






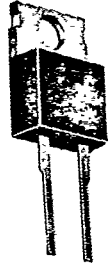
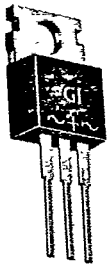
Schottky Rectifiers

General Instrument Schottky Barrier Rectifiers are characterized by high switching speeds and low forward voltage drops. A diffused Guard Ring process allows for reverse voltage stress protection.

Schottky rectifiers are ideal for use in low voltage, high frequency power supplies and fast clamping applications. These devices feature

switching times less than 10 ns and are offered in current ranges from 1 to 40 Amperes, and reverse voltages to 60 volts. Detailed specifications are available on the individual data sheets.

All devices are connected cathode to case. Reverse polarity is also available on our entire product line. Contact our General Instrument representative for more information.

I _F (A)	1.0		1.0	3.0		5.0			
PKG. TYPE	DO-41	GL41 MELF	GL-41 MELF	DO-201AD	DO-201AD	TO-220	TO-220CT		
VRRM (volts)									
20	1N5817	SB120	SGL41-20	BYM13-20	1N5820	SB320	SB520		
30	1N5818	SB130	SGL41-30	BYM13-30	1N5821	SB330	SB530	SBL530	SBL530CT
35									
40	1N5819	SB140	SGL41-40	BYM13-40	1N5822	SB340	SB540	SBL540	SBL540CT
45									
50		SB150	SGL41-50	BYM13-50		SB350	SB550		
60		SB160	SGL41-60	BYM13-60		SB360	SB560		

MAX V _I (Volts)	0.60	0.70	0.70	0.7	0.525	0.75	0.67	0.55	0.55
I _r (25°C) (mA)	1.0	0.5	0.5	0.5	2.0	0.5	0.5	0.5	0.5
I _r (125°C) (mA)	10*	10*	10	10	20*	30*	50*	33	33*
SURGE (A)	25	40	30	30	80	150	150	175	100

*: I_r at 100°C

SCHOTTKY RECTIFIERS (continued)

7.5		10			15		16	
				SBL1030	SBL1030CT			SBL1630CT
MBR735		MBR1035				MBR1535CT		MBR1635
				SBL1040	SBL1040CT			SBL1640CT
MBR745		MBR1045				MBR1545CT		MBR1645
	MBR750		MBR1050				MBR1550CT	
	MBR760		MBR1060				MBR1560CT	

0.57 @ 7.5A Tc = 125°C	0.65A @ 7.5A Tc = 125°C	0.72 @ 20A Tc = 125°C	0.85 @ 20A Tc = 125°C	.60	0.55	.72 @ 15A Tc = 125°	.65@7.5A Tc = 125° C	0.57 @ 16A Tc = 125°C	.55
0.1	0.5	0.1	0.1	1.0	0.5	0.1	1.0	0.2	1.0
15	50	15	25	50	50	15	50	40	50
150	150	150	150	250	175	150	150	150	250

GENERAL INSTRUMENT

Packaging Codes

PKG. 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"	
	± 0.5 mm (.020")	± 1.5 mm (.059")	
0 mm to 5 mm (0 to .197")	5.0 mm	52.4 mm	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

