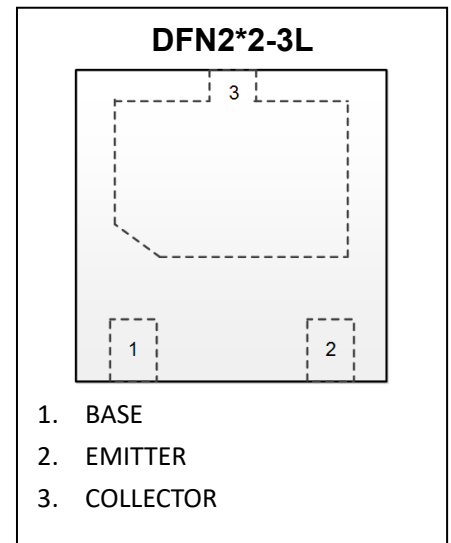


GPB1016FA Transistor(NPN)

Feature

- High Collector-emitter voltage $V_{CE}=160V$
- Large continuous collector current capability

Marking: AD



MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	1	A
Power Dissipation*	P_d	1	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

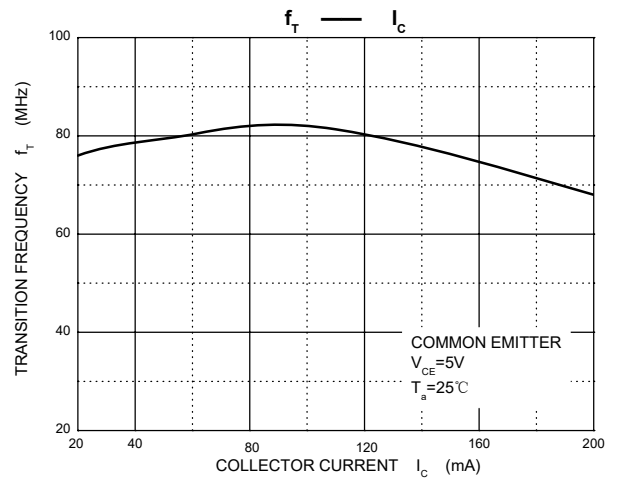
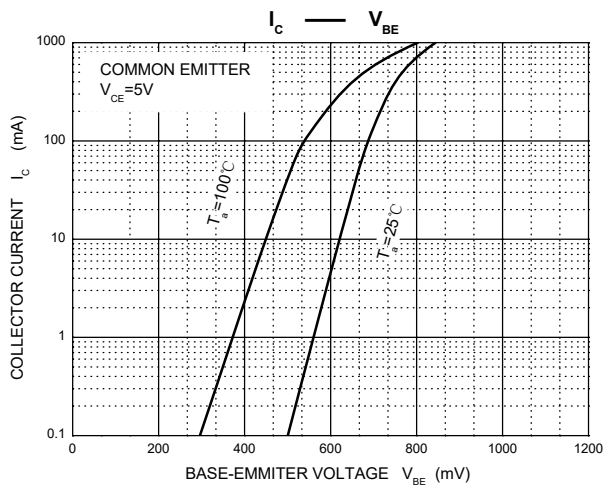
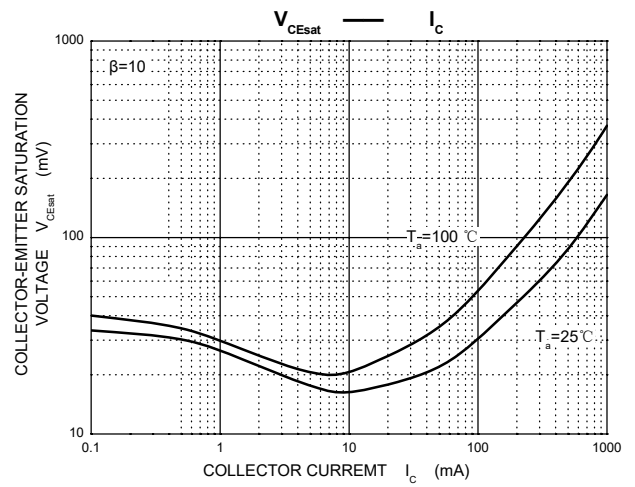
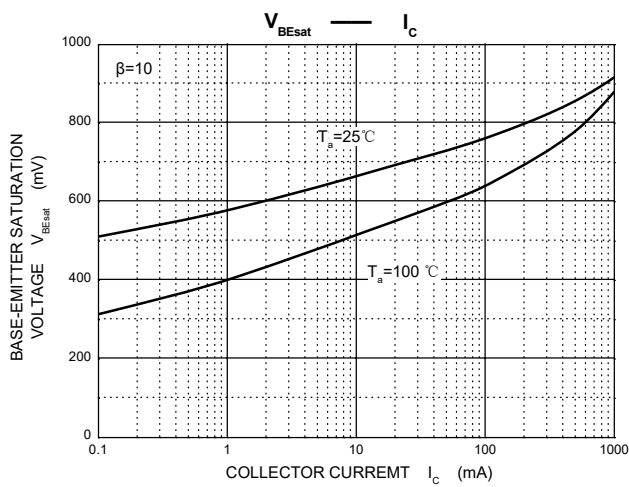
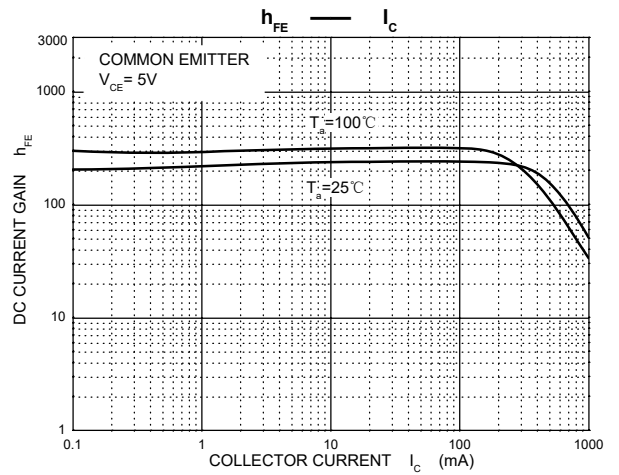
