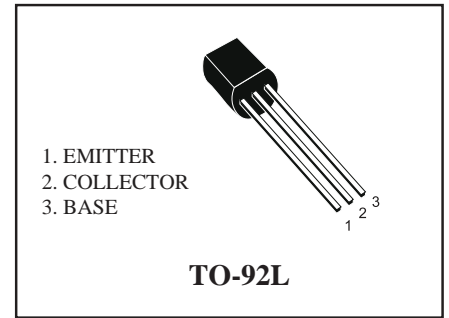


NPN Transistor
(Pb) Lead(Pb)-Free

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Parameter	Symbol	value	Units
Collector-Base Voltage	V _{CBO}	120	V
Collector-Emitter Voltage	V _{CEO}	120	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _C	0.8	A
Collector Power Dissipation	P _C	0.75	W
Thermal Resistance From Junction To Ambient	R _{ΘJA}	167	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to- +150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

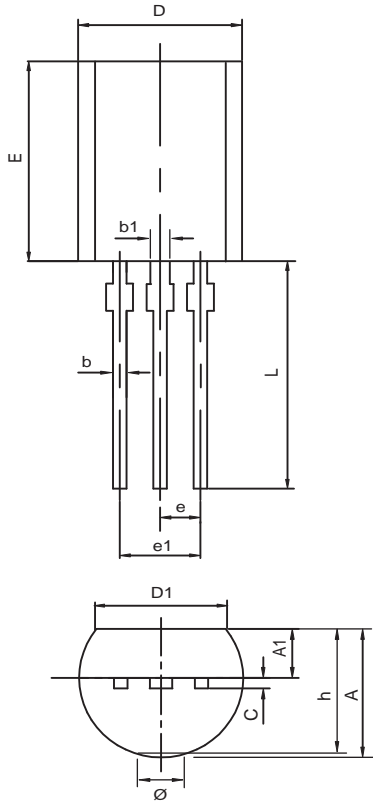
Parameter	Symbol	Test conditions	MIN	TYPE	MAX	UNIT
Collector-base breakdown voltage	V(BR) _{CBO}	I _C = 1mA, I _E =0	120			V
Collector-emitter breakdown voltage	V(BR) _{CEO}	I _C = 10 mA, I _B =0	120			V
Emitter-base breakdown voltage	V(BR) _{EBO}	I _E =1mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} = 120V, I _E =0			0.1	μ A
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			0.1	μ A
DC current gain	h _{FE}	V _{CE} =5V, I _C = 100mA	80		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 500 mA, I _B = 50mA			1.0	V
Base-emitter voltage	V _{BE}	I _C = 500 mA, V _{CE} =5V			1.0	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			30	pF
Transition frequency	f _T	V _{CE} =5V, I _C =100mA		120		MHz

CLASSIFICATION OF h_{FE(1)}

k n a R	O	Y
Range	80-160	120-240

TO-92L Outline Dimensions

unit:mm



TO-92L		
Dim	Min	Max
A	3.70	4.10
A1	1.28	1.58
b	0.35	0.55
b1	0.60	0.80
c	0.35	0.45
D	4.70	5.10
D1	4.00	-
E	7.80	8.20
e	1.270TYP	
e1	2.44	2.64
L	13.8	14.2
Ø	-	1.60
h	0.00	0.30