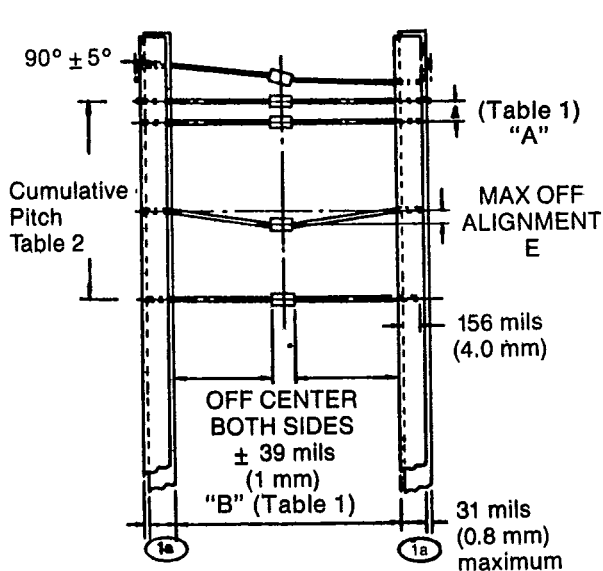


Figure 1

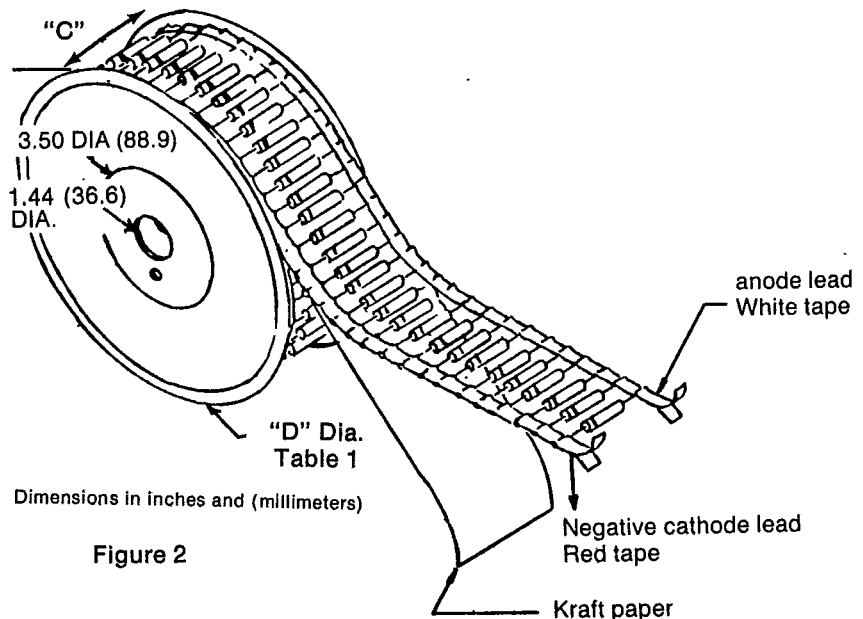


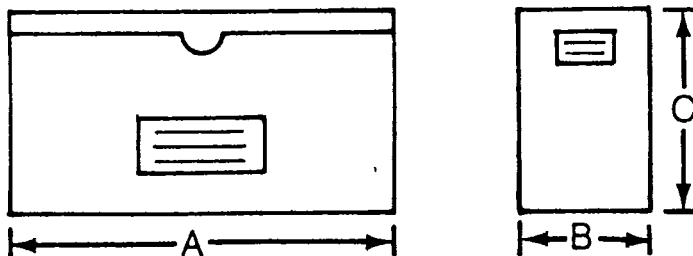
Figure 2

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

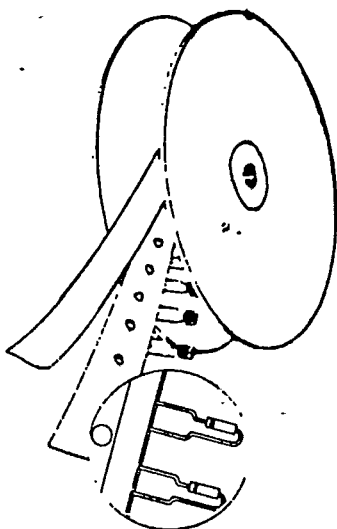
AMMO BOX PACKAGING



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

PACKAGING METHODS FOR VERTICAL TAPING

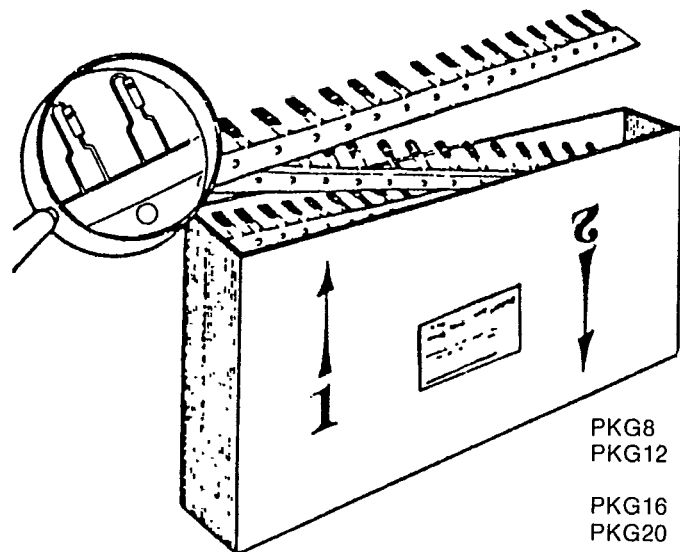
