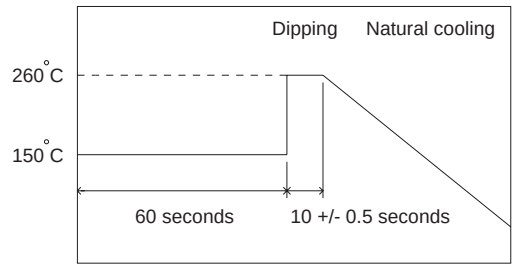
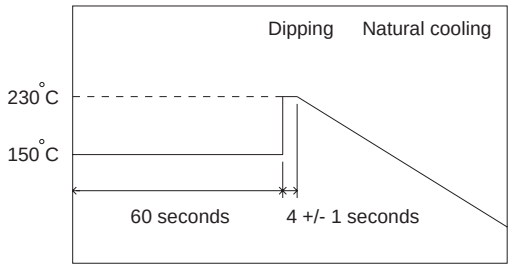
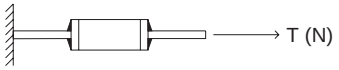
Surface Mount Chip EMI Suppressors

Performance and Test Conditions

Criteria	Performance	Parameters
Operating temperature range	-25 to +85°C	
Storage temperature and humidity ranges	40°C max., 70% RH max.	
Soldering heat resistance	No cracking of the chip may occur. Solder must cover greater than 75% of the total surface area of the terminal electrode. Impedance must be within +/- 20% of the initial value.	Preheat: 150°C, 60 seconds Solder: H63A Solder temperature: 260 +/- 5°C Flux: Resin Dip time: 10 +/- 0.5 seconds 
Solderability	New solder must cover greater than 90% of the total surface area of the terminal electrode.	Preheat: 150°C, 60 seconds Solder: H63A Solder temperature: 230 +/- 5°C Flux: Rosin Dip time: 4 +/- 1 seconds 
Pull strength	The terminal electrode and the ferrite shall not be damaged by the tensile forces applied by the conditions shown.	After soldering a lead wire to a terminal electrode, apply a tensile force, T, in the direction shown.  Size Code / T (N) MB0603 4.9 MB0805 5.9 MB1206 9.8 MB1210 9.8 MB1806 9.8 MB1812 14.7
Low temperature storage life test	Chipping, cracking or any other physical defects which are harmful to the electrical characteristics shall not be allowed. Impedance must be within +/- 20% of the initial value.	Temperature: -40 +/- 2°C Testing time: 1008 +/- 12 hours Measurement taken after placing for 24 hours minimum.

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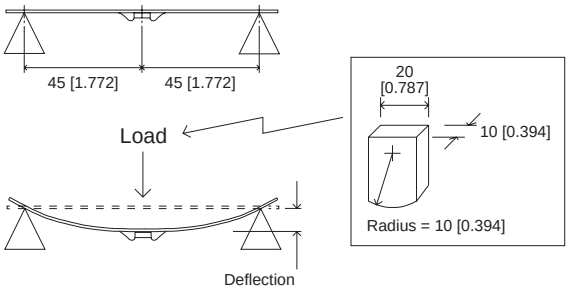
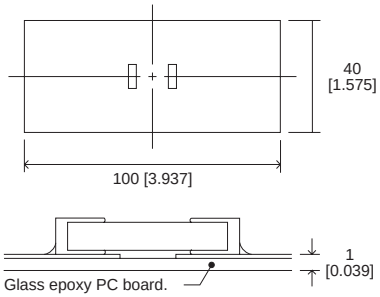
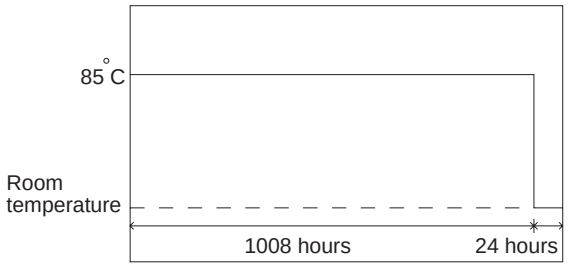
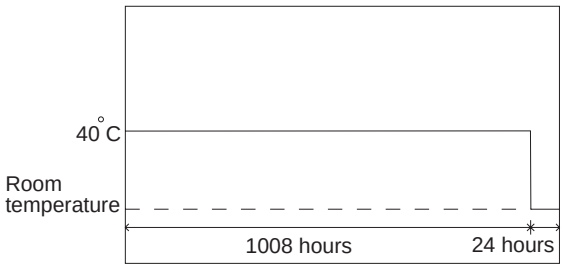
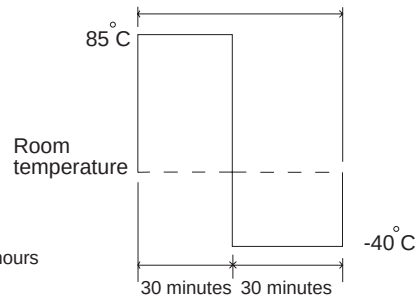
Flexural strength	The terminal electrode and the ferrite shall not be damaged by the forces applied by the conditions shown. 	After soldering a chip to the center of a test substrate, deflect the midpoint of the substrate by 2mm (0.079 inches) and allow it to return to the initial position. Soldering shall be done in accordance with the recommended PC board pattern and reflow soldering. 
High Temperature Resistance	The physical appearance of the ferrite shall not be damaged. Impedance must be within +/- 20% of the initial value.	Temperature: 85 +/- 2°C Applied current: Rated current (maximum value) Testing time: 1008 +/- 12 hours Measurement taken after placing for 24 hours minimum. 
Humidity Resistance	The physical appearance of the ferrite shall not be damaged. Impedance must be within +/- 20% of the initial value.	Humidity: 90 to 95% RH Temperature: 40 +/- 2°C Applied Current (maximum value) Testing time: 1008 +/- 12 hours Measurement taken after placing for 24 hours minimum. 
Thermal Shock	Chipping, cracking or any other physical defects which are harmful to the electrical characteristics shall not be allowed. Impedance must be within +/- 20% of the initial value.	Temperature: -40°C, +85°C, kept steady for 30 minutes each. Cycle: 100 cycles  Measurement taken after placing for 24 hours minimum.

