





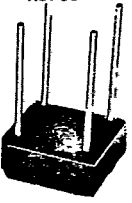



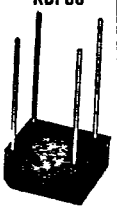

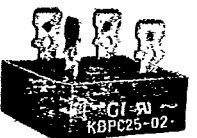
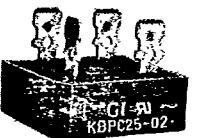
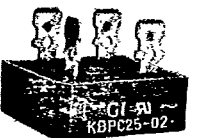



**SINGLE PHASE BRIDGE RECTIFIERS (continued)**

| IF (A)       | 3.0   |   | 4.0   |   |        | 5.0  | 6.0   |   |           |
|--------------|---|---|---|---|--------|--|---|---|-----------|
| PGK TYPE     | KBPC1   | BC  | KBL   | KBU   |        | BC   | KBU   | KBPC6   |           |
| VRRM (volts) |  |  |  |  |        |  |  |  |           |
| 50           | KBPC1005  | B40 C3700/2200  | KBL005 #  | KBU4A   | RKBU4A | B40 C5000/3300   | KBU6A #   | KBPC6005  | RKBPC6005 |
| 100          | KBPC101   | B80 C3700/2200  | KBL01 #   | KBU4B   | RKBU4B | B80 C5000/3300   | KBU6B #   | KBPC601   | RKBPC601  |
| 200          | KBPC102   | B125 C3700/2200   | KBL02 #   | KBU4D   | RKBU4D | B125 C5000/3300  | KBU6D #   | KBPC602   | RKBPC602  |
| 400          | KBPC104   | B250 C3700/2200   | KBL04 #   | KBU4G   | RKBU4G | B250 C5000/3300  | KBU6G #   | KBPC604   | RKBPC604  |
| 600          | KBPC106   | B380 C3700/2200   | KBL06 #   | KBU4J   | RKBU4J | B380 C5000/3300  | KBU6J #   | KBPC606   | RKBPC606  |
| 800          | KBPC108   |   | KBL08 #   | KBU4K   | RKBU4K |  | KBU6K   | KBPC608   | RKBPC608  |
| 1000         | KBPC110   |   | KBL10 #   | KBU4M   | RKBU4M |  | KBU6M   | KBPC610   | RKBPC610  |

|              |    |     |     |     |         |     |     |     |         |
|--------------|----|-----|-----|-----|---------|-----|-----|-----|---------|
| SURGE (A)    | 50 | 100 | 200 | 200 | 200     | 250 | 250 | 125 | 125     |
| MAX Trr (nS) |    |     |     |     | 200-500 |     |     |     | 200-500 |

# Also available in fast recovery version

**SINGLE PHASE BRIDGE RECTIFIERS (continued)**

| IF (A)       | 8.0   |   | 10.0  |   | 15.0  | 25.0  |   | 35.0  |   |
|--------------|---|---|---|---|---|---|---|---|---|
| PKG TYPE     | KBU   | KBPC8   | KBPC10  | KBPC15  | KBPC25  |   | KBPC35  |   |   |
| VRRM (volts) |  |  |  |  |  |  |  |  |  |
| 50           | KUB8A #   | KBPC8005  | KBPC10-005 #  | 10SP005*  | KBPC15005 #   | KBPC25005 #   | 25SP005*  | KBPC35005 #   | 35SP005*  |
| 100          | KUB8B #   | KBPC801   | KBPC10-01 #   | 10SP01*   | KBPC1501 #  | KBPC2501 #  | 25SP01*   | KBPC3501 #  | 35SP01*   |
| 200          | KUB8D #   | KBPC802   | KBPC10-02 #   | 10SP02*   | KBPC1502 #  | KBPC2502 #  | 25SP02*   | KBPC3502 #  | 35SP02*   |
| 400          | KUB8G #   | KBPC804   | KBPC10-04 #   | 10SP04*   | KBPC1504 #  | KBPC2504 #  | 25SP04*   | KBPC3504 #  | 35SP04*   |
| 600          | KUB8J #   | KBPC806   | KBPC10-06 #   | 10SP06*   | KBPC1506 #  | KBPC2506 #  | 25SP06*   | KBPC3506 #  | 35SP06*   |
| 800          | KBU8K   | KBPC808   | KBPC10-08   | 10SP08*   | KBPC1508  | KBPC2508  | 25SP08*   | KBPC3508  | 35SP08*   |
| 1000         | KBU8M   | KBPC810   | KBPC10-10   | 10SP10*   | KBPC1510  | KBPC2510  | 25SP10*   | KBPC3510  | 35SP10*   |

|              |     |     |     |     |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SURGE (A)    | 300 | 125 | 200 | 200 | 300 | 300 | 300 | 400 | 400 |
| MAX Trr (nS) |     |     |     |     |     |     |     |     |     |

\*Also available as doubler or negative center tap - change letter "P" to "D" or "N".