Avisert: PKG6	Panasert: PKG14	Euroform: PKG40
PKG8	PKG16	PKG41
PKG10	PKG18	PKG42
PKG12	PKG20	PKG43



PKG6
PKG10

PKG14
PKG18

PKG40
PKG42



PKG8
PKG12

PKG16
PKG20

PKG41
PKG43

FIG. 1

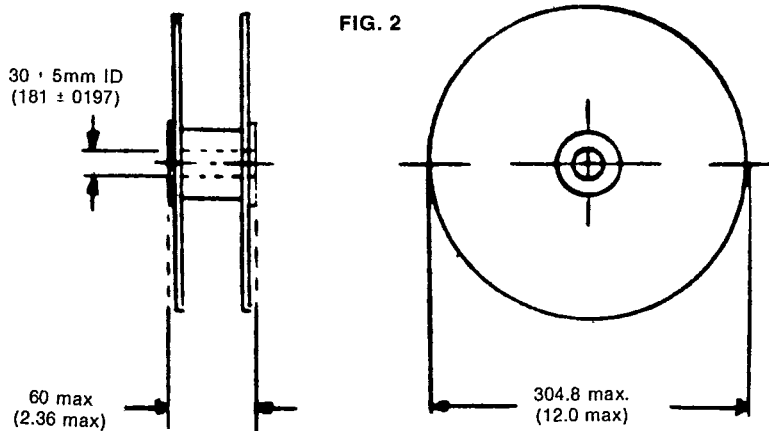


FIG. 2

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

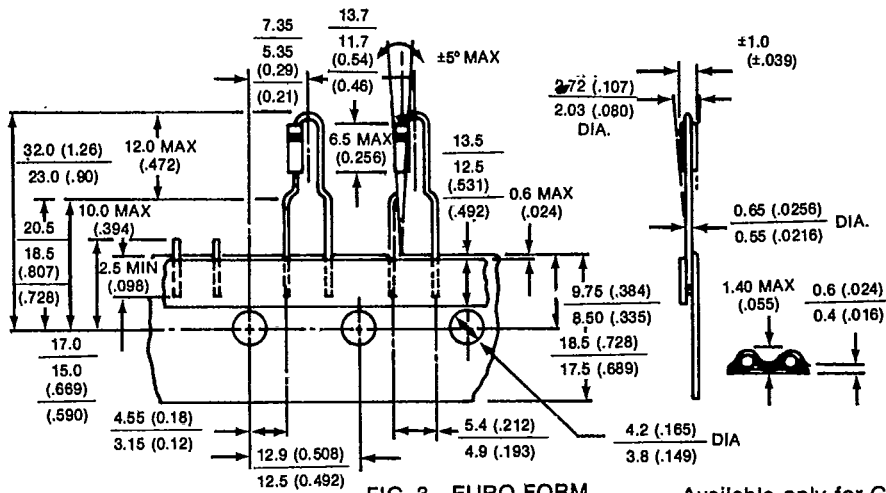


FIG. 3 - EURO FORM

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.

