

Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company



PNP SILICON PLANAR EPITAXIAL TRANSISTORS



BC212, A, B BC213, A, B, C BC214, B, C

TO-92 Plastic Package

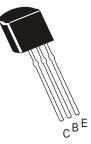
Silicon Small Signal General Purpose Amplifier

ABSOLUTE MAXIMUM RATINGS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	BC212	BC213	BC214	UNITS
Collector Emitter Voltage	V _{CEO}	50	30	30	V
Collector Base Voltage	V _{CBO}	60	45	45	V
Emitter Base Voltage	V _{EBO}		5		V
Collector Current Continuous	Ι _C		100		mA
Power Dissipation @ T _a =25°C	P _D		350		mW
Derate Above 25°C			2.8		mW/ ºC
Power Dissipation @ T _c =25ºC	P _D		1		W
Derate Above 25ºC			8		mW/ °C
Operating And Storage Junction Temperature Range	T _j , T _{stg}		-55 to +150		°C

THERMAL RESISTANCE

Junction to Ambient in free air	R _{th (j-a)}	357	°C/W
Junction to case	R _{th (j-c)}	125	°C/W



BC212, A, B BC213, A, B, C BC214, B, C

TO-92 Plastic Package

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	ТҮР	MAX	UNITS
Collector Emitter Voltage	V _{CEO}	I _C =2mA,I _B =0				
BC212			50			V
BC213, BC214			30			V
Collector Base Voltage	V _{CBO}	I _C =10uA.I _E =0				
BC212			60			V
BC213, BC214			45			V
Emitter Base Voltage	V _{EBO}	I _E =10uA, I _C =0	5			V
Collector Cut off Current	I _{CBO}	V _{CB} =30V,I _E =0			15	nA
Emitter Cut off Current	I _{EBO}	V _{EB} =4V, I _C =0			15	nA
DC Current Gain						
BC212, BC213	h _{FE}	I _C =10uA,V _{CE} =5V	40			
BC214			100			
BC212	h _{FE}	I _C =2mA,V _{CE} =5V	60			
BC213			80			
BC214			140		600	
				100		
BC212, BC214	h _{FE}	I _C =100mA,V _{CE} =5V*		120		
BC213				140		
Collector Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA,I _B =0.5mA		0.10		V
		I _C =100mA,I _B =5mA*		0.25	0.6	V
Base Emitter Saturation Voltage	V _{BE(sat)}	I _C =100mA,I _B =5mA*		1.00	1.4	V
Base Emitter On Voltage	$V_{BE(on)}$	I _C =2mA,V _{CE} =5V	0.6	0.62	0.72	V

*Pulse Condition: Pulse Width = 300μ s, Duty Cycle = 2%.

PNP SILICON PLANAR EPITAXIAL TRANSISTORS



BC212, A, B BC213, A, B, C BC214, B, C

TO-92 Plastic Package

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

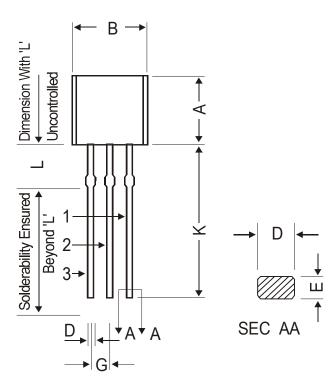
DYNAMICS CHARACTERISTICS

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	ТҮР	MAX	UNITS
Transition Frequency						
BC212	f _T	I _C =10mA, V _{CE} =5V		280		MHz
BC213		f=50MHz		360		MHz
BC214				320		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0			6	pF
Noise Figure						
BC212, BC213	NF	I _C =200uA, V _{CE} =5V			10	dB
		$R_s=2K\Omega f=1KHz$				
		f=200Hz				
BC214	NF	I _C =200uA, V _{CE} =5V			2	dB
		R _s =2KΩ f=30Hz				
		to 15KHz				
Small Signal Current Gain						
BC212	h _{fe}	I _C =2mA, V _{CE} =5V	60			
BC213		f=1KH _z	80			
BC214			140			
BC212A, BC213A	h _{fe}	I _C =2mA, V _{CE} =5V	100		300	
BC212B, BC213B, BC214B		f=1KH _z	200		400	
BC213C, BC214C			350		600	

*Pulse Condition: Pulse Width = $300\mu s$, Duty Cycle = 2%.