\*Also available in 15. Amperes change prefix to 15

#Also available in fast recovery version

# GENERAL INSTRUMENT

## Packaging Codes

| PKG.<br>CODE | PACKAGING DESCRIPTION  |
|--------------|--|
| 1            | Bulk   |
| 2            | 26MM Horizontal Reel   |
| 3            | 26MM Horizontal Ammo Pack  |
| 4            | Standard Horizontal Reel, Class I (Metric 52.4MM)                          |
| 6            | Avisert, Cathode Up, Reel  |
| 8            | Avisert, Cathode Up, Ammo Pack   |
| 10           | Avisert, Cathode Down, Reel  |
| 12           | Avisert, Cathode Down, Ammo Pack   |
| 14           | Panasert, Cathode Up, Reel   |
| 16           | Panasert, Cathode Up, Ammo Pack  |
| 18           | Panasert, Cathode Down Reel  |
| 20           | Panasert, Cathode Down, Ammo Pack  |
| 22           | Bulk Pack for Special Axial-Leaded Formed Devices                          |
| 23           | Standard Horizontal Ammo Pack (Metric)                                     |
| 25           | GL41 SMD 12MM Tape, 7" Diameter Reel                                       |
| 26           | GL41 SMD 12MM Tape, 13" Diameter Reel                                      |
| 31           | Standard Horizontal Reel, Class III, 14" Diameter, (Metric 73MM)           |
| 32           | GL34 SMD, 8MM Tape, 7" Diameter Reel                                       |
| 33           | GL34 SMD, 8MM Tape, 13" Diameter Reel                                      |
| 34           | Tab Mounted EFR8 Chip, 16MM, 13" Diameter Reel                             |
| 35           | Bulk, Axial-Leaded Conductive Packaging                                    |
| 36           | Standard Horizontal Reel (Metric) Conductive Packaging                     |
| 37           | Bulk, TO220, TO3P Conductive Tubes   |
| 38           | Bulk, Conductive Packaging for Bridge Rectifier                            |
| 39           | Miscellaneous Non-Standard T&R Packaging                                   |
| 40           | Euroform, Reel, Cathode First Off Reel, Lead Coated                        |
| 41           | Euroform, Ammo Pack, Cathode First Off Tape, Lead Coated                   |
| 42           | Euroform, Reel, Cathode Last Off Reel, Lead Coated                         |
| 43           | Euroform, Ammo Pack, Cathode Last Off Tape, Lead Coated                    |
| 44           | Standard Horizontal Reel (Metric) 5MM Component Spacing for DO201 Packages |
| 45           | Bulk Pack for TO220, TO3P, and Bridge Rectifier Tubes                      |
| 46           | GL41 SMD 12 MM Tape, 7" Diameter Plastic Tubes                             |
| 47           | GL41 SMD 12 MM Tape, 13" Diameter Plastic Reels                            |

Also available for all packaging Electro-Static-Protection by adding the number "50" to the existing codes.  
For ex. "51" would be Bulk, Electro-Static Packaging. "54" would be T/R, Electro-Static Packaging.

Axial lead units are packed in accordance with EIA Standard RS-296-D plus specifications given below and the diagrams given below which are referred to in the specifications.

| COMPONENT CASE TYPE | UNITS PER REEL | COMPONENT SPACING "A" FIG. 1 |      | TAPE SPACING "B" FIG. 1 |      | REEL DIMENSION "D" FIG. 2 |         | MAX. OFF ALIGNMENT "E" FIG. 1 |           | GROSS WEIGHT PER WHEEL |      |
|---------------------|----------------|------------------------------|------|-------------------------|------|---------------------------|---------|-------------------------------|-----------|------------------------|------|
|                     |                | ea.                          | in.  | mm                      | in.  | mm                        | in.     | mm                            | in.       | mm                     | lbs. |
| DO15                | 3500           | .220                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.19                   | 1.9  |
| DO201AD             | 1200           | .395                         | 10.0 | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.19                   | 1.9  |
| DO204AP             | 4000           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.41                   | 2.0  |
| DO204MB             | 4000           | .220                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 2.65                   | 1.2  |
| DO41                | 5000           | .220                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.63                   | 2.1  |
| G3/G4               | 1500           | .395                         | 10.0 | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 3.75                   | 1.7  |
| GL34 Surface Mount  | 2500/9000      | .157                         | 4.0  | —                       | —    | 7/13                      | 178/330 | See Fig. 6                    | .471/1.49 | .214/68                |      |
| GL41 Surface Mount  | 1500/5000      | .157                         | 4.0  | —                       | —    | 7/13                      | 178/330 | See Fig. 6                    | .471/1.49 | .214/68                |      |
| GP10 Only Verticle  | 2000           | .500                         | 12.7 | —                       | —    | 12.0                      | 305     | .079                          | 2.0       | 2.29                   | 1.04 |
| GP10E               | 4000           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 3.05    | .047                          | 1.2       | 3.04                   | 1.38 |
| GP20                | 1200           | .395                         | 10.0 | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 3.42                   | 1.55 |
| J,JTX,1N5415        | 2500           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.19                   | 1.9  |
| J,JTX, 1N5550       | 2500           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.19                   | 1.9  |
| J, JTX, 1N5807      | 2500           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 4.19                   | 1.9  |
| MPG06               | 5000           | .200                         | 5.0  | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 2.20                   | 1.0  |
| P600                | 700            | .395                         | 10.0 | 2.06                    | 52.4 | 12.0                      | 305     | .047                          | 1.2       | 3.75                   | 1.7  |

