

### **Features**

- Wide safe Operating Area.
- Complementary to A940



## Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	150	V
V <sub>CEO</sub>	Collector-Emitter Voltage	150	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current	1.5	Α
Pc	Collector Power Dissipation	1.5	W
$T_{j}$ , $T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}$

1.BASE 2.COLLECTOR 3.EMITTER

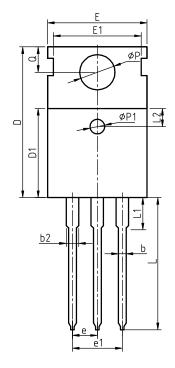
**TO-220C** 

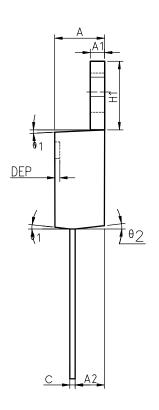


## Electrical Characteristics (Ta=25°C unless otherwise specified)

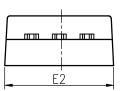
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	150			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	150			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =120V, I <sub>E</sub> =0			10	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			10	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	40		140	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =0.5A, I <sub>B</sub> =50mA			1.5	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	0.65		0.85	V
Transition frequency	f⊤	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A		4		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		35		pF

# Package Information TO-220C





### COMMON DIMENSIONS



SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX
Α	4.40	4.57	4.70	0.173	0.180	0.185
A1	1. 27	1.30	1.33	0.050	0.051	0.052
A2	2. 35	2.40	2.50	0.093	0.094	0.098
b	0.77	0.80	0.90	0.030	0.031	0.035
b2	1. 17	1. 27	1.36	0.046	0.050	0.054
С	0.48	0.50	0.56	0.019	0.020	0.022
D	15.40	15.60	15.80	0.606	0.614	0.622
D1	9.00	9. 10	9. 20	0.354	0.358	0.362
DEP	0.05	0.10	0.20	0.002	0.004	0.008
E	9.80	10.00	10.20	0. 386	0.394	0.402
E1	-	8.70	-	-	0.343	-
E2	9.80	10.00	10.20	0.386	0.394	0.402
е		2.54	BSC		0.100	BSC
e1		5.08	BSC		0.200	BSC
H1	6.40	6.50	6.60	0. 252	0.256	0.260
L	12.75	13.50	13.65	0.502	0.531	0.537
L1	-	3.10	3.30	-	0.122	0.130
L2		2.50	REF		0.098	REF
Р	3.50	3.60	3.63	0.138	0.142	0.143
P1	3.50	3.60	3.63	0.138	0.142	0.143
Q	2.73	2.80	2.87	0.107	0.110	0.113
θ 1	5°	7°	9°	5°	7°	9°
θ2	1°	3°	5°	1°	3°	5°
θ 3	1°	3°	5°	1°	3°	5°



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