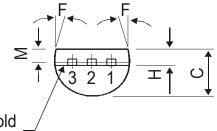
BC212, A, B BC213, A, B, C BC214, B, C

TO-92 Plastic Package

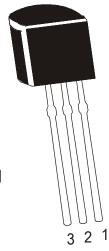


DIM	MIN.	MAX.			
А	4.32	5.33			
В	4.45	5.20			
С	3.18	4.19			
D	0.41	0.55			
E	0.35	0.50			
F	5 DEG				
G	1.14	1.40			
Н	1.20	1.40			
K	12.70				
L	1.982	2.082			
М	1.03	1.20			

All dimensions are in mm







PIN CONFIGURATION

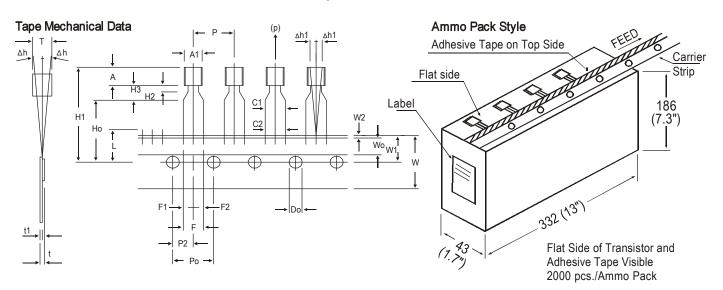
- 1. EMITTER
- 2. BASE
- 3. COLLECTOR

The TO-92 Package , Tape and Ammo Pack drawings are correct as on the date of issue/revision of this Data Sheet. The currently valid dimensions and information, may please be confirmed from the TO-92 Drawing in the Packages and Packing Section of the Product Catalogue.

Packing Details

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"	5K	17" x 15" x 13.5"	80K	23 kgs
TO-92 T&A	2K/ammo box	645 gm/2K pcs	12.5" x 8" x 1.8"	2K	17" x 15" x 13.5"	32K	12.5 kgs