| Component Body Dia.               | Metric Spec.                          |                         | Cumulative pitch tolerance                       |
|-----------------------------------|---------------------------------------|-------------------------|--|
|                                   | Components spacing "A" (Lead to Lead) | Inside tape spacing "B" |  |
| 0 mm to 5 mm (0 to .197")         | ± 0.5 mm (.020")                      | ± 1.5 mm (.059")        | Not exceed 1.0 mm over 20 consecutive components |
| 5.01 mm to 10 mm (.197" to .394") | 10 mm                                 | 52.4 mm                 | Not exceed 1.0 mm over 10 consecutive components |

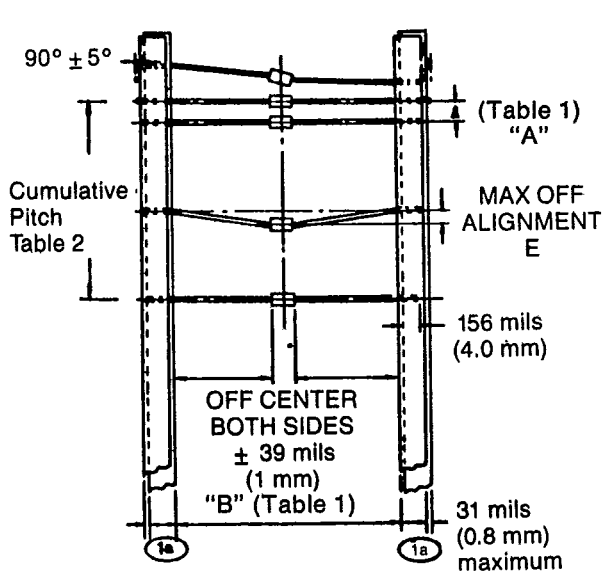


Figure 1

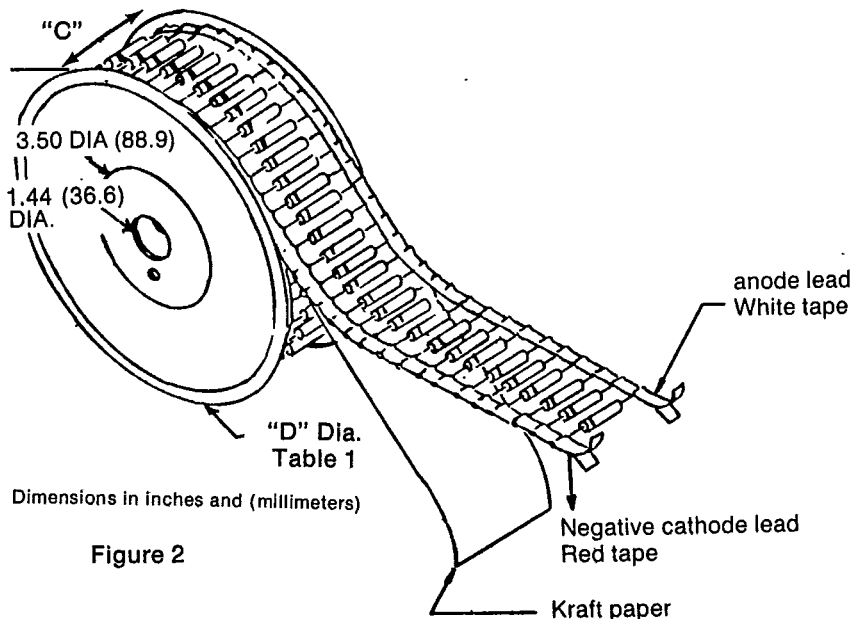


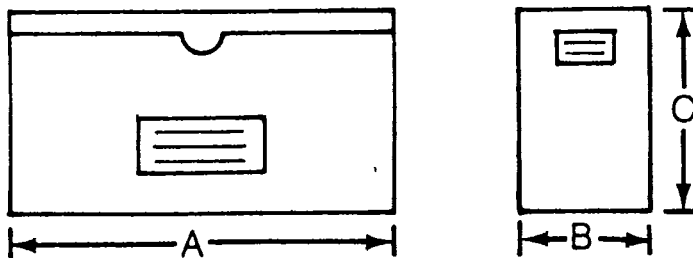
Figure 2

The C dimension of Fig. 2 is between .125" (3.175) and .250" (6.35) greater than the length of the component involved.

**BULK PACKAGING**

| Component Case Type                  | Box Size            |                    | Quantity  | Gross Weight |          |
|--------------------------------------|---------------------|--------------------|-----------|--------------|----------|
|                                      | IN.                 | CM                 | EA        | LBS.         | KG.      |
| GL34 Surface Mount                   | 8 x 3.5 x 1         | 20.3 x 8.8 x 2.54  | 800       | 0.55         | 0.25     |
| GL41 Surface Mount                   | 8 x 3.5 x 1         | 20.3 x 8.8 x 2.54  | 4000      | 1.03         | 0.467    |
| DO15                                 | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 4000      | 3.85         | 1.75     |
| DO201AD                              | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 1500      | 4.41         | 2.0      |
| DO204AP                              | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 4000      | 3.75         | 1.7      |
| DO204MB                              | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 5000      | 3.15         | 1.45     |
| DO41/MPG06.                          | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 5000      | 2.38/2/20    | 1.08/1.0 |
| G4/G3                                | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 3000/2000 | 5.07/5.29    | 2.3/2/4  |
| GP20                                 | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 1500      | 3.75         | 1.7      |
| J, JTX1N483B, 1N645, 1N645-1         | 8 x 3.5 x 1         | 20.3 x 8.8 x 2.54  | 1000      | .77          | .35      |
