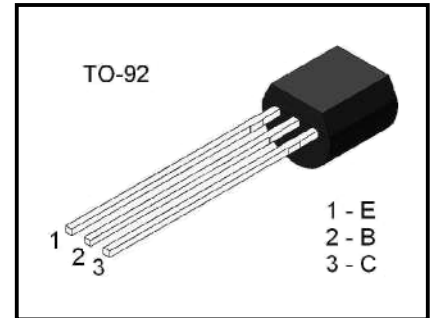


Features

- Complementary to KSP63



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	30	V
Collector-Emitter Voltage	BV_{CEO}	30	V
Emitter-Base Voltage	BV_{EBO}	10	V
Collector Current	I_C	1.0	A
Collector Power Dissipation	P_D	0.625	W
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}	$I_C = 100\mu A, I_E = 0$	30			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	30			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	10			V
Collector cut-off current	I_{CBO}	$V_{CB} = 30V, I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 10V, I_C = 0$			100	nA
DC current gain	h_{FE}	$V_{CE} = 5V, I_C = 10mA$ $V_{CE} = 5V, I_C = 100mA$	5000 10000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 0.1mA$			1.5	V
Base -emitter saturation voltage	$V_{BE(on)}$	$V_{CE} = 5V, I_C = 100mA$			2.0	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 10mA$ $f=100MHz$	125			MHz