TO-92 Tape and Ammo Pack



All dimensions are in mm

Image: ConstructionMin.NOM.MAX.TOL.BODY WIDTHA14.04.8NOTESBODY HEIGHTA4.85.21BODY THICKNESST3.94.21.0PITCH OF COMPONENTP12.7±1.02.03*1FEED HOLE PITCHPo12.7±0.32.0*2 FEED HOLE CENTRE TO COMPONENT CENTREP26.35±0.43. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.*3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW HOLD-DOWN TAPE WIDTH Δh 01.0HOLD-DOWN TAPE WIDTH HOLD-DOWN TAPE POSITIONW20.5±0.2 +0.55. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITIONW20.5±0.2 +0.55. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITIONW20.5±0.2 +0.55. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITIONW20.5±0.2 +0.55. Splices should not interfere with the sprocket feed holes.LEAD WIRE CLINCH HEIGHT LEAD TO - LEAD DISTANCEL11.012.7 +0.414.5STAND OFF CLINCH HEIGHTH20.451.45 +0.4*1 Cumulative pitch error 1.0 mm/20 pitch *3 At top of body*1 CLINCH HEIGHT LEAD PARALLELISMH20.451.45 +0.2 </th <th></th> <th></th> <th colspan="2">SPECIFICATION</th> <th>ON</th> <th></th>			SPECIFICATION		ON		
BODY HEIGHTA4.85.21. Maximum alignment deviation between leads will not to be greater than 0.2mm.PITCH OF COMPONENTP12.7± 1.02. Maximum non-cumulative variation between tape feed holes shall not exceed 1 mm in 20 pitches.*1 FEED HOLE PITCHPo12.7± 0.32. Maximum non-cumulative variation between tape feed holes shall not exceed 1 mm in 20 pitches.*2 FEED HOLE CENTRE TO COMPONENT CENTREP26.35± 0.43. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.*3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW HOLD-DOWN TAPE WIDTH $\triangle h$ 01.0*0.11.8± 0.5± 0.25. A tape trailer, having at least three (3) consecutive missing components in a tape.HOLD-DOWN TAPE WIDTH HOLE POSITIONW20.5± 0.25. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITION LEAD VIRE CLINCH HEIGHT LEAD - TO - LEAD DISTANCEL11.0± 0.2*5 TOTAL TAPE THICKNESS LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4 - 0.1*1 Cumulative pitch error 1.0 mm/20 pitch *3 to po foody*5 TAND OFF CLINCH HEIGHT LEAD PARALLELISM[C1 - C2]0.451.45*1 Cumulative pitch error 1.0 mm/20 pitch *3 At top of body	ITEM	SYMBOL	MIN.	NOM.	MAX.	TOL .	
BODY THICKNESST3.94.2BODY THICKNESST3.94.2PITCH OF COMPONENTP12.7 ± 1.0 *1 FEED HOLE PITCHPo12.7 ± 0.3 *2 FEED HOLE CENTRE TO COMPONENT CENTREP26.35 ± 0.4 DISTANCE BETWEEN OUTER LEADSF5.08 -0.2 *3 COMPONENT ALIGNMENT SIDE VIEW HOLD-DOWN TALIGNMENT FRONT VIEW HOLD POSITION Δh 01.0*4 COMPONENT ALIGNMENT FRONT VIEW HOLD-DOWN TAPE WIDTH Δh 01.0HOLD-DOWN TAPE WIDTH HOLE POSITIONW20.5 ± 0.2 *5 TOTAL TAPE THICKNESS EED HOLE DIAMETERL11.0FEED HOLE DIAMETER LEAD TO - LEAD DISTANCEF1, F22.54*5 TOTAL TAPE THICKNESS LEAD - TO - LEAD DISTANCEF1, F2*5 TAND OFF CLINCH HEIGHTH20.45LEAD PARALLELISM[C1 - C2]0.22	BODY WIDTH	A1	4.0		4.8		NOTES
BODY THICKNESST3.94.2leads will not to be greater than 0.2mm.PITCH OF COMPONENTP12.7± 1.02. Maximum non-cumulative variation between tape feed holes shall not exceed 1 mm in 20 pitches.**2 FEED HOLE CENTRE TO COMPONENT CENTREP26.35± 0.43. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.**3 COMPONENT ALIGNMENT SIDE VIEW LEADS Δh 01.01.34.2**3 COMPONENT ALIGNMENT FRONT VIEW HOLD-DOWN TAPE WIDTH Δh 01.01.34.0**4 COMPONENT ALIGNMENT FRONT VIEW HOLD-DOWN TAPE WIDTH Δh 01.04.4. There will be no more than three (3) consecutive missing components in a tape.HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHTW20.5± 0.25. