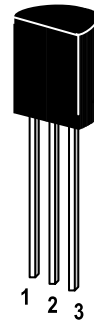


BV32

NPN Silicon Epitaxial Planar Transistor

High voltage fast switching power transistor



1. Emitter 2. Collector 3. Base

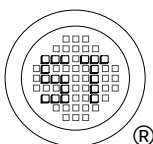
TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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 ($t_p < 5\text{ ms}$)	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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

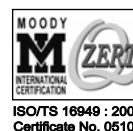
Characteristics at $T_a = 25^\circ\text{C}$

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



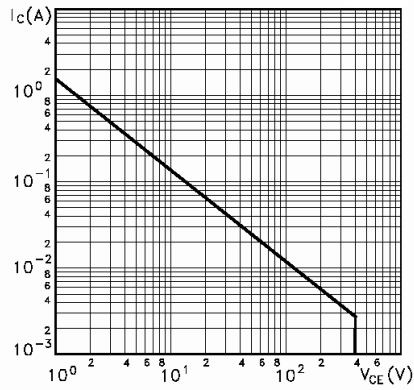
SEMTECH ELECTRONICS LTD.

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listed on the Hong Kong Stock Exchange, Stock Code: 724)

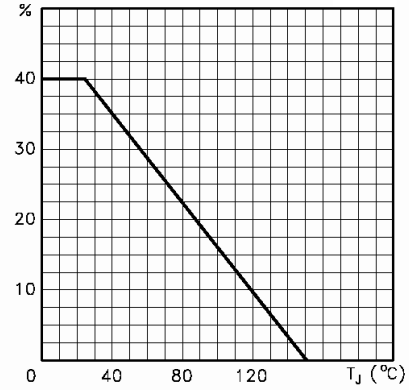


Dated : 16/09/2006

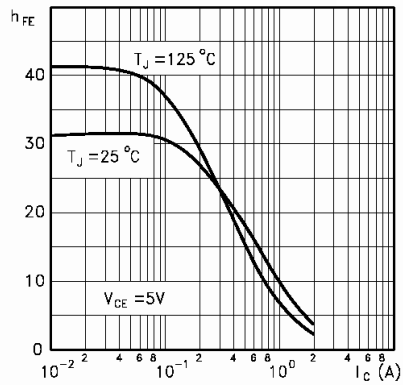
Safe Operating Area



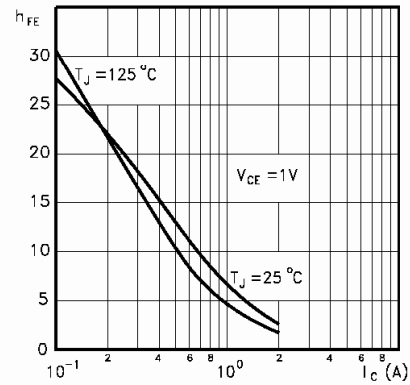
Derating Curve



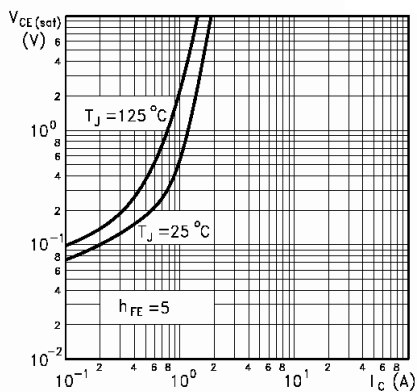
DC Current Gain



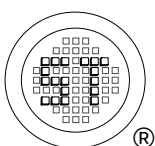
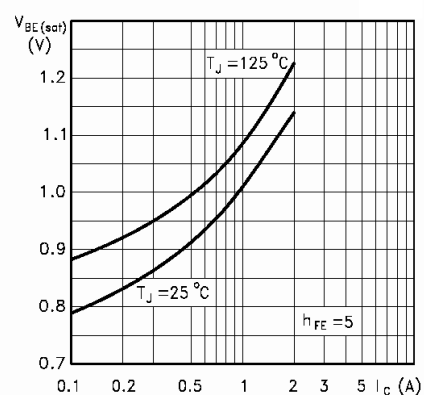
DC Current Gain



Collector Emitter Saturation Voltage



Base Emitter Saturation Voltage



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