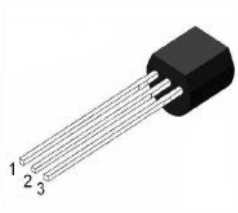




1.Features

- High Voltage Amplifier
- Complement to MPSA42

Case:TO-92



1.E
2.B
3.C

2.Mechanical Data

- Case:Molded Plastic,TO-92
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking: marked on body.
- Mounting Position : Any.

3.Maximum Ratings and Electrical Characteristics

Rating at 25℃ Cambient temperature unless otherwise specified

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-300	V
Collector-Emitter Voltage	V_{CES}	-300	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	500	A
Power Dissipation $T_A=25^{\circ}C$	P_C	625	mW
Junction Temperature	T_j	-55 to +150	℃
Operating and Storage Temperature Range	T_{stg}	-55 to +150	℃

4.Electrical Characteristics (TA=25℃ unless otherwise noted)

Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-300	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-300	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = -200V, I_E = 0$	-	-	0.25	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$	-	-	0.25	μA
DC current gain	h_{FE}	$V_{CE} = 10V, I_C = 1mA$	25	-	-	-
		$V_{CE} = 10V, I_C = 10mA$	40	-		
		$V_{CE} = 10V, I_C = 30mA$	40	-		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20mA, I_B = 2mA$	-	-	-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 20mA, I_B = 2mA$	-	-	-0.9	V
Output Capacitance	f_T	$V_{CE} = -20V, I_B = -10mA$	40	-	-	MHz



