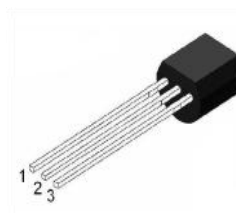


**1.Features**

- High Voltage Amplifier
- Collector-Emitter Voltage: $V_{CEO} = 400V$
- Collector Power Dissipation: $P_C(\text{max}) = 625mW$
- Complementary to KSP94

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°C Ambient temperature unless otherwise specified

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CES}	400	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	300	A
Power Dissipation $T_A=25^\circ C$	P_C	625	mW
Junction Temperature	T_j	-55 to +150	°C
Operating and Storage Temperature Range	T_{stg}	-55 to +150	°C

4.Electrical Characteristics ($T_A=25^\circ C$ unless otherwise noted)

Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	500	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	400	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	6	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = 400V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	-	-	0.1	μA
DC current gain *	h_{FE}	$V_{CE} = 10V, I_C = 1mA$	40	-	200	
		$V_{CE} = 10V, I_C = 10mA$	50	-		
		$V_{CE} = 10V, I_C = 50mA$	45	-		
		$V_{CE} = 10V, I_C = 100mA$	40	-		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1mA, I_B = 0.1A$	-	-	0.4	V
		$I_C = 10mA, I_B = 1mA$	-	-	0.5	
		$I_C = 50mA, I_B = 5A$	-	-	0.75	
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 1mA$	-	-	0.75	V
Output Capacitance	C_{ob}	$V_{CB} = 20V, I_E = 0, f=1MHz$	-	-	7	MHz