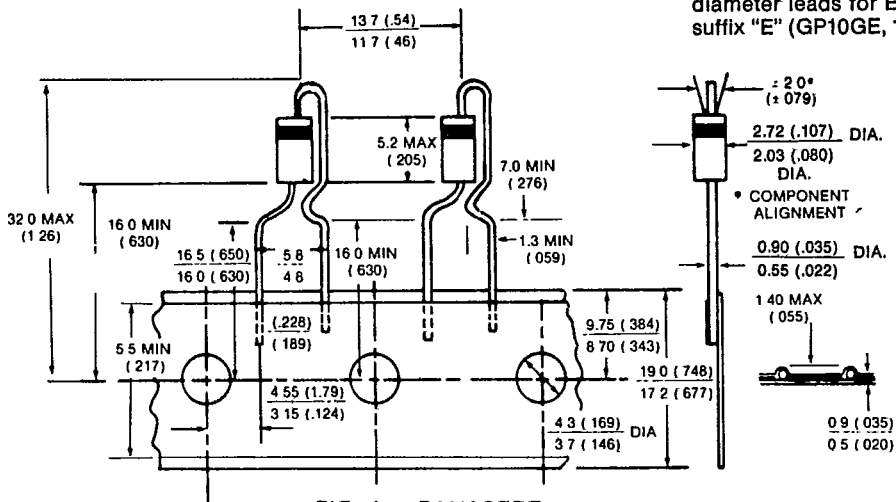


FIG. 4 - PANASERT

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.

User Direction Feed

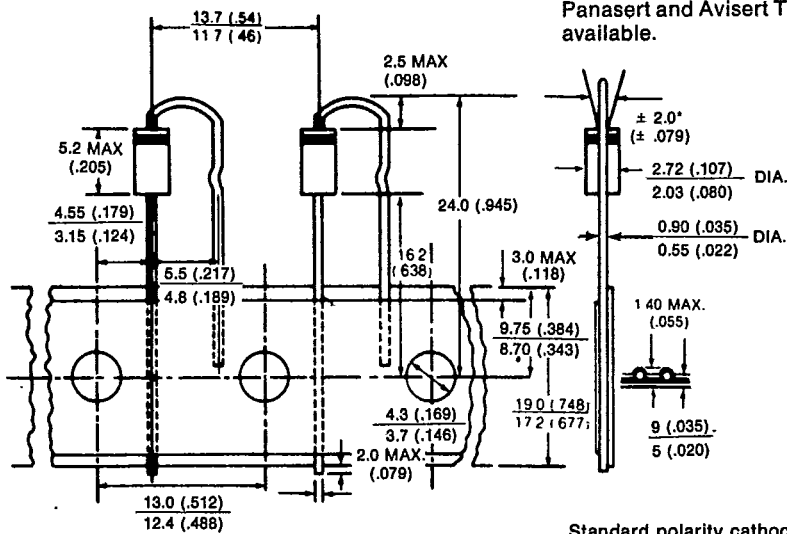


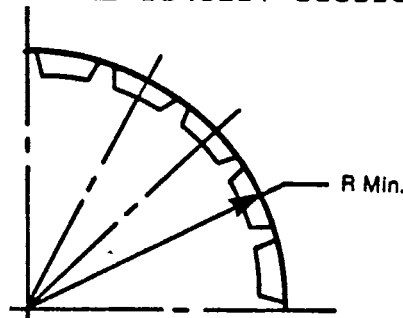
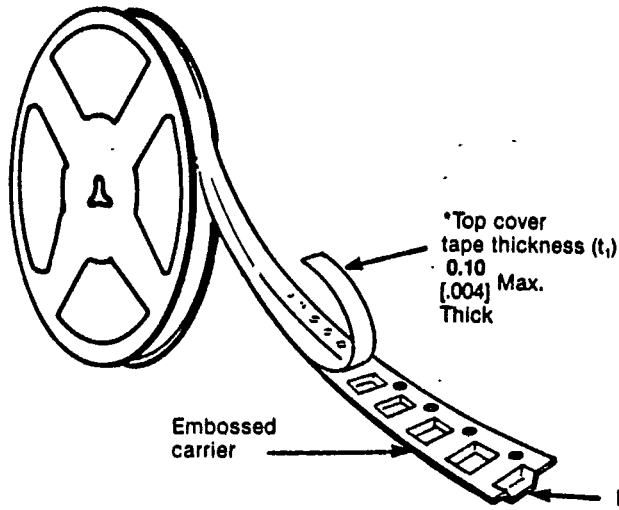
FIG. 5 - AVISERT