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITION LEAD VIRE CLINCH HEIGHTU11.0± 0.25. On the sproket feed holes.**5 TOTAL TAPE THICKNESS LEAD - TO - LEAD DISTANCEL11.0± 0.2*1 Cumulative pitch error 1.0 mm/20 pitch **3 to po foody**5 TAND OFF CLINCH HEIGHTH20.451.45*0*1 Cumulative pitch error 1.0 mm/20 pitch**3 TAND OFF CLINCH HEIGHTH30.451.45*1 Cumulative pitch error 1.0 mm/20 pitch**4 At top of bodyLEAD PARALLELISM[C1 - C2]0.22*4 At top of body	BODY HEIGHT	А	4.8		5.2		1. Maximum alignment deviation between
*1 FEED HOLE PITCH Po 12.7 ± 0.3 ± 0.3 between tape feed holes shall not exceed holes. *2 FEED HOLE CENTRE TO COMPONENT CENTRE P2 6.35 ± 0.4 3. Holdown tape feed holes shall not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive. *3 COMPONENT ALIGNMENT SIDE VIEW Δh 0 1.0 -0.2 4. There will be no more than three (3) consecutive missing components in a tape. *4 COMPONENT ALIGNMENT FRONT VIEW Δh 0 1.0 -0.5 ± 0.5 HOLD-DOWN TAPE WIDTH Wo 6 ± 0.7 -0.5 5. A tape trailer, having at least three feed holes. HOLD-DOWN TAPE POSITION W2 0.5 ± 0.5 ± 0.5 5. A tape trailer, having at least three feed holes. HOLD-DOWN TAPE POSITION W2 0.5 ± 0.5 ± 0.5 6. Splices should not interfere with the sprocket feed holes. LEAD VIRE CLINCH HEIGHT H0 16 ± 0.5 ± 0.5 4. 0.4 *1 Cumulative pitch error 1.0 mm/20 pitch *5 TOTAL TAPE THICKNESS t 1.45 1.45 •0.4 *1 Cumulative pitch error 1.0 mm/20 pitch *5 TAND OFF H2 0.45 1.45 3.0 <	BODY THICKNESS	Т	3.9		4.2		
**2 FEED HOLE CENTRE TO COMPONENT CENTRE P2 6.35 ± 0.4 exceed 1 mm in 20 pitches. DISTANCE BETWEEN OUTER LEADS F 5.08 ± 0.4 3. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive. *3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH △h 0 1.0 -0.2 4. There will be no more than three (3) consecutive missing components in a tape. HOLD-DOWN TAPE WIDTH HOLE POSITION W 18 ± 0.5 ± 0.2 5. A tape trailer, having at least three feed holes are provided after the last component in a tape. HOLD-DOWN TAPE POSITION HOLE POSITION W2 0.5 ± 0.2 5. A tape trailer, having at least three feed holes are provided after the last component in a tape. HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT LEAD WIRE CLINCH HEIGHT LEAD TO - LEAD DISTANCE W2 0.5 ± 0.2 *5 TOTAL TAPE THICKNESS CLINCH HEIGHT LEAD - TO - LEAD DISTANCE F1, F2 2.54 + 0.4 *5 TAND OFF CLINCH HEIGHT LEAD PARALLELISM H2 0.45 1.45 3.0 *1 Cunulative pitch error 1.0 mm/20 pitch *3 At top of body *4 At top of body		Р				± 1.0	2. Maximum non-cumulative variation
COMPONENT CENTRE DISTANCE BETWEEN OUTER LEADSP26.35± 0.43. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.*3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH HOLD-DOWN TAPE WIDTH HOLE POSITION△h01.04. There will be no more than three (3) consecutive missing components in a tape.HOLD-DOWN TAPE WIDTH HOLE POSITIONW18± 0.55. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT LEAD TO - LEAD DISTANCEW20.5± 0.2*5 TOTAL TAPE THICKNESS CLINCH HEIGHT LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4*5 TAND OFF CLINCH HEIGHT LEAD PARALLELISMF1, C211.45*1 Cumulative pitch error 1.0 mm/20 pitch *3 At top of body	*1FEED HOLE PITCH	Po		12.7		± 0.3	