Tape Dimensions

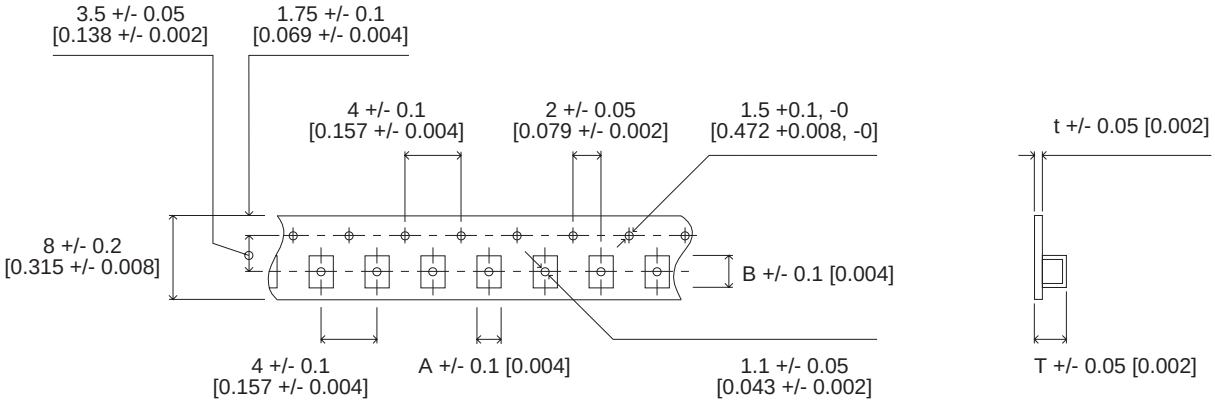


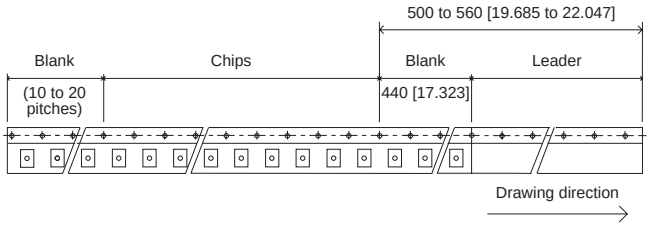
Fig. 1

Rev. 97001

TAPE DIMENSIONS

Size Code	A	B	T	t	Fig.
MB0603	1.1 [0.043]	1.9 [0.075]	1.1 [0.043]	0.3 [0.012]	1
MB0805	1.55 [0.061]	2.3 [0.091]	1.2 [0.047]	0.3 [0.012]	1
MB1206	1.9 [0.075]	3.5 [0.138]	1.4 [0.055]	0.3 [0.012]	1
MB1210	2.9 [0.114]	3.6 [0.142]	1.7 [0.067]	0.3 [0.012]	1
MB1806	1.9 [0.075]	4.9 [0.193]	1.8 [0.072]	0.3 [0.012]	2
MB1812	3.6 [0.142]	4.9 [0.193]	2.05 [0.081]	0.3 [0.012]	2

Dimensions in mm [inches].



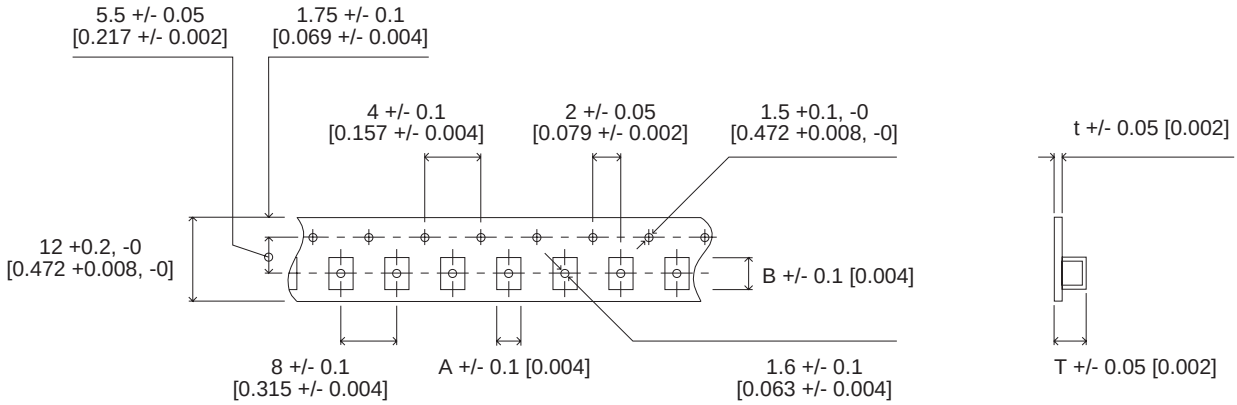


Fig. 2