Typical Characteristics

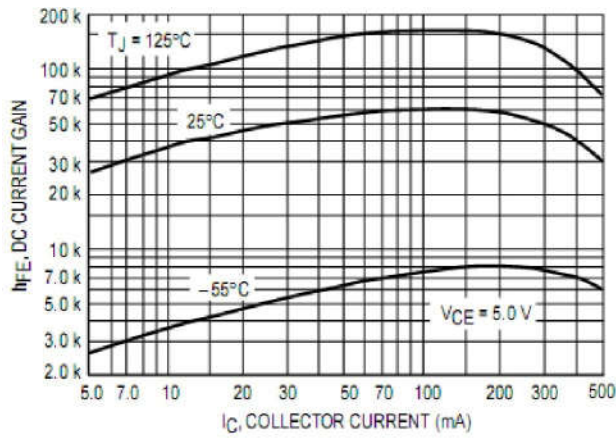


Figure 1. DC Current Gain

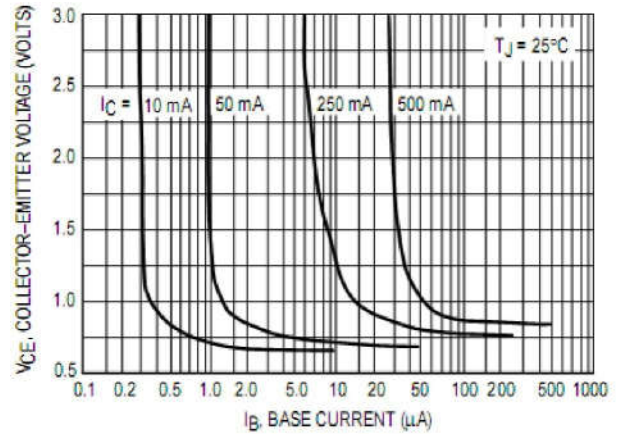


Figure 2. Collector Saturation Region

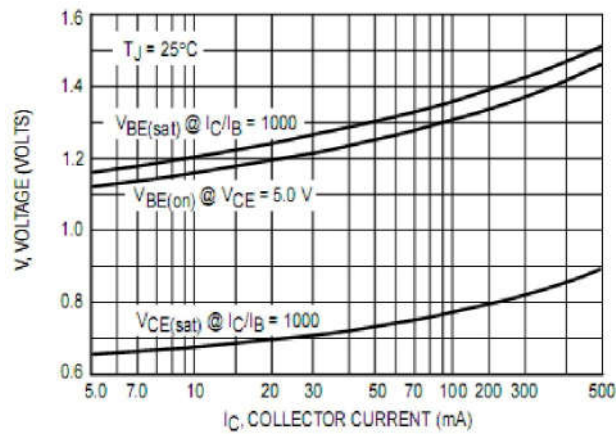


Figure 3. "On" Voltages

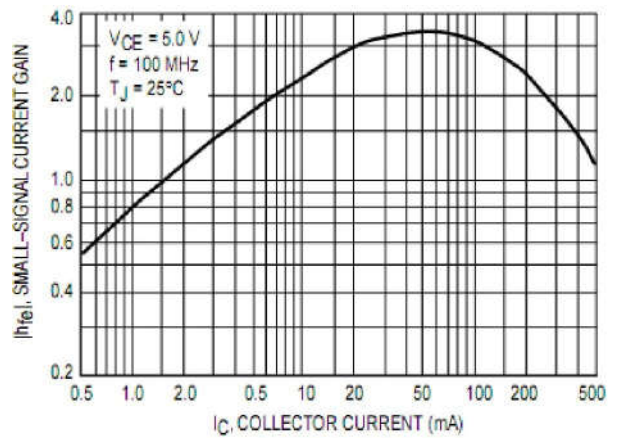


Figure 4. High Frequency Current Gain

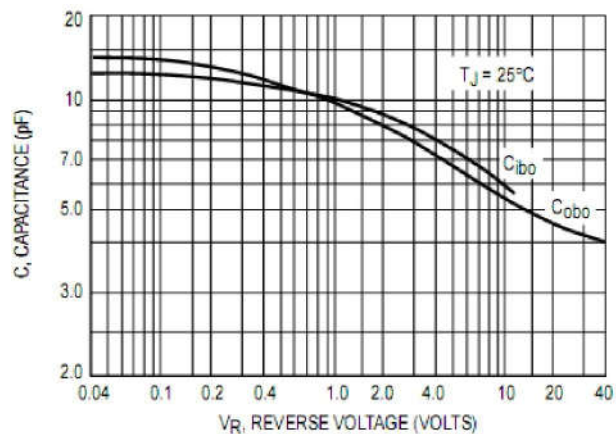


Figure 5. Capacitance

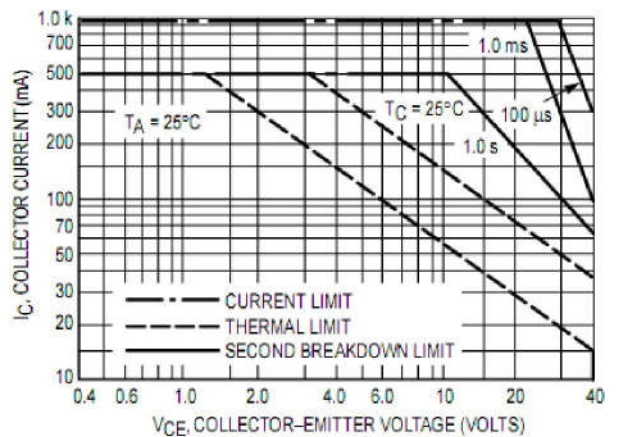
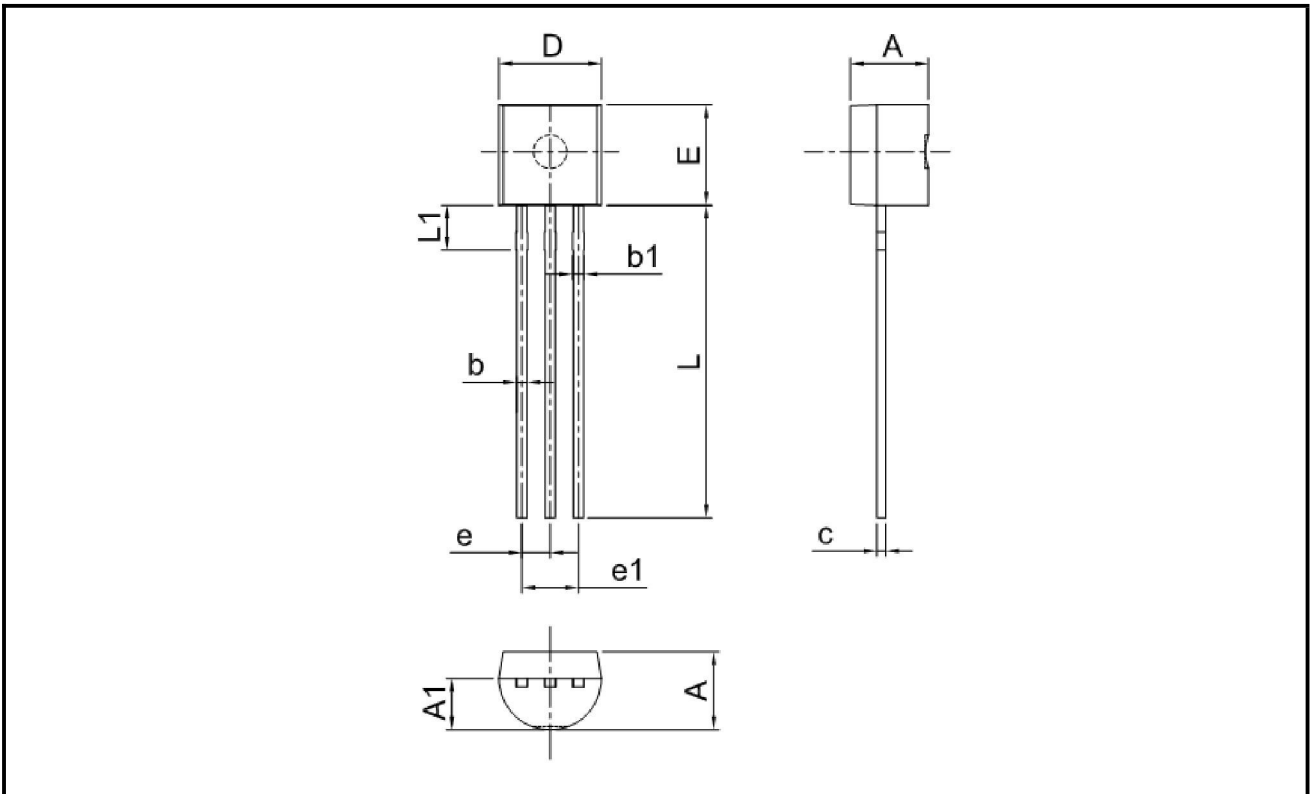


Figure 6. Safe Operating Area

Package Dimensions



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