DISTANCE BETWEEN OUTER LEADSIn 20.001.03. Holddown tape will not exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.*3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH $\triangle h$ 01.0*4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH $\triangle h$ 01.04. There will be no more than three (3) consecutive missing components in a tape.HOLD-DOWN TAPE WIDTH HOLE POSITIONW18 ± 0.5 5. A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT LEAD WIRE CLINCH HEIGHTW20.5 ± 0.2 5. A tape trailer, having at least three feed holes are provided after the last component in a tape.*5 TOTAL TAPE THICKNESS CLINCH HEIGHT LEAD OFF CLINCH HEIGHT LEAD PARALLELISMF1, F22.54 ± 0.2 *1 Cumulative pitch error 1.0 mm/20 pitch *3 At top of body*4 top of body	^{*2} FEED HOLE CENTRE TO						exceed 1 mm in 20 pitches.
LEADSF5.08+ 0.0shall be no exposure of adhesive.*3 COMPONENT ALIGNMENT SIDE VIEW *4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH△h01.0*4 COMPONENT ALIGNMENT FRONT VIEW TAPE WIDTH△h101.3± 0.5HOLD-DOWN TAPE WIDTH HOLE POSITIONW18± 0.5± 0.2HOLD-DOWN TAPE WIDTH HOLE POSITIONW19± 0.7HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT LENGTH OF SNIPPED LEADSW20.5± 0.2		P2		6.35		± 0.4	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		-		E 00		+ 0.6	
**4 COMPONENT ALIGNMENT FRONT VIEW △h1 0 1.3 consecutive missing components in a tape. TAPE WIDTH W 18 ± 0.5 ± 0.5 ± 0.7 HOLD-DOWN TAPE WIDTH W0 6 ± 0.7 -0.5 ± 0.7 HOLD-DOWN TAPE POSITION W2 0.5 ± 0.2 + 0.7 -0.5 HOLD-DOWN TAPE POSITION W2 0.5 ± 0.2 ± 0.5 5 LEAD WIRE CLINCH HEIGHT H0 16 ± 0.5 ± 0.5 6 COMPONENT HEIGHT H1 23.25 11.0 6 Spices should not interfere with the sprocket feed holes. FEED HOLE DIAMETER Do 4 ± 0.2 1.2 11.0 7 *5 TOTAL TAPE THICKNESS t 1.2 1.45 ± 0.2 11.0 12 12 STAND OFF H2 0.45 1.45 3.0 ± 0.4 ± 0.1 *1 Cumulative pitch error 1.0 mm/20 pitch *2 To be measured at bottom of clinch *3 At top of body *4 At top of body *4 At top of body		Г		5.00		- 0.2	
TAPE WIDTHW18 ± 0.5 ± 0.5 tape.HOLD-DOWN TAPE WIDTHWo6 ± 0.5 ± 0.5 ± 0.5 HOLD-DOWN TAPE POSITIONW19 $+0.7$ -0.5 5 . A tape trailer, having at least three feed holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITIONW20.5 ± 0.2 ± 0.5 ± 0.2 LEAD WIRE CLINCH HEIGHTHo16 ± 0.5 ± 0.2 5 . Splices should not interfere with the sprocket feed holes.COMPONENT HEIGHTH123.2511.0 5 . Splices should not interfere with the sprocket feed holes.FEED HOLE DIAMETERDo4 ± 0.2 $*1.2$ LEAD - TO - LEAD DISTANCEF1, F2 2.54 $+0.4$ $*1$ Cumulative pitch error 1.0 mm/20 pitchSTAND OFFH2 0.45 1.45 3.0 $*4$ At top of bodyLEAD PARALLELISM C1 - C2 0.22 $*4$ At top of body $*4$ At top of body	*3 COMPONENT ALIGNMENT SIDE VIEW	∆h		0			
TAPE WIDTHW18± 0.5HOLD-DOWN TAPE WIDTHWo6± 0.2HOLE POSITIONW19+ 0.7-0.5± 0.2- 0.5HOLD-DOWN TAPE POSITIONW20.5± 0.2LEAD WIRE CLINCH HEIGHTHo16± 0.5COMPONENT HEIGHTH123.25LENGTH OF SNIPPED LEADSL11.0FEED HOLE DIAMETERDo4± 0.2*5 TOTAL TAPE THICKNESSt1.2LEAD - TO - LEAD DISTANCEF1, F22.54STAND OFFH20.451.45CLINCH HEIGHTH30.22LEAD PARALLELISM C1 - C2				Ŭ	1.3		v .
HOLD DOWN TAPE POSITIONW19+ 0.7 - 0.5holes are provided after the last component in a tape.HOLD-DOWN TAPE POSITIONW20.5± 0.2-LEAD WIRE CLINCH HEIGHTHo16± 0.56. Splices should not interfere with the sprocket feed holes.COMPONENT HEIGHTH123.2511.0LENGTH OF SNIPPED LEADSL11.04*5 TOTAL TAPE THICKNESSt1.2LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4STAND OFFH20.451.45CLINCH HEIGHTH30.224 top of bodyLEAD PARALLELISM C1 - C2 0.22*4 At top of body		W					