| J, JTX1N3611, 1N4245, 1N5614         | 8 x 3.5 x 1         | 20.3 x 8.8 x 2.54  | 500       | .55          | .25      |
| J, JTX1N4942, 1N5615                 | 8 x 3.5 x 1         | 20.3 x 8.8 x 2.54  | 500       | .55          | .25      |
| J, JTX1N5415, 1N5550, 1N5807         | 12 x 3.6 x 2.5      | 30.4 x 9.1 x 6.3   | 1000      | 2.5          | 1.1      |
| J, JTX1N5624                         | 12 x 3.2 x 2.5      | 30.4 x 8.1 x 6.3   | 1000      | 2.5          | 1.1      |
| P600                                 | 11.75 x 5.125 x 2.5 | 29.8 x 13.0 x 6.3  | 750       | 3.72         | 1.69     |
| DF-M/DF-S Anti-Static Plastic Tubes  | 19.0 Length         | 48.2 Length        | 50        | 0.12         | 0.05     |
| TO220CT Anti-Static Plastic Tubes    | 20.5 Length         | 52.0 Length        | 50        | 0.306        | 0.14     |
| TO3P Anti-Static Plastic Tubes       | 20.5 Length         | 52.0 Length        | 30        | 0.572        | 0.26     |
| KBPM/2KBPM Anti-Static Plastic Tubes | 18.5 Length         | 47.0 Length        | 30        | 0.216        | .098     |
| AR,ARS Plastic Bags                  |                     |                    | 200       | 0.84         | 0.38     |
| WM Plastic Plastic Bags              |                     |                    | 100       | 0.37         | 0.17     |
| GPP1, EFR1,35, SCH3, 5, Chip Tray    | 2.0 x 2.0 x .35     | 5.1 x 5.1 x 0.9    | 100       | 0.042        | 0.019    |
| GPP5, EFR8, SCH 10 Chip Tray         | 2.0 x 2.0 x 3.5     | 5.1 x 5.1 x 0.9    | 100       | 0.044        | 0.020    |
| SCH1 Chip Tray                       | 2.0 x 2.0 x 3.5     | 5.1 x 5.1 x 0.9    | 400       | 0.042        | 0.019    |
| GPP08,GPP12 Chip Tray                | 2.0 x 2.0 x 3.5     | 5.1 x 5.1 x 0.9    | 49        | 0.042        | 0.019    |
| KBU4, 6, 8 . . Polyfoam Container    | 14.8 x 8.8 x 3.5    | 37.6 x 22.3 x 8.9  | 400       | 7.5          | 3.4      |
| KBL Polyfoam Container               | 14.8 x 8.8 x 3.5    | 37.5 x 22.0 x 9.0  | 500       | 7.5          | 3.4      |
| KPBC10 35W Polyfoam Container        | 10.4 x 8.7 x 7.1    | 26.6 x 22.0 x 18.0 | 100       | 6.5          | 2.95     |
| BC                                   | 9.2 x 5.0 x 2.5     | 23.4 x 12.7 x 6.3  | 100       | 3.08         | 1.4      |
| KBPC8                                | 8.8 x 8.8 x 1.8     | 22.3 x 22.3 x 4.5  | 200       | 3.52         | 1.6      |
| KBPC1, KBPC6                         | 7.8 x 7.8 x 1.8     | 19.8 x 19.8 x 4.5  | 200       | 2.2          | 1.0      |
| KBPC 10/35, 25SP PBC Tray            | 7.5 x 15.0 x 1.1    | 19.0 x 38.1 x 2.8  | 100       | 7.3          | 3.3      |

