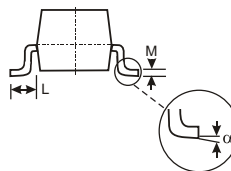
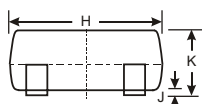
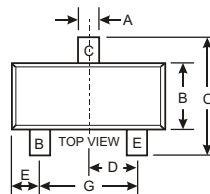


### Features

- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary PNP Types Available (BC808)

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	30	V
Collector Emitter Voltage	$V_{CEO}$	25	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	800	mA
Power Dissipation	$P_{tot}$	300	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	$^\circ\text{C}$



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
$\alpha$	$0^\circ$	$8^\circ$
All Dimensions in mm		

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CBO}$	$I_C = 10\mu\text{A}$ , $I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = 10\text{mA}$ , $I_B = 0$	25			V
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = 10\mu\text{A}$ , $I_C = 0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 25\text{V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 4\text{V}$ , $I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = 1\text{V}$ , $I_C = 100\text{mA}$	100		630	
	$h_{FE(2)}$	$V_{CE} = 1\text{V}$ , $I_C = 300\text{mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}$ , $I_B = 50\text{mA}$			0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500\text{mA}$ , $I_B = 50\text{mA}$			1.2	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 1\text{V}$ , $I_C = 500\text{mA}$			1.2	V
Collector capacitance	$C_{ob}$	$V_{CB} = 10\text{V}$ , $f = 1\text{MHz}$		6		pF
Transition frequency	$f_T$	$V_{CE} = 5\text{V}$ , $I_C = 50\text{mA}$ $f = 100\text{MHz}$		170		MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	BC818-16	BC818-25	BC818-40
Range	100-250	160-400	250-630
Marking	6E	6F	6G

### TYPICAL TRANSIENT CHARACTERISTICS

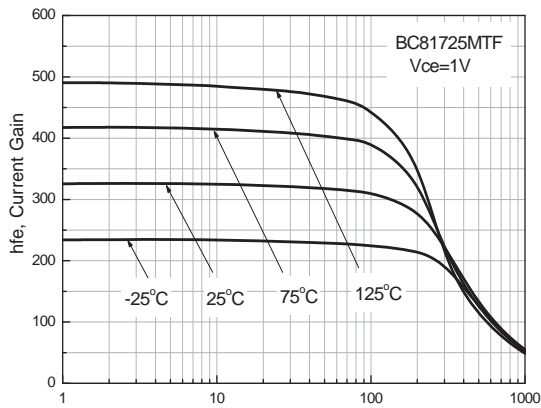


Figure 1. DC current Gain

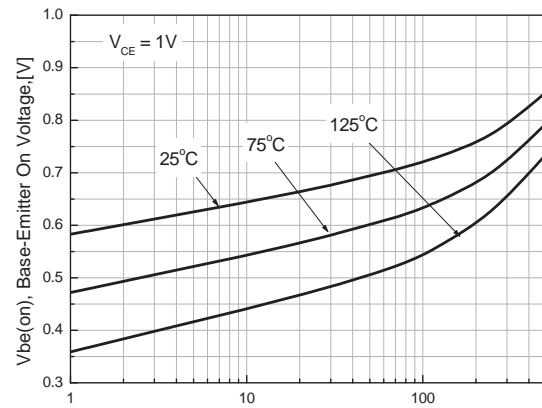


Figure 2. Base-Emitter On Voltage

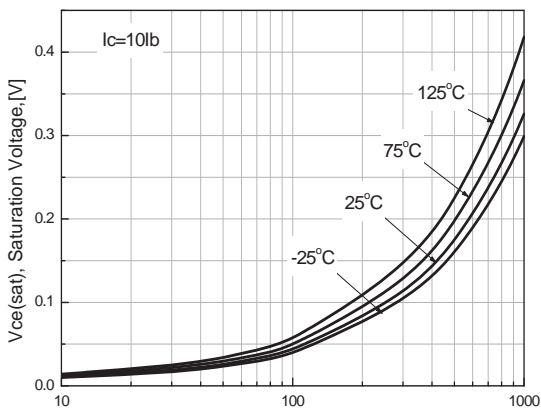


Figure 3. Collector-Emitter Saturation Voltage

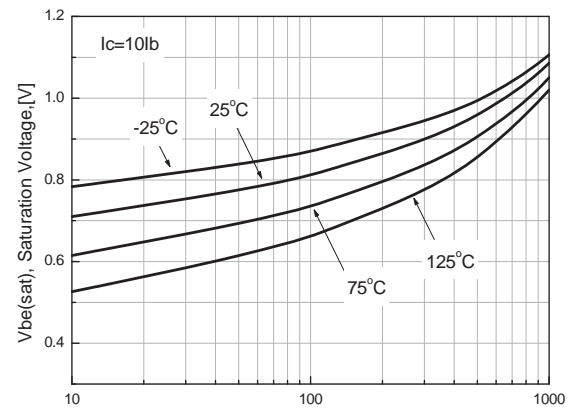


Figure 4. Base-Emitter Saturation Voltage

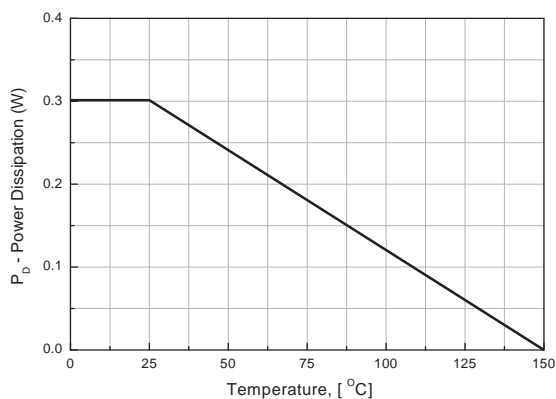


Figure 5. Power Dissipation vs Ambient Temperature

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