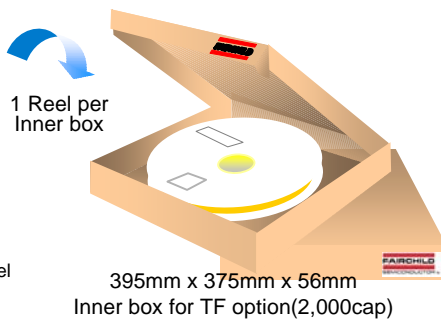
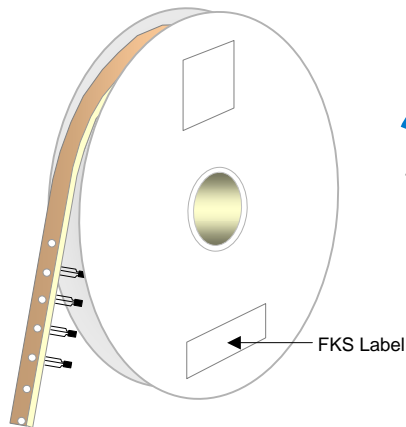


# TO-92 Tape and Reel Data

**TO-92 Packaging Configuration: Figure 1.0**

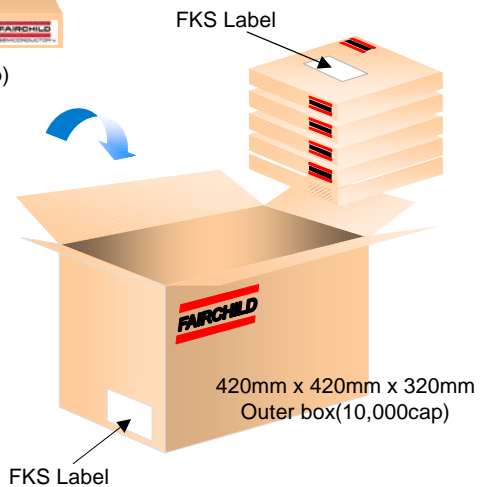
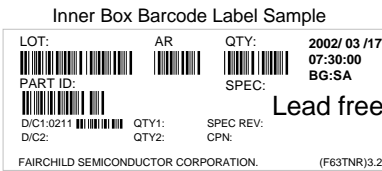


**Packaging Description:**

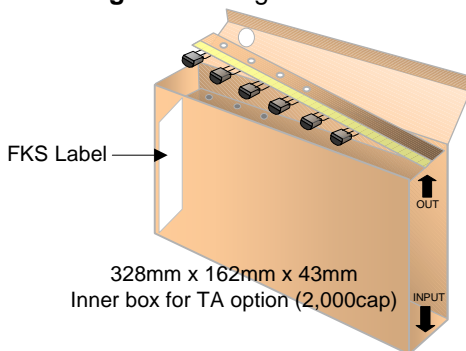
TO-92 parts are shipped normally in tape. These reeled parts in standard option are shipped with 2,000 units per 14" or 355.6cm diameter reel. This and some other options are further described in the Packaging Information table. These full reels are individually barcode labeled and placed inside a standard intermediate box (illustrated in figure 1.0) made of recyclable corrugated brown paper. One box contains one reel maximum. And these boxes are placed inside a barcode labeled shipping box which comes in different sizes depending on the number of parts shipped.

