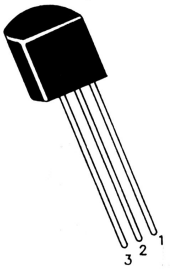
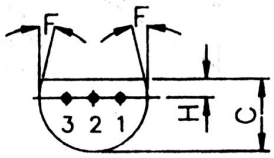
technobots.co.uk 2300-361

TO-92 Plastic Package Transistor

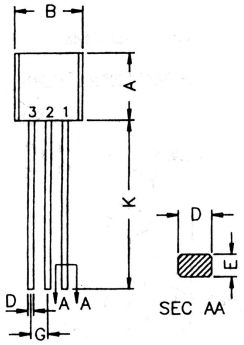
CDIL –BC182L - NPN Transistor – Style TO-92



CDIL Case Type TO-92



Pin Configuration
1. Base
2. Collector
3. Emmitter



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 are in mm		

Maximum Ratings

Collector - Base Breakdown Voltage, Emitter Open	V_{CBO}	Min.	60	V
Collector - Emitter Breakdown Voltage, Base Open	V_{CEO}	Min.	50	V
Emitter - Base Breakdown Voltage, Collector Open	V_{EBO}	Min.	6	V
Allowable Power Dissipation @ Tc = 25ºC	P_D		0.35	W
Collector Current	I_C		0.1	A

Electrical Characteristics (Ta=25^{o}C, Unless Otherwise Specified)

Collector Cut Off Current, Emitter Open	I_{CBO}	Max.	0.015	µA
@ Collector Base Voltage	V_{CB}		50	V
Collector Cut Off Current, with Emitter & Base Shorted	I_{CES}	Max.	-	µA
@ Collector Emitter Voltage	V_{CE}		-	V
Small Signal, Current Gain, Common Emitter	h_{FE}	Min.	120	
		Max.	500	
@ Collector Current	I_C		2	mA
& Collector - Emitter Voltage	V_{CE}		5	V
Collector - Emitter Saturation Voltage	$V_{CE(SAT)}$	Max.	0.25	V
		Min.	-	V
& Base - Emitter Saturation Voltage	$V_{BE(SAT)}$	Max.	-	V
@ Collector Current	I_C		10	mA
Output Capacitance, Common Base	C_{ob}	Max.	5	pF
Transition Frequency (common emitter, gain bandwidth product)	f_t	Min.	150	MHz
		Typ.	-	MHz
@ Collector Current	I_C		10	mA
Turn-off Time (ts + tf)	$t_{(off)}$	Max.	-	ns
Common Source Noise Figure	NF	Max.	10	dB
@ Frequency			0.001	MHz