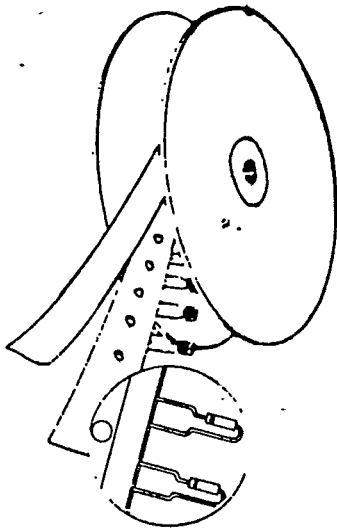
**AMMO BOX PACKAGING**



| Packaging                                      | Available Product Outlines                  | Packaging Codes                                | Dimension "A"    | Dimension "B"  | Dimension "C"   | Quantity Box   |
|--|---|--|------------------|----------------|-----------------|----------------|
| 26MM Horizontal Ammo Pack                      | DO-41<br>G1, GP15                           | PKG 3  | 9.7"<br>(247MM)  | 1.7"<br>(44MM) | 3.7"<br>(95MM)  | 3K<br>1.5K     |
| 52MM Horizontal Ammo Pack                      | G1, DO-41, DO15<br>DO201AD, G3,<br>G4, GP20 | PKG 23   | 10.0"<br>(254MM) | 3.1"<br>(79MM) | 4.3"<br>(110MM) | 3K<br>2K<br>1K |
| Vertical (Avisert, Euroform Panasert Ammo Pack | DO41, GP10-E,<br>RGP10-E                    | PKG 8, 9,<br>12, 13, 16, 17,<br>20, 21, 41, 43 | 12.9"<br>(328MM) | 1.7"<br>(42MM) | 7.9"<br>(200MM) | 2K             |

# PACKAGING METHODS FOR VERTICAL TAPING

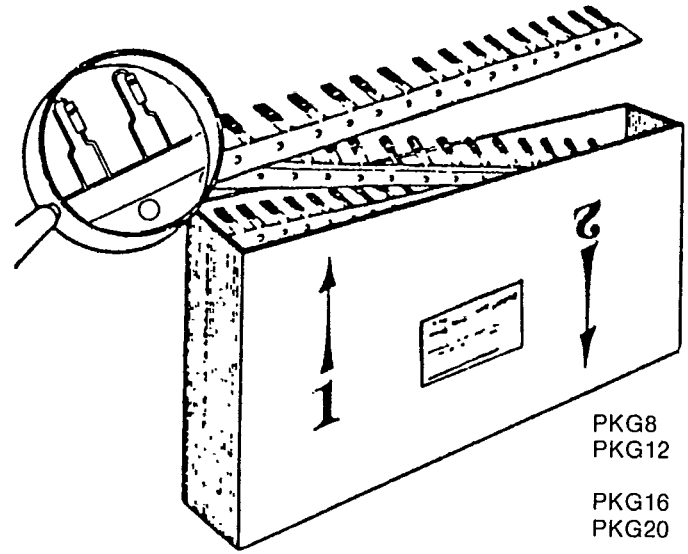
Avisert: PKG6 Panasert: PKG14 Euroform: PKG40  
 PKG8 PKG16 PKG41  
 PKG10 PKG18 PKG42  
 PKG12 PKG20 PKG43