5. Rating And Characteristic Curves

Fig.1 DC current Gain

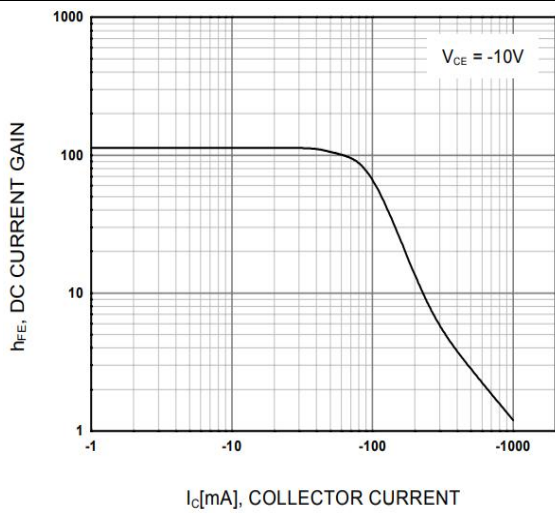


Fig.2 Saturation Voltage

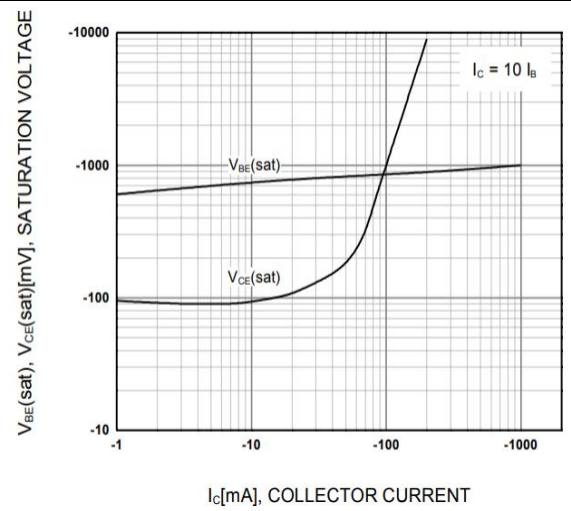


Fig.3 Capacitance

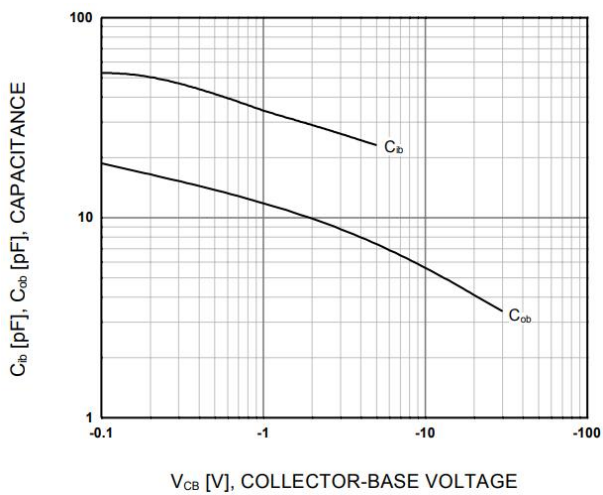


Fig.4 Current Gain Bandwidth Product

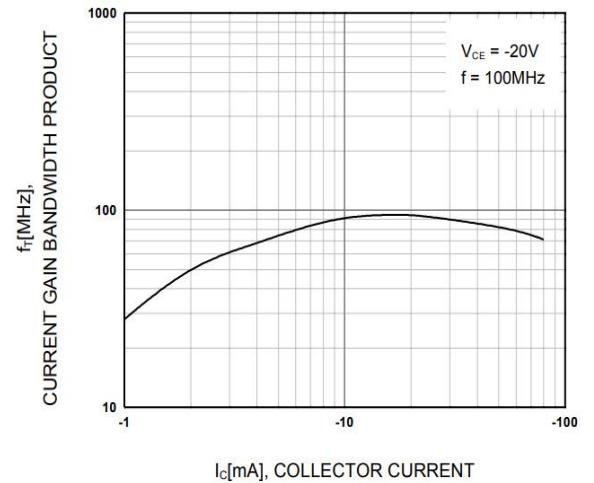
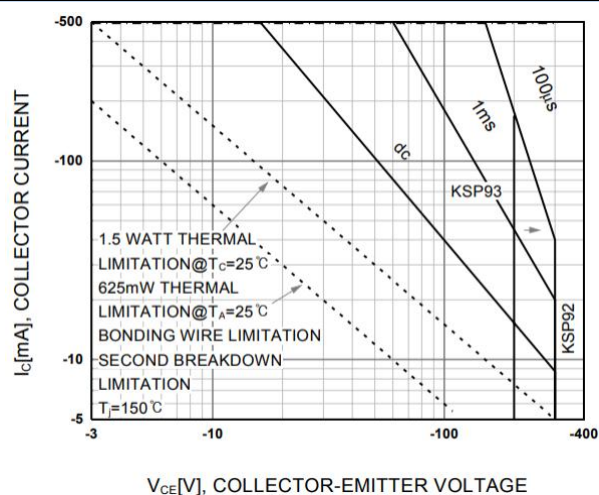
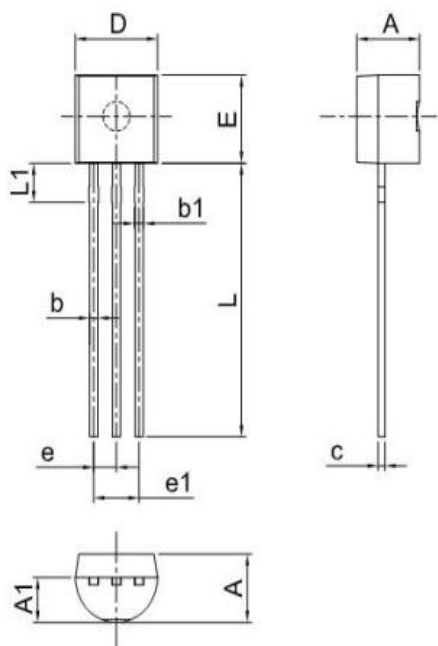


Fig.5 Active-Region Safe Operating Area



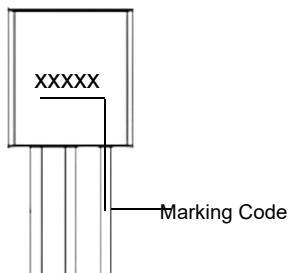


6.Dimensions



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

7. Part Marking System



8. Package Information

Package	Box	Carton
TO92	2000pcs	20,000pcs



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