**TO-92 Packaging Configuration: Figure 2.0**

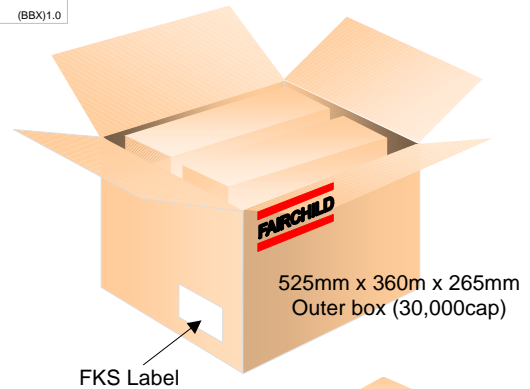
TO-92 Packaging Information			
Packaging Option	Standard (TF/ TFR)	Standard (TA/ TAR)	Standard (BU)
Packaging type	TNR	AMMO	BULK
Qty per Reel/Tube/ Bag	2,000	-	1,000
Reel Size	14" Dia	-	-
Inner Box Dimension (mm)	395x375x56	328x162x43	237x167x96
Max qty per Box	2,000	2,000	10,000
Outer Box Dimension (mm)	420x420x320	525x360x265	525x360x265
Max qty per Box	10,000	30,000	100,000
Weight per unit (gm)	0.2080	0.2080	0.2080
Note/Comments			



**TO-92 AMMO Packaging Configuration: Figure 3.0**



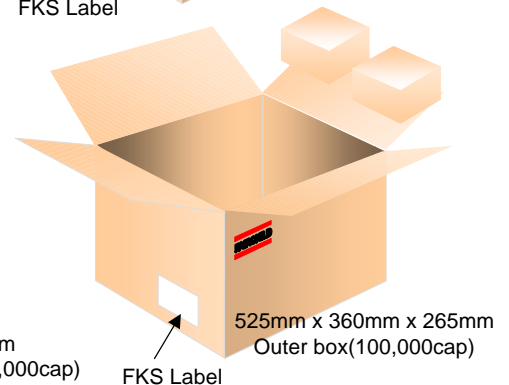
15 Ammo boxes per Outer Box



**TO-92 Bulk Packing Configuration: Figure 4.0**



237mm x 167mm x 96mm Bulk Inner box for bu option(10,000cap)

