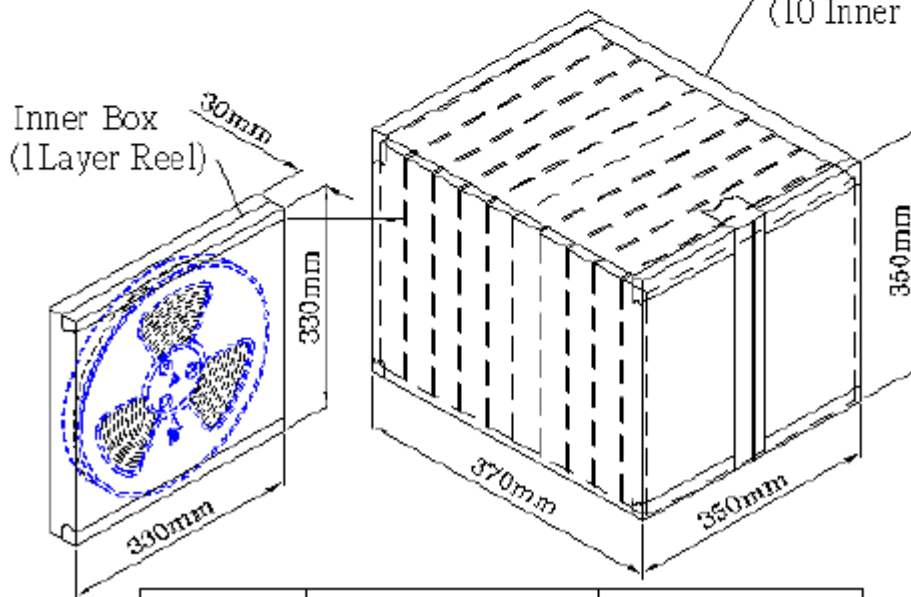
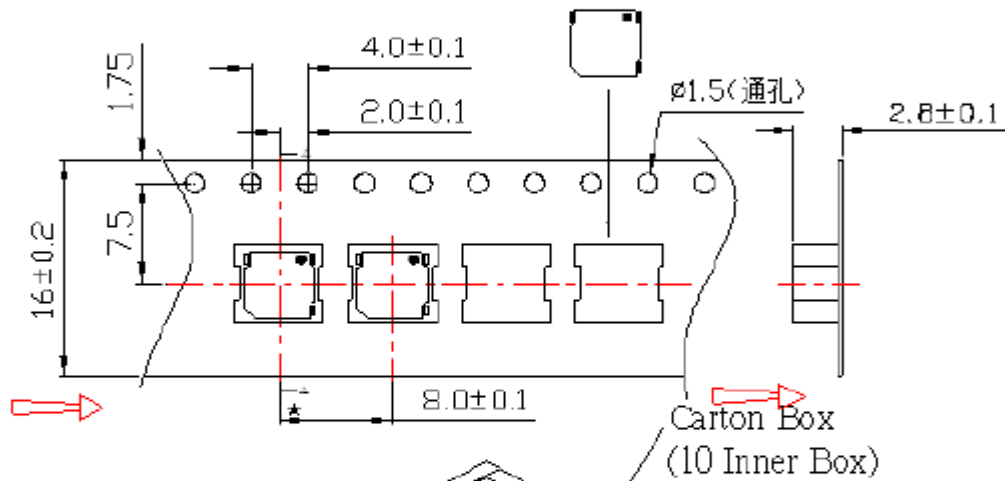
Type of Test	Test Specifications
High Temperature Test	The part shall be capable of withstanding a temperature +85°C for 96 hours
Low Temperature Test	The part shall be capable of withstanding a temperature -40°C for 96 hours
Humidity Test	25±2°C, 90~95% RH, 5 hours up to 55°C, 0.5hr for 25±2°C, 5 hours to 25±2°C, then 0.5hr. Complete 10 cycles.
Temperature Cycle Testing	<p>Total 1 cycle of the following</p> <p>(1 cycle) -20 °C → +25 °C → +70 °C → +25 °C → -20 °C</p> <p>Time intervals: 30 min, 30 min, 15 min, 30 min, 30 min, 30 min, 15 min, 30 min</p>
Vibration Test	After vibration part with 1.5mm amplitude at 10-50Hz in 3 perpendicular directions for 2 hours each.
Drop Test	Drop from a height of 700mm onto 10mm thick wood board in 3 directions.

After each test, part shall meet specifications with an SPL variance that of specification tolerance.

Packaging



1 Reel : 2500PCS



Inner Box	330mmx330mmx30mm	1x2500PCS~2500PCS
Carton Box	350mmx350mmx370mm	10x2500PCS~25,000PCS

Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	08/06/2018	-
B	Update Spec Format, Add details for Packaging and MSL 2A	01/21/2025	ML

Note:

1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are $\pm 0.5\text{mm}$ and angles are $\pm 3^\circ$.
2. Specifications or changes may not be made without prior customer notification and approval.