PKG6  
 PKG10

PKG14  
 PKG18

PKG40  
 PKG42



PKG8  
 PKG12

PKG16  
 PKG20

PKG41  
 PKG43

FIG. 1

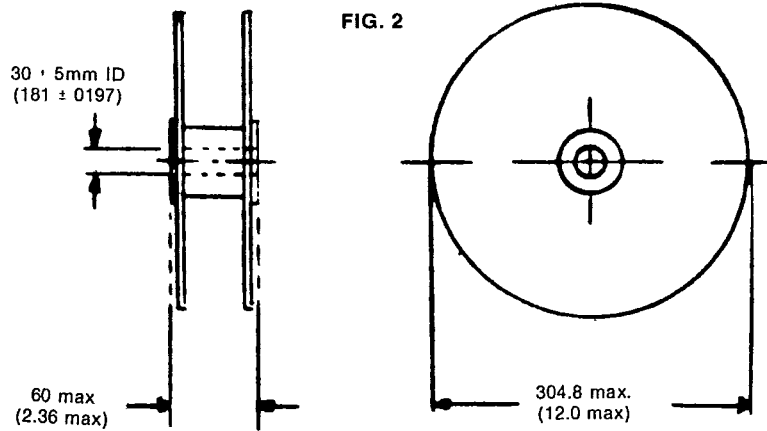


FIG. 2

ALL DIMENSIONS  
 IN MILLIMETERS AND INCHES

Package per E1A JEDEC standard RS-468 Available on reels or fan fold box (ammo pack)

Available only for DO41 case style products utilizing 0.65mm (.025") or 0.76mm (.30") diameter leads for Panasert and Avisert Tape and Reeling.

Available only for GP10 products utilizing 0.65mm (.025") diameter leads for Euroform Tape and Reeling by adding suffix "E" (GP10GE, 1N4004GPE)

### VERTICAL REEL PACKAGING

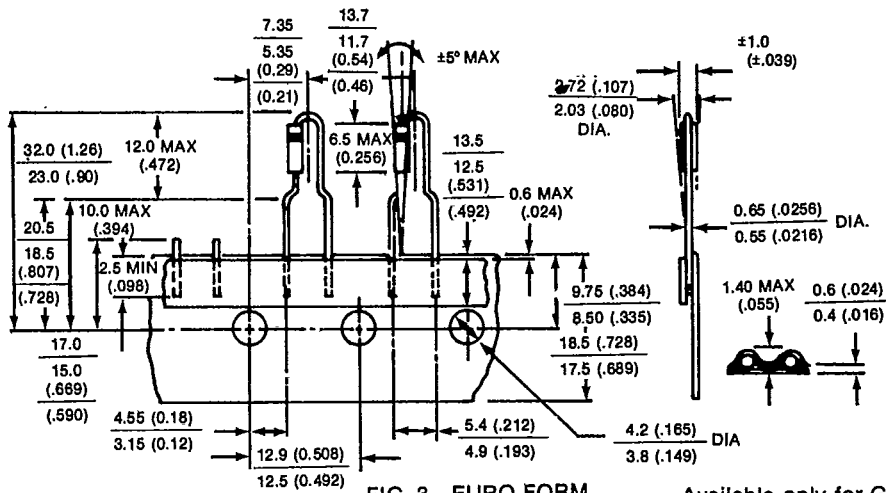


FIG. 3 - EURO FORM

Available only for GP10 products utilizing 0.65mm (.025) diameter leads for Euroform Tape and Reeling by adding suffix "E" (GP10GE, 1N4004GPE). Lead coating is standard.

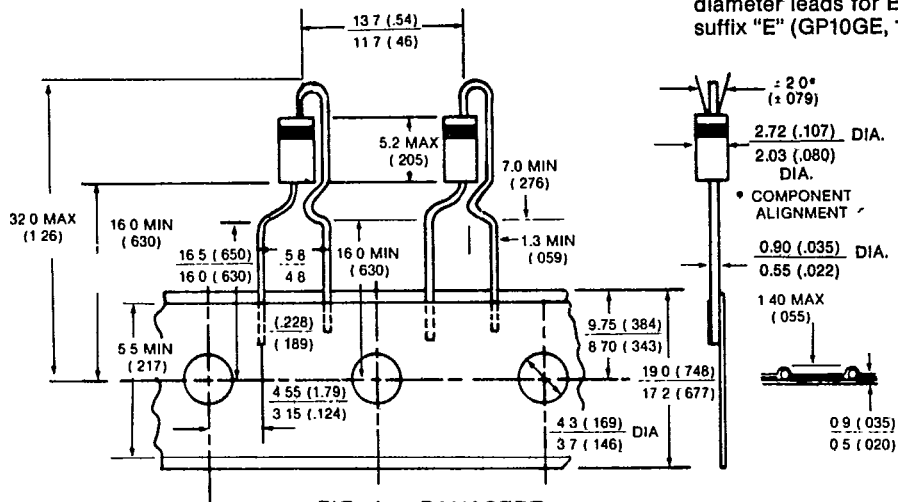


FIG. 4 - PANASERT

User Direction Feed

Available only for DO41 case style products utilizing 0.65mm (.025) or 0.76mm (.30) diameter leads for Panasert and Avisert Tape and Reeling. Lead coating is not available.