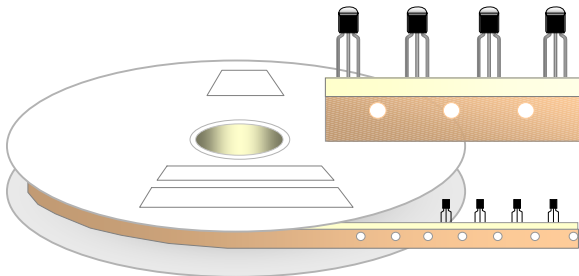


# TO-92 Tape and Reel Data, continued

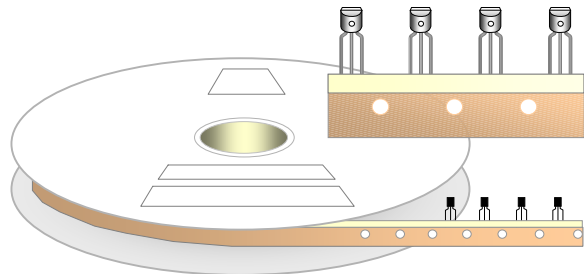
## TO-92 Reeling Style

Configuration: Figure 5.0

**Standard ( TF )**



**Machine Option ( TFR )**

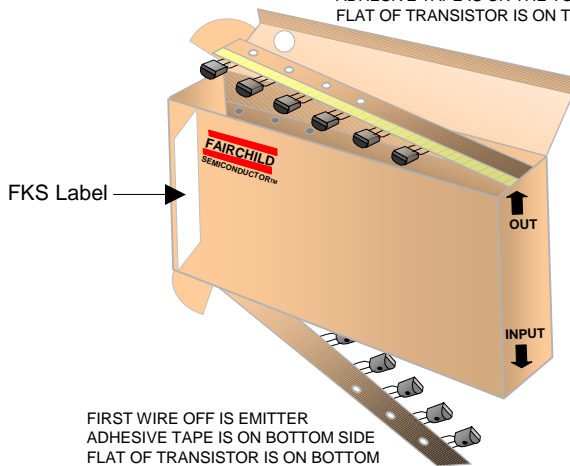


## TO-92 Radial Ammo Packaging

Configuration: Figure 6.0

**Standard( TA, Normal )**

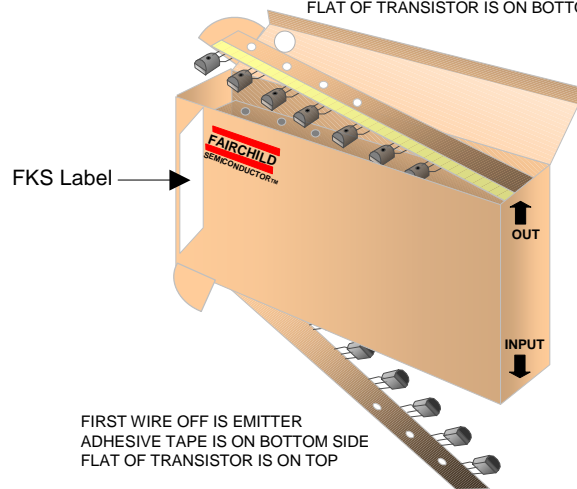
FIRST WIRE OFF IS COLLECTOR  
ADHESIVE TAPE IS ON THE TOP SIDE  
FLAT OF TRANSISTOR IS ON TOP



FIRST WIRE OFF IS EMITTER  
ADHESIVE TAPE IS ON BOTTOM SIDE  
FLAT OF TRANSISTOR IS ON BOTTOM

**Machine Option( TAR )**

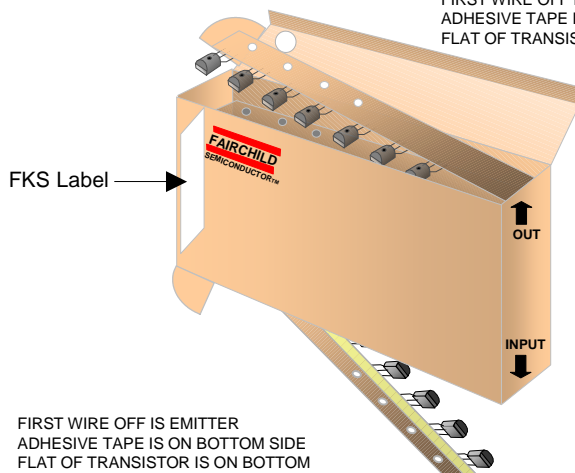
FIRST WIRE OFF IS COLLECTOR  
ADHESIVE TAPE IS ON THE TOP SIDE  
FLAT OF TRANSISTOR IS ON BOTTOM



FIRST WIRE OFF IS EMITTER  
ADHESIVE TAPE IS ON BOTTOM SIDE  
FLAT OF TRANSISTOR IS ON TOP

**Standard( TA, BC Series )**

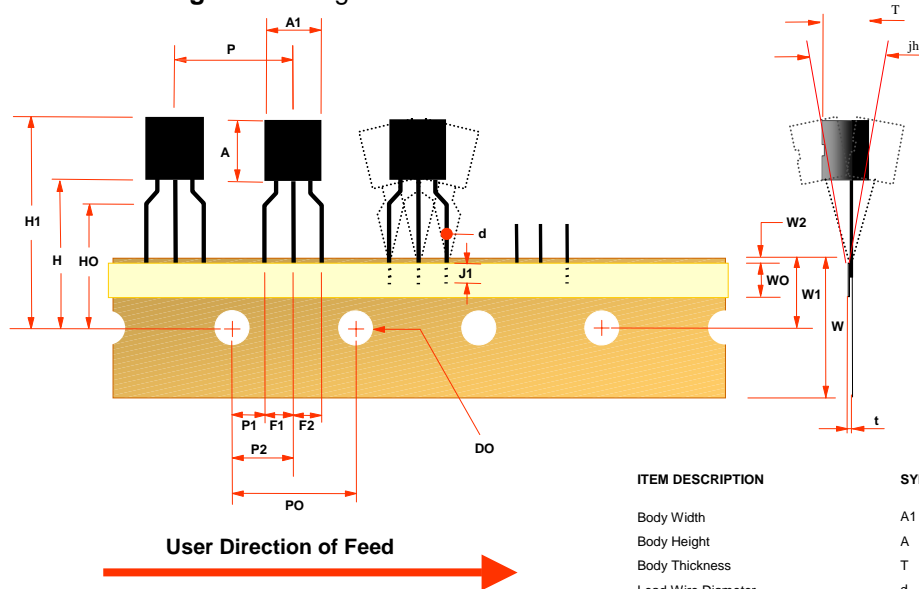
FIRST WIRE OFF IS COLLECTOR  
ADHESIVE TAPE IS ON THE TOP SIDE  
FLAT OF TRANSISTOR IS ON TOP



