

**Plastic Package Transistors (NPN)**

**Absolute Maximum Ratings (Ta=25°C)**

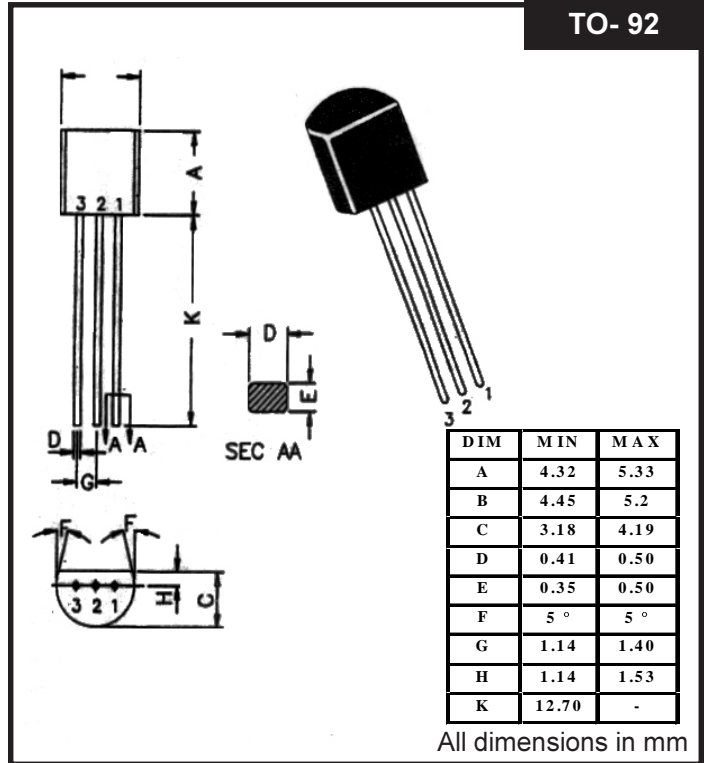
Items	Symbol	Ratings	Unit
Collector - Base	$V_{CBO}$	80	V
Collector - Emitter	$V_{CEO}$	80	V
Emitter - Base	$V_{EBO}$	4	V
Power Dissipation	$P_D$	625	mW
Collector Current	$I_C$	500	mA
Junction to Case	$R_{th(JC)}$	83.3	°C/W
Junction to Ambient	$R_{th(JA)} (1)$	200	°C/W

(1) Device soldered to a typical PCB

**Pin Configuration**

Code Style	Pin 1	Pin 2	Pin 3
TO - 92	Collector	Base	Emitter

**Dimensions**



**TO - 92**

DIM	MIN	MAX
A	4.32	5.33
B	4.45	5.2
C	3.18	4.19
D	0.41	0.50
E	0.35	0.50
F	5 °	5 °
G	1.14	1.40
H	1.14	1.53
K	12.70	-

All dimensions in mm

**Electrical Characteristics (Ta=25°C)**

Description	Symbol	Test Conditions	Min	Typ	Max	Units
Collector - Emitter Breakdown Voltage	$V_{CEO}$	$I_C = 1mA, I_B = 0$	80			V
Emitter - Base Voltage	$V_{EBO}$	$I_E = 100\mu A, I_C = 0$	4			V
Collector - Cut off Current	$I_{CEO}$	$V_{CE} = 60V, I_B = 0$			0.1	$\mu A$
	$I_{CBO}$	$V_{CB} = 80V, I_E = 0$			0.1	$\mu A$
DC Current Gain	$h_{FE}$	$I_C = 10mA, V_{CE} = 1V$	100			
		$I_C = 100mA, V_{CE} = 1V$	100			
Collector Emitter (sat) Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$			0.25	V
Base Emitter (on) Voltage	$V_{BE(on)}$	$I_C = 100mA, V_{CE} = 1V$			1.2	V

**Dynamic Characteristics (Ta=25°C)**

Current gain Bandwidth Product	$f_T$	$I_C = 10mA, V_{CE} = 2V$ $f = 100 MHz$	100			MHz
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