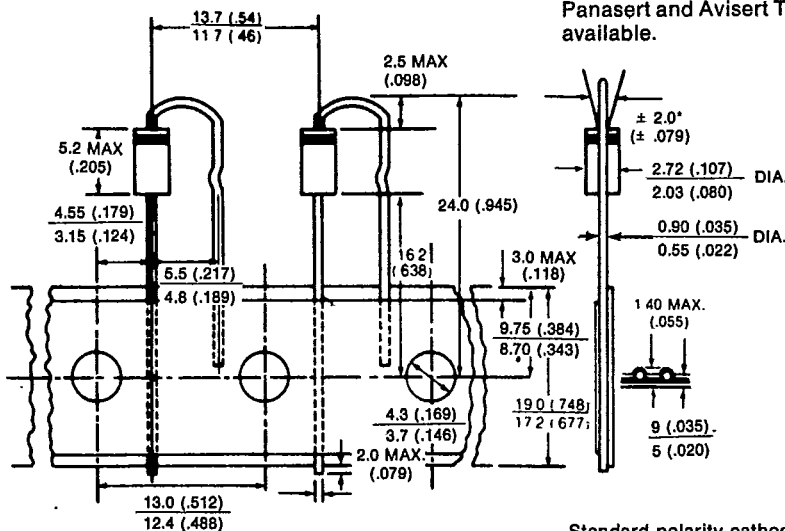


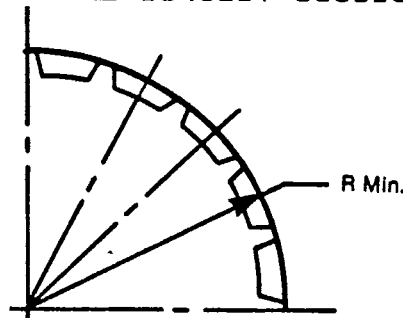
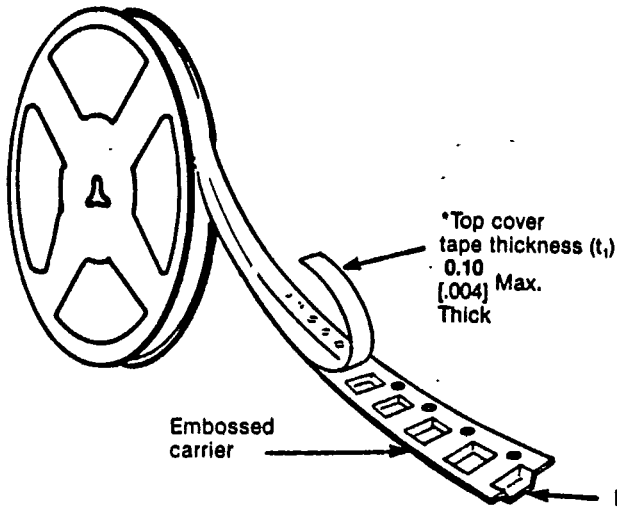
FIG. 5 - AVISERT

ALL DIMENSIONS IN MILLIMETERS AND (INCHES)

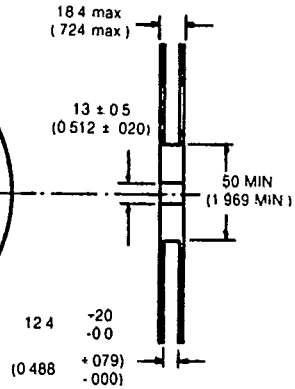
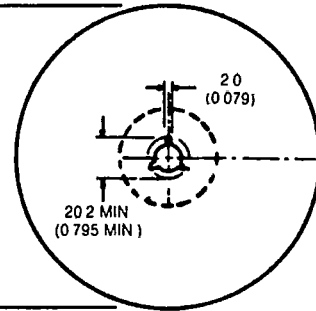
Standard polarity cathode oriented away from sprocket holes (Optional polarity cathode oriented toward sprocket holes)

**SURFACE MOUNT PACKAGING**

Packed per EIA/JEDEC Standard RS-481



AVAILABLE  
178 ± 20  
(7 00 ± 079)  
OR  
330 max  
(13 0 max)



