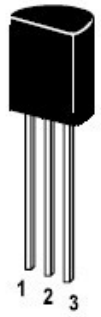
BV32 NPN Silicon Epitaxial Planar Transistor

High voltage fast switching power transistor



1.Base 2.Emitter 3.Collector
TO-92 Plastic Package
Weight approx. 0.19g

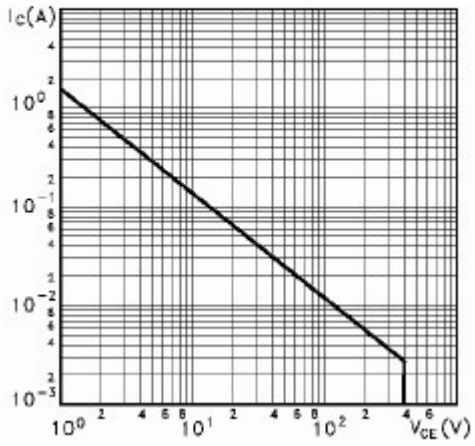
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	700	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current	I_C	1.5	A
Collector Peak Current (tp < 5 ms)	I_{CM}	3	A
Base Current	I_B	0.75	A
Base Peak Current	I_{BM}	1.5	A
Total Dissipation	P_{tot}	1.1	W
Operating Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

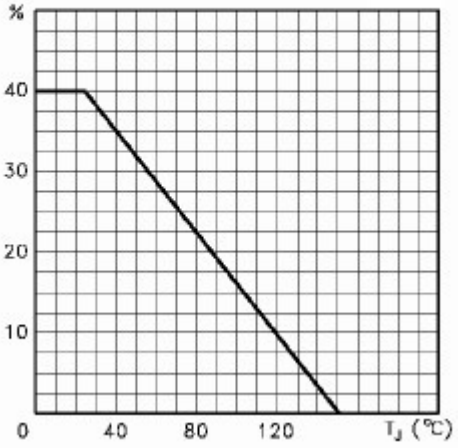
Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at V_{CE} = 2 V, I_C = 0.5 A at V_{CE} = 2 V, I_C = 1 A	 h_{FE} h_{FE}	 8 5	 35 25	 - -
Collector Cutoff Current at V_{CB} = 700 V	I_{CBO}	-	1	mA
Emitter Cutoff Current at V_{EB} = 9 V	I_{EBO}	-	1	mA
Collector Emitter Breakdown Voltage at I_C = 10 mA	$V_{(BR)CEO}$	400	-	V
Collector Emitter Saturation Voltage at I_C = 0.5 A, I_B = 0.1 A at I_C = 1 A, I_B = 0.25 A at I_C = 1.5 A, I_B = 0.5 A	V_{CEsat}	- - -	0.5 1 3	V
Base Emitter Saturation Voltage at I_C = 0.5 A, I_B = 0.1 A at I_C = 1 A, I_B = 0.25 A	V_{BEsat}	- -	1 1.2	V

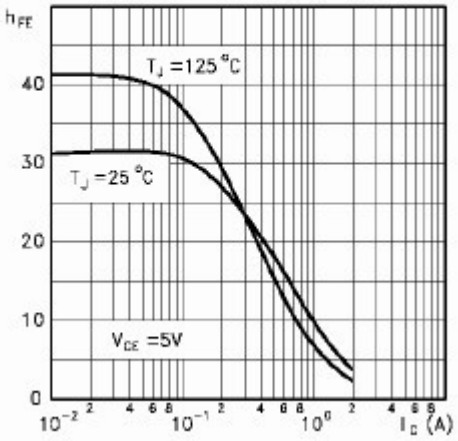
Safe Operating Area



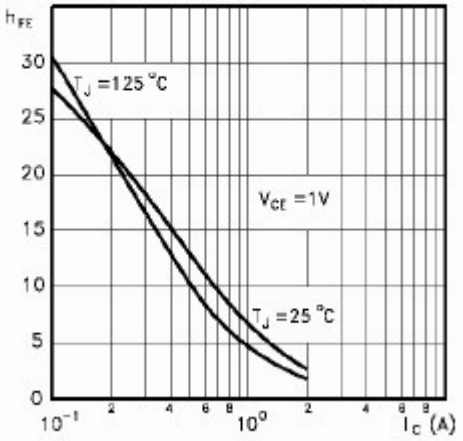
Derating Curve



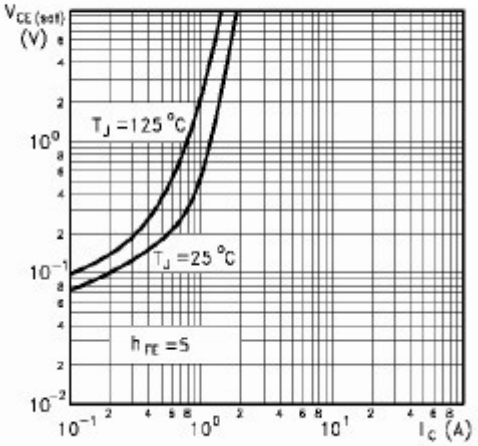
DC Current Gain



DC Current Gain



Collector Emitter Saturation Voltage



Base Emitter Saturation Voltage