

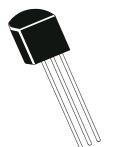
# Continental Device India Limited

An IS/ISO 9002 and IECQ Certified Manufacturer



# IS / IECQC 700000 IS / IECQC 750100

## PNP SILICON EPITAXIAL TRANSISTOR



CSA562 TO-92 BCE

# **Audio Frequency Low Power Amplifier Applications.**

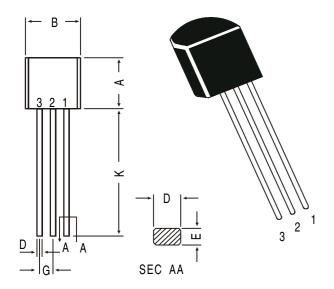
ABSOLUTE MAXIMUM RATINGS(Ta=25deg C)

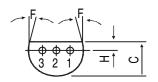
DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	35	V
Collector -Emitter Voltage	VCEO	30	V
Emitter Base Voltage	VEBO	5.0	V
Collector Current	IC	500	mA
Base Current	IB	100	mA
Collector Power Dissipation	PC	500	mW
Operating And Storage Junction	Tj, Tstg	-55 to +150	deg C
Temperature Range			

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	ICBO VCB=35V, IE=0		-	-	100	nA
Emitter Cut off Current	IEBO	EBO VEB=5V, IC=0		-	100	nA
DC Current Gain	hFE(1)	IC=100mA, VCE=1V	70	-	240	
	hFE(2)	IC=400mA, VCE=6V	25	-	-	
Collector Emitter Saturation Voltage	VCE(Sat)	IC=100mA, IB=10mA	-	-	0.25	V
Base Emitter Voltage	VBE(on)	IC=100mA, VCE=1V	-	-	1.0	V
<b>Dynamic Characteristics</b>						
Collector Output Capacitance	Cob	VCB=6V, IE=0, f=1MHz	-	13	-	pF
Transition Frequency	ft	VCE=6V,IC=20mA,	-	200	-	MHz
hFE(1) CLASSIFICATION	0: 70 - 140,		Y:120-2	240,	·	
hFE(2)	0: 25 Min,		Y: 40 N	∕lin,		

## **TO-92 Plastic Package**



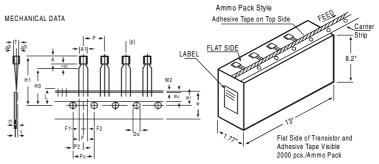


## PIN CONFIGURATION

- 1. BASE
- 2. COLLECTOR
- 3. EMITTER

DIM	MIN.	MAX.			
Α	4.32	5.33			
В	4.45	5.20			
С	3.18	4.19			
D	0.41	0.55			
Е	0.35	0.50			
F	5 DEG				
G	1.14	1.40			
Н	1.14	1.53			
K	12.70	_			

### **TO-92 Transistors on Tape and Ammo Pack**



#### All dimensions in mm unless specified otherwise

ITEM		SPECIFICATION			DEM. D.// 0	
IIEM	SYMBOL	MIN.	NOM.	MAX.	TOL.	REMARKS
BODY WIDTH BODY HEIGHT	A1 A T	4.0 4.8		4.8 5.2		
BODY THICKNESS PITCH OF COMPONENT	T P	3.9	12.7	4.2	±1	
FEED HOLE PITCH	Po		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 TAPE WIDTH	∆h W		0 18	1	±0.5	AT TOP OF BODY
HOLD-DOWN TAPE WIDTH HOLE POSITION	Wo W1		6 9		±0.2 +0.7 -0.5	
HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT	W2 Ho		0.5 16		±0.2 ±0.5	
COMPONENT HEIGHT LENGTH OF SNIPPED LEADS	H1 L		"	23.25	10.0	
FEED HOLE DIAMETER	Do		4		±0.2	
TOTAL TAPE THICKNESS LEAD - TO - LEAD DISTANCEF1,	t F2		2.54	1.2	+0.4 -0.1	t1 0.3 - 0.6
CLINCH HEIGHT PULL - OUT FORCE	H2 (P)	6N		3		

- 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.
- 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 TO-92 T&A	1K/polybag 2K/ammo box	200 gm/1K pcs 645 gm/2K pcs	3" x 7.5" x 7.5" 12.5" x 8" x 1.8"	5.0K 2.0K	17" x 15" x 13.5" 17" x 15" x 13.5"	80.0K 32.0K	23 kgs 12.5 kgs

#### **Notes**

#### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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## Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290
e-mail sales@cdil.com www.cdil.com