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

ALL DIMENSIONS IN MILLIMETERS AND (INCHES)

SURFACE MOUNT PACKAGING

Packed per EIA/JEDEC Standard RS-481



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

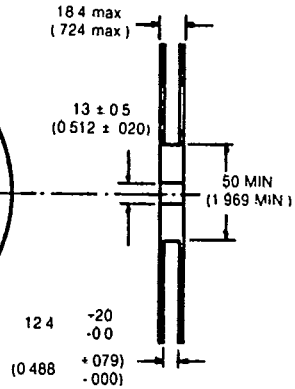
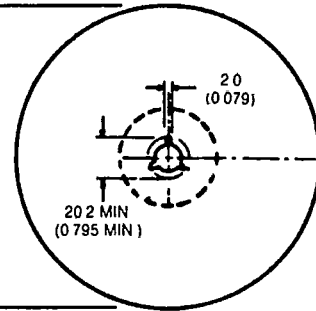


Table 1

8, 12, MM Embossed Tape

All Dimensions in Millimeters and (Inches)

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

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

Notes:

1. A₀ B₀ K₀ 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.

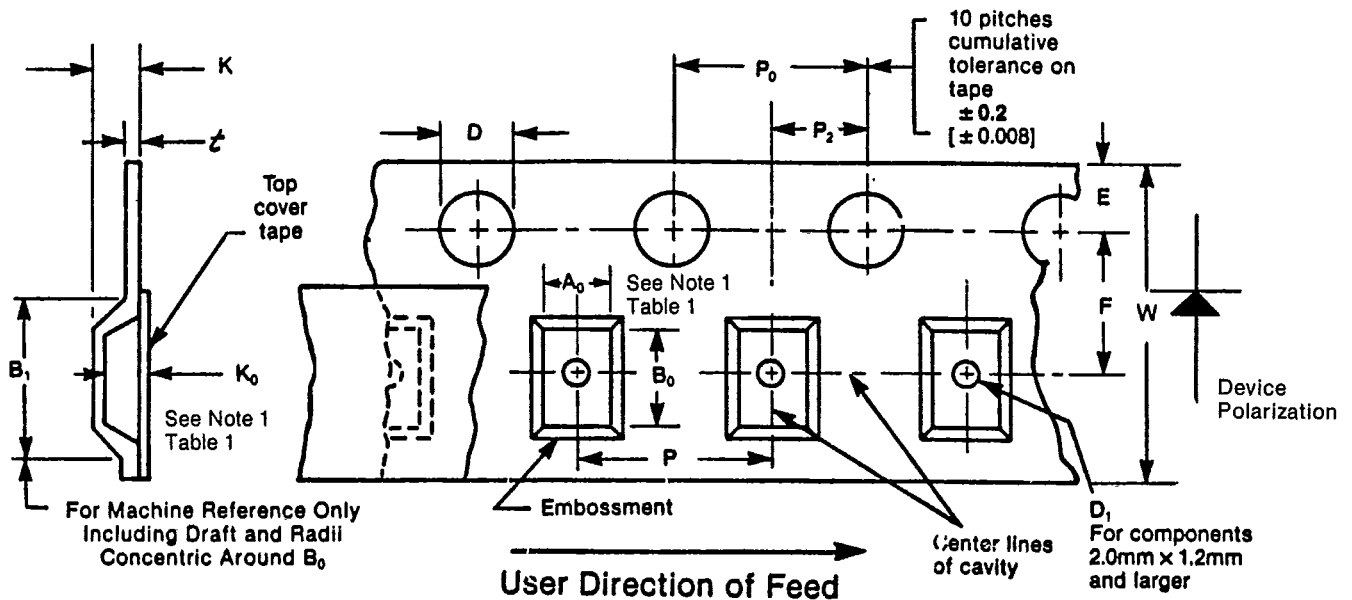


FIG. 6