* Pulse Test: $PW \leq 300\mu s$, Duty Cycles $\leq 2\%$



5. Rating And Characteristic Curves

Fig.1 DC current Gain

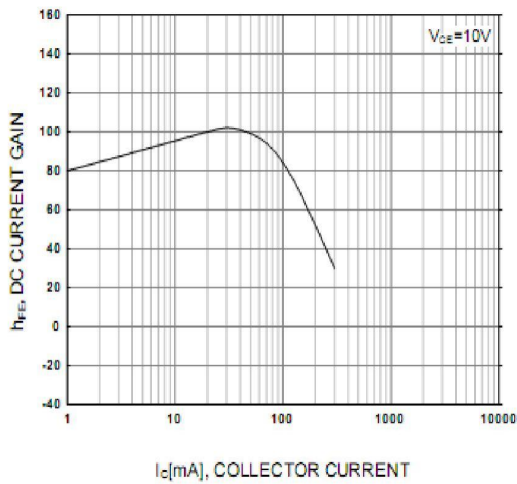


Fig.2 On Voltage

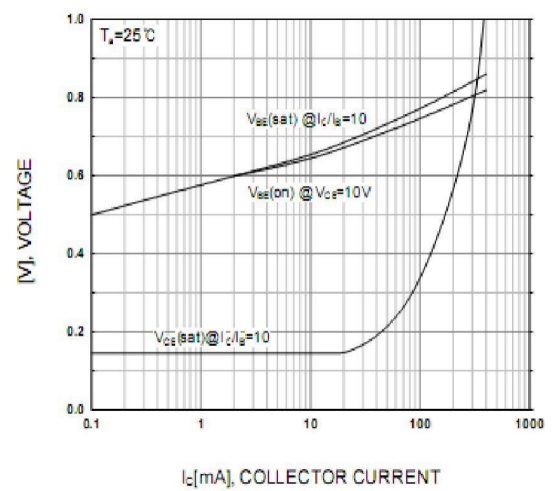


Fig.3 Collector Saturation Region

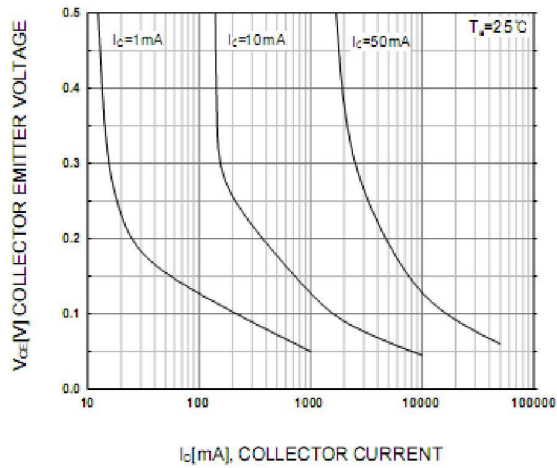


Fig.4 Base-Emitter Voltage

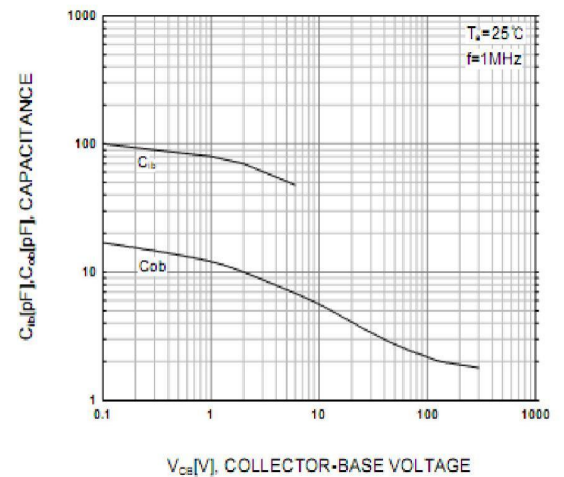


Fig.5 High Frequency Current Gain

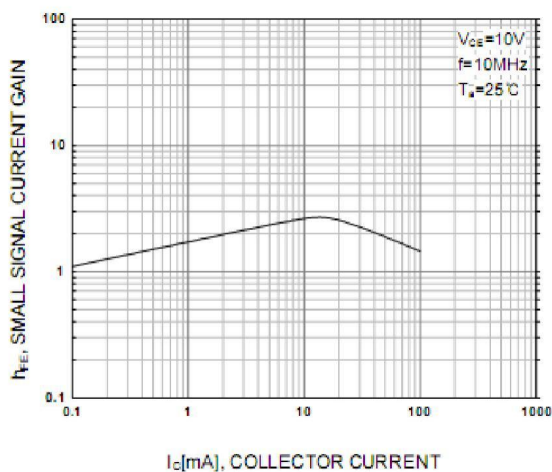
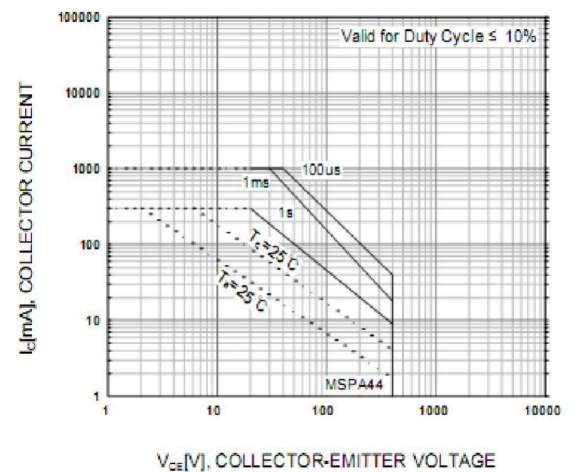
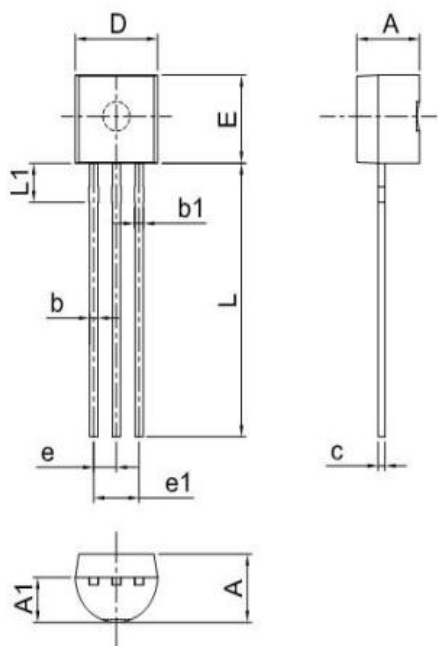


Fig.6 Safe Operating Area



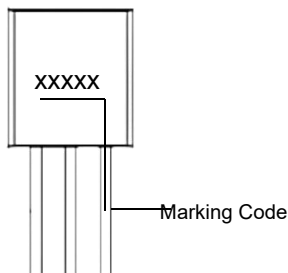


6.Dimensions



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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