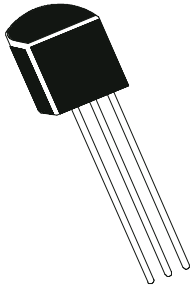




NPN SILICON PLANAR EPITAXIAL TRANSISTOR

**BF422
(BPL)
TO-92
BCE**



Designed for High Voltage Video Amplifier in Television Receivers.

ABSOLUTE MAXIMUM RATINGS(Ta=25 deg C)

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector -Base Voltage	VCBO	250	V
Collector -Emitter Voltage	VCEO	250	V
Emitter -Base Voltage	VEBO	5.0	V
Collector Current Continuous	IC	500	mA
Power Dissipation@ Ta=25 deg C	PD	900	mW
Derate Above 25 deg C		7.2	mW/deg C
Power Dissipation@ Tc=25 deg C	PD	2.75	W
Derate Above 25 deg C		22	mW/deg C
Operating & Storage Junction Temperature Range	Tj, Tstg	-55 to +150	deg C
THERMAL RESISTANCE			
From Junction to Case	Rth(j-c)	45	deg C/W
From Junction to Ambient	Rth(j-a)	156	deg C/W

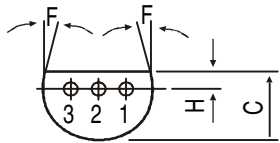
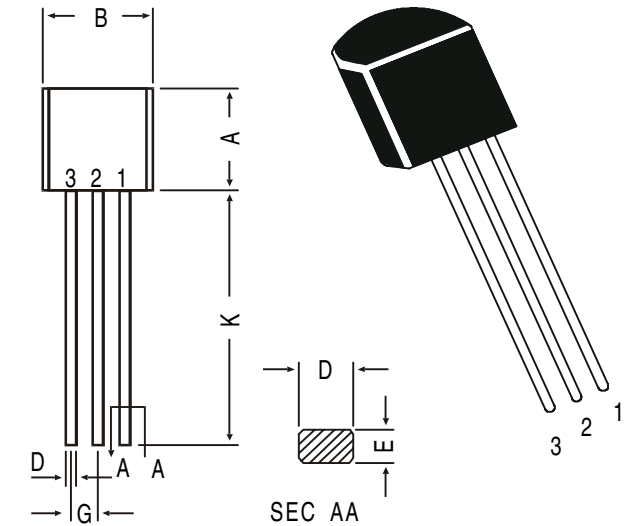
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		UNITS
			min	max	
Collector -Emitter Voltage	VCEO	IC=1.0mA, IB=0	250	-	V
Collector -Base Voltage	VCBO	IC=100uA, IE=0	250	-	V
Emitter-Base Voltage	VEBO	IE=100uA, IC=0	5.0	-	V
Collector-Cut off Current	ICBO	VCB=200V, IE=0	-	10	nA
Emitter-Cut off Current	IEBO	VEB=5.0V, IC=0		100	nA
Base Emitter (Sat) Voltage	VBE(Sat)*	IC=20mA, IB=2mA	-	2	V
Collector Emitter (Sat) Voltage	VCE(Sat) *	IC=20mA, IB=2mA	-	0.5	V
DC Current Gain	hFE*	IC=25mA, VCE=20V	60	120	
DYNAMIC CHARACTERISTICS					
Transistors Frequency	ft	IC=10mA, VCE=10V f=50MHz	60	-	MHz
Feedback Capacitance	Cre	VCB=30V, f=1MHz	-	1.6	pF

*Pulse Test : Pulse Width =300us, Duty Cycle=2%

TO-92 Plastic Package

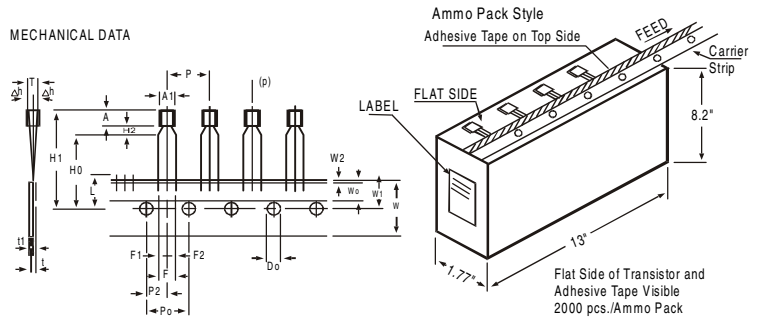
TO-92 Transistors on Tape and Ammo Pack



PIN CONFIGURATION
 1. BASE
 2. COLLECTOR
 3. EMITTER

All dimensions in mm.

DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	5 DEG	
G	1.14	1.40
H	1.14	1.53
K	12.70	—



All dimensions in mm unless specified otherwise

ITEM	SYMBOL	SPECIFICATION				REMARKS
		MIN.	NOM.	MAX.	TOL.	
BODY WIDTH	A1	4.0	4.8			
BODY HEIGHT	A	4.8	5.2			
BODY THICKNESS	T	3.9	4.2			
PITCH OF COMPONENT	P		12.7		±1	
FEED HOLE PITCH	P0		12.7		±0.3	CUMULATIVE PITCH ERROR 1.0 mm/20 PITCH
FEED HOLE CENTRE TO COMPONENT CENTRE	P2		6.35		±0.4	TO BE MEASURED AT BOTTOM OF CLINCH
DISTANCE BETWEEN OUTER LEADS	F	5.08			+0.6 -0.2	
COMPONENT ALIGNMENT	Δh	0	1			AT TOP OF BODY
TAPE WIDTH	W	18			±0.5	
HOLD-DOWN TAPE WIDTH	W0	6			±0.2	
HOLE POSITION	W1	9			+0.7 -0.5	
HOLD-DOWN TAPE POSITION	W2	0.5			±0.2	
LEAD WIRE CLINCH HEIGHT	H0	16			±0.5	
COMPONENT HEIGHT	H1		23.25			
LENGTH OF SNIPPED LEADS	L		11.0			
FEED HOLE DIAMETER	Do		4		±0.2	
TOTAL TAPE THICKNESS	t		1.2			t1 0.3 - 0.6
LEAD - TO - LEAD DISTANCE F1,	F2	2.54			+0.4 -0.1	
CLINCH HEIGHT	H2		3			
PULL - OUT FORCE	(P)	6N				

NOTES

1. MAXIMUM ALIGNMENT DEVIATION BETWEEN LEADS NOT TO BE GREATER THAN 0.2 mm.
2. MAXIMUM NON-CUMULATIVE VARIATION BETWEEN TAPE FEED HOLES SHALL NOT EXCEED 1 mm IN 20 PITCHES.
3. HOLDDOWN TAPE NOT TO EXCEED BEYOND THE EDGE(S) OF CARRIER TAPE AND THERE SHALL BE NO EXPOSURE OF ADHESIVE.
4. NO MORE THAN 3 CONSECUTIVE MISSING COMPONENTS ARE PERMITTED.
5. A TAPE TRAILER, HAVING AT LEAST THREE FEED HOLES ARE REQUIRED AFTER THE LAST COMPONENT.
6. SPLICES SHALL NOT INTERFERE WITH THE SPROCKET FEED HOLES.

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-92 Bulk	1K/polybag	200 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	23 kgs
TO-92 T&A	2K/ammo box	645 gm/2K pcs	12.5" x 8" x 1.8"	2.0K	17" x 15" x 13.5"	32.0K	12.5 kgs