HOLE POSITIONW19+ 0.7 - 0.5component in a tape.HOLD-DOWN TAPE POSITIONW20.5± 0.26. Splices should not interfere with the sprocket feed holes.LEAD WIRE CLINCH HEIGHTHo16± 0.56. Splices should not interfere with the sprocket feed holes.COMPONENT HEIGHTH123.2511.06. Splices should not interfere with the sprocket feed holes.FEED HOLE DIAMETERDo4± 0.28.*5 TOTAL TAPE THICKNESSt1.21.21.2LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4 - 0.1-0.1STAND OFFH20.451.453.0CLINCH HEIGHTH30.220.22*4 At top of bodyLEAD PARALLELISM C1 - C2 0.22*4 At top of body	HOLD-DOWN TAPE WIDTH	Wo		Ŭ		± 0.2	
HOLD-DOWN TAPE POSITION LEAD WIRE CLINCH HEIGHT COMPONENT HEIGHTW2 Ho Ho 0.5 16 ± 0.2 ± 0.5 6 . Splices should not interfere with the sprocket feed holes.COMPONENT HEIGHT LENGTH OF SNIPPED LEADS FEED HOLE DIAMETERH1 Do 23.25 11.0 7.02 6 . Splices should not interfere with the sprocket feed holes.*5 TOTAL TAPE THICKNESS LEAD - TO - LEAD DISTANCEL F1, F2 11.0 2.54 ± 0.2 11.0 $REMARKS$ STAND OFF CLINCH HEIGHT LEAD PARALLELISMH2 IC1 - C2 I 0.45 1.45 3.0 7.0 0.22 $* 4$ At top of body	HOLE POSITION	W1		9		•••	
HOLD-DOWN TAPE FOSTIONW20.3± 0.2± 0.2sprocket feed holes.LEAD WIRE CLINCH HEIGHTHo16± 0.5sprocket feed holes.COMPONENT HEIGHTH123.2511.0feed holes.LENGTH OF SNIPPED LEADSL11.010feed holes.FEED HOLE DIAMETERDo4± 0.2feed holes.*5 TOTAL TAPE THICKNESSt1.2± 0.4fl Cumulative pitch error 1.0 mm/20 pitchLEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4fl Cumulative pitch error 1.0 mm/20 pitchSTAND OFFH20.451.453.0*3 At top of bodyCLINCH HEIGHTH30.220.22*4 At top of body							
LEAD WIRE CLINCH HEIGHTHo16± 0.5COMPONENT HEIGHTH123.25LENGTH OF SNIPPED LEADSL11.0FEED HOLE DIAMETERDo4± 0.2*5 TOTAL TAPE THICKNESSt1.2LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4STAND OFFH20.451.45CLINCH HEIGHTH33.0*4 At top of bodyLEAD PARALLELISM C1 - C2 0.22*4 At top of body							
LENGTH OF SNIPPED LEADSL411.0FEED HOLE DIAMETERDo4± 0.2*5 TOTAL TAPE THICKNESSt1.2LEAD - TO - LEAD DISTANCEF1, F22.54STAND OFFH20.45CLINCH HEIGHTH3LEAD PARALLELISM C1 - C2				16		± 0.5	
FEED HOLE DIAMETERDo4± 0.2REMARKS*5 TOTAL TAPE THICKNESSt1.21.2* 0.4* 1.2*		H1					
*5 TOTAL TAPE THICKNESSt1.2*1 Cumulative pitch error 1.0 mm/20 pitchLEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4- 0.1*1 Cumulative pitch error 1.0 mm/20 pitchSTAND OFFH20.451.453.0*3 At top of bodyCLINCH HEIGHTH3 C1 - C2 0.22*4 At top of body		-			11.0		
LEAD - TO - LEAD DISTANCEF1, F22.54+ 0.4 - 0.1* 1 Cumulative pitch error 1.0 mm/20 pitchSTAND OFFH20.451.45- 0.1*2 To be measured at bottom of clinchCLINCH HEIGHTH33.03.0*4 At top of bodyLEAD PARALLELISM C1 - C2 0.22*4 At top of body		Do		4		± 0.2	REMARKS
ELEAD FIGUREH1, 122.54+ 0.4STAND OFFH20.451.45CLINCH HEIGHTH33.0LEAD PARALLELISM C1 - C2 0.22					1.2		*1 Cumulative pitch error 1.0 mm/20 pitch
STAND OFFH20.451.45CLINCH HEIGHTH33.0*3 At top of bodyLEAD PARALLELISM C1 - C2 0.22*4 At top of body	LEAD - TO - LEAD DISTANCE	F1, F2		2.54		+ 0.4	
LEAD PARALLELISMI C1 - C2 0.22*4 At top of body	STAND OFF	H2	0.45		1.45	- 0.1	
	CLINCH HEIGHT	H3			3.0		
PULL - OUT FORCE (p) 6N *5 t1 0.3 – 0.6 mm	LEAD PARALLELISM	C1 - C2			0.22		*4 At top of body
	PULL - OUT FORCE	(p)	6N				*5 t1 0.3 – 0.6 mm

BC212, A, B BC213, A, B, C BC214, B, C

TO-92 Plastic Package

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 in the Data Sheet and on the CDIL Web Site/CD are 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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CDIL	=
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