FIRST WIRE OFF IS EMITTER  
ADHESIVE TAPE IS ON BOTTOM SIDE  
FLAT OF TRANSISTOR IS ON BOTTOM

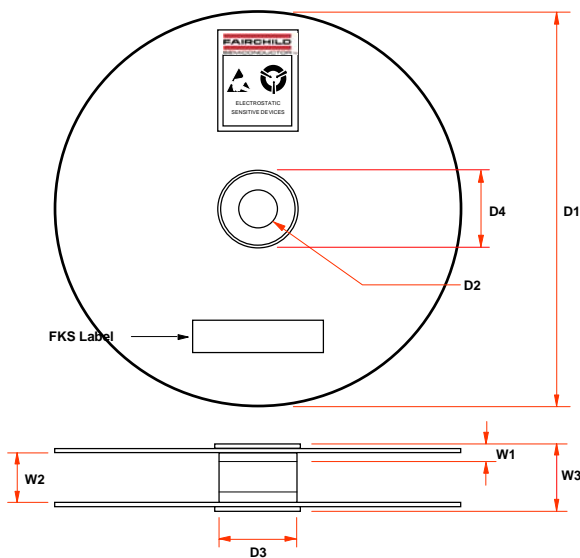
# TO-92 Tape and Reel Data, continued

TO-92 Tape and Reel Taping  
Dimension Configuration: Figure 7.0



ITEM DESCRIPTION	SYMBOL	DIMENSION	REMARK
Body Width	A1	4.58 (+ 0.25, - 0.15)	
Body Height	A	4.58 (+/- 0.20)	
Body Thickness	T	3.86 (max)	
Lead-Wire Diameter	d	0.46 (+/- 0.05)	
Pitch of Component	P	12.7 (+/- 0.50)	
Feed Hole Pitch	P0	12.7 (+/- 0.20)	
Hole Center to Component Center	P2	6.35 (+/- 0.50)	In Case of Reel Package +/- 1.00
Lead to Lead Distance	F1,F2	2.50 (+ 0.3, - 0.10)	F1-F2= +/- 0.30
Component Alignment F-R	jh	0.00 (+/- 1.00)	
Tape Width	W	18.00 (+ 1.00, - 0.50)	
Hole-Down Tape Width	W0	6.00 (+/- 0.50)	
Hole Position	W1	9.00 (+/- 0.50)	
Hole-Down Tape Position	W2	1.00 (max)	
Height of Component From Tape Center	H	19.50 (+/- 1.00)	H + A <= H1
Lead-Wire Clinch Height	H0	16.00 (+/- 0.50)	
Component Height	H1	27.0 (max)	
Lead-Wire (Tape Portion)	J1	2.50 (min)	
Feed Hole Diameter	D0	4.00 (+/- 0.20)	
Total Tape Thickness	t	0.65 (+/- 0.20)	
Position of Hole	P1	3.85 (+/- 0.50)	

TO-92 Reel  
Configuration: Figure 8.0



Note : All dimensions are in millimeters.

ITEM DESCRIPTION	SYMBOL	MINIMUM	MAXIMUM
Reel Diameter	D1	13.975	14.025
Arbor Hole Diameter (Standard)	D2	1.160	1.200
(Small Hole)	D2	0.650	0.700
Core Diameter	D3	3.100	3.300
Hub Recess Inner Diameter	D4	2.700	3.100
Hub Recess Depth	W1	0.370	0.570
Flange to Flange Inner Width	W2	1.630	1.690
Hub to Hub Center Width	W3		2.090

Note: All dimensions are in inches