**Table 1**

8, 12, MM Embossed Tape

All Dimensions in Millimeters and (Inches)

| Tape Size | D             | E                        | P <sub>0</sub>          | t               | A <sub>0</sub> B <sub>0</sub> K <sub>0</sub> |  |  |  |                        |
|-----------|---------------|--------------------------|-------------------------|-----------------|--|--|--|--|------------------------|
| 8, 12, MM | 1.5<br>(.059) | 1.75±0.10<br>(.069±.004) | 4.0±.10<br>(.157 ±.004) | 0.400<br>(.016) | See Note 1<br>Table 2                        |  |  |  | Constant<br>Dimensions |

| Product Type | Tape Size | Max. B' <sub>1</sub> | Min. D' <sub>1</sub> | F                       | Max. K        | P <sup>2</sup>          | Min. R        | W                       | P                       | Variable Dimensions |
|--------------|-----------|----------------------|----------------------|-------------------------|---------------|-------------------------|---------------|-------------------------|-------------------------|---------------------|
| GL34         | 8MM       | 4.2<br>(.165)        | 1.0<br>(.039)        | 3.5±0.05<br>(.138±.002) | 2.4<br>(.094) | 2.0±0.05<br>(.079±.002) | 25<br>(.984)  | 8.0±.30<br>(.315±.012)  | 4.0±0.10<br>(.157±.004) |                     |
| GL41         | 12MM      | 8.2<br>(.323)        | 1.5<br>(.059)        | 5.5±0.05<br>(.217±.002) | 4.5<br>(.177) |                         | 30<br>(1.181) | 12.0±.30<br>(.472±.012) |                         |                     |

**Notes:**

1. A<sub>0</sub> B<sub>0</sub> K<sub>0</sub> are determined by component size. The clearance between the component and the cavity must be within 0.05 min. to 0.5 max. for 8MM tape and 0.05 min to 0.650 max. for 12 MM tape.

In addition the components cannot rotate more than 20° within the determined cavity.

2. Tape and components will pass around radius "R" without damage.

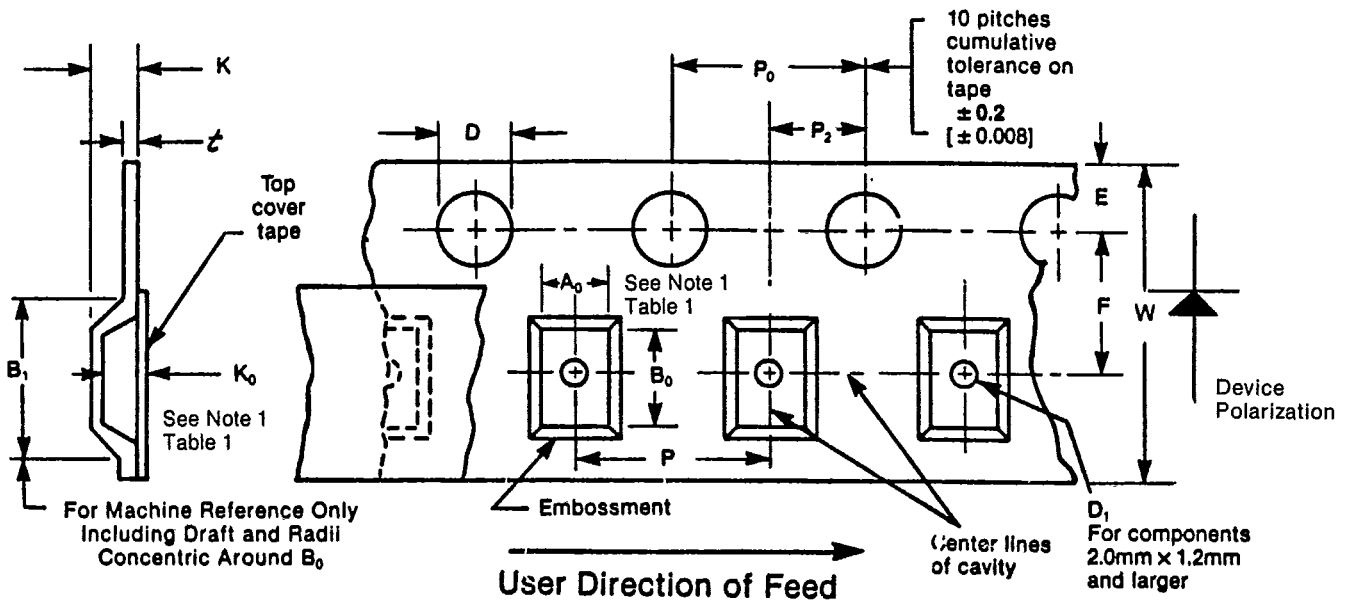


FIG. 6