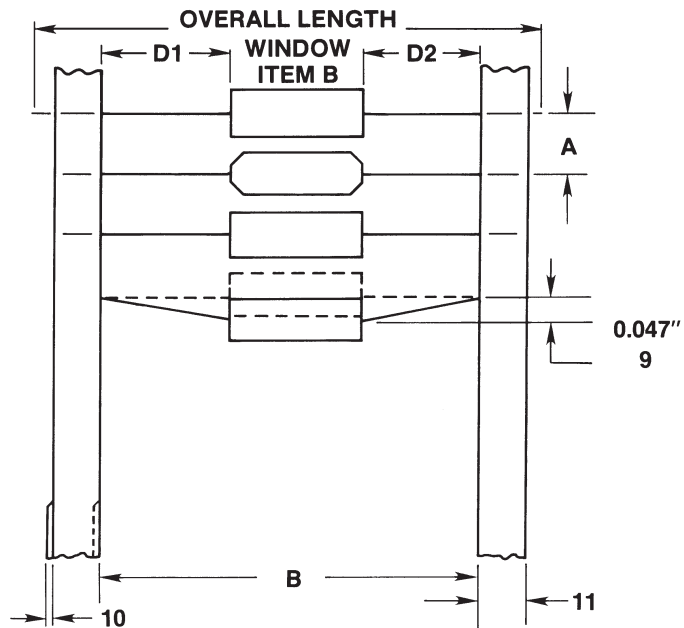
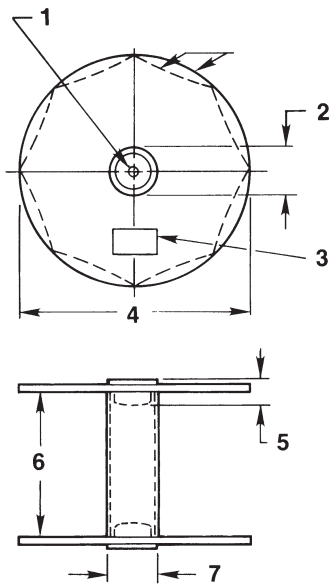


TAPE AND REEL SPECIFICATIONS



INTRODUCTION

This tape and reel specification is intended to facilitate the use of readily available standard components. Compliance to this process specification should not require the vendor's modification, if conformed to EIA standard RS-296D.

Item # Description/Specification

1. Arbor Hole Diameter / $.640'' \pm .025''$
2. Hub Recess / $3.0'' \pm .05''$
3. Minimum reel and carton marking will correspond to individual customer specification.
4. Reel Diameter = $14.0''$
5. Recess Depth / $.5''$ minimum
6. Item 5 reel width shall be $.125''$ to $.250''$ greater than the overall length of the taped component.
7. Core Diameter / $3.25'' \pm .1''$
8. A window which is equal to the maximum component body length shall be centered between lead tapes such that the difference between D1 and D2 does not exceed $.055''$.
9. Leads shall not be bent more than $.047''$ from their normal position when measured from the edge of the component lead at the inside tape edge and at its connection to the body of the component.

Component Body Dia.	Dimension "A" Unless Noted Item 12	Inside Tape Spacing Dimension "B" Item 13	
		Stand. Class II	Class III
$.180''$ to $.394''$	$.395'' \pm .015''$	$2.500 \pm .063$	
$.394''$ to $.591''$	$.591'' \pm .015''$		$2.875 \pm .063$

10. Exposed adhesive shall be no greater than $.031''$.
11. Component leads shall be perpendicularly positioned between pairs of $.197''$ to $.250''$ tape and held without any relative motion to the tape.
12. Accumulative pitch tolerance dimension "A" shall not exceed $0.059''$ over six consecutive components.
13. Inside tape spacing will be determined by the input class of each individual component as called for by customers drawing and/or purchase order.

Other notes: (optional)

- All outside foil components will be oriented in one direction.
- A length of leader tape shall be provided before the first and after the last component of the reel. It will be a minimum of $12.0''$.