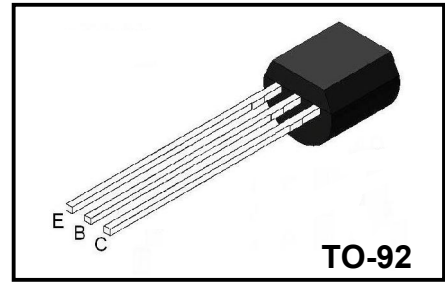


NPN Plastic-Encapsulate Transistors

Audio Frequency Amplifier & High Frequency OSC.

- ◆Complement to 2SA733
- ◆Collector-Base Voltage : $V_{CBO}=60V$
- ◆High Current Gain Bandwidth Product : $f = 300MHz$ (TYP)



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	60	V
Collector-Emitter Voltage	BV_{CEO}	50	V
Emitter-Base Voltage	BV_{EBO}	5	V
Collector Current	I_C	150	mA
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	50			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 40V, I_B = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6V, I_B = 1mA$	90		600	
Collector-emitter saturation voltage	V_{CESAT}	$I_C = 100mA, I_B = 10mA$			0.3	V
base -emitter saturation voltage	V_{BESAT}	$I_C = 100mA, I_B = 10mA$			1.0	V
Transition frequency	f_T	$V_{CE} = 6V, I_B = 10mA$		300		MHz

hFE Classification

Classification	R	Q	P	K
hFE	90-180	135-270	200-400	300-600

Package Dimensions

TO-92

Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
A1	2.30	2.70	0.091	0.106
b	0.40	0.50	0.016	0.020
b1	0.50	0.70	0.020	0.028
c	0.35	0.45	0.014	0.018
D	4.45	4.70	0.175	0.185
E	4.40	4.65	0.173	0.183
e	1.17	1.37	0.046	0.054
e1	2.34	2.64	0.092	0.104
L	13.50	14.50	0.531	0.571
L1	1.80	2.20	0.071	0.087

Package	Packing Method	Pack Q uantity
TO-92	Bulk	1000pcs/Bag
TO-92	Tape	2000pcs/Box