Calculating Parts to Tape and Reel Per 13" Reel

Reel Size: (OD: 13" ID: 4")

August 2005

Setting Up Your Own Excel Worksheet

Using Microsoft Excel® to determine how many parts to tape and reel per 13" take-up reel is easy. To begin, you will need the pocket depth and pitch of your carrier tape. All numbers are referenced in millimeters. Proceed as follows:

Step-by-Step Instructions:

- Open a new Microsoft Excel® worksheet.
- In cell A1 record the value of your carrier tape pocket depth in mm's.
- In cell A2 record the value of your carrier tape pitch in mm's.
- In cell A3 cut and paste the following formula:
- =ROUNDDOWN(((77.53/($A$1+0.31))-1)*(1000/$A$2),-1)
- The value supplied in cell A3 will represent the maximum number of parts that can fit on one 13-inch take-up reel that has a 4-inch center core.

Keep in mind that this number is the practical maximum. In theory more pockets may be able to fit. It is often best to round down to the nearest 250, 500, or 1000-mark for an optimal selling count. This formula already allows for leader and trailer in setting the final reel count. For other reel sizes, please contact us to request the proper formula by using our contact sheet.

Here Is An Example:

- In cell A1 record 4.90 as the value of your carrier tape pocket depth in mm's.
- In cell A2 record 16.00 as the value of your carrier tape pitch in mm's.
- In cell A3 cut and paste the following formula:
- =ROUNDDOWN(((77.53/($A$1+0.31))-1)*(1000/$A$2),-1)
- The value supplied in cell A3 should be 860.
- In this case after rounding down to the nearest 250, we would suggest 750 parts per reel.

OX3's semiconductor handling services are supported by three web sites at OX3.com for tape and reel service, Reelpak.com for carrier tape, and Reel.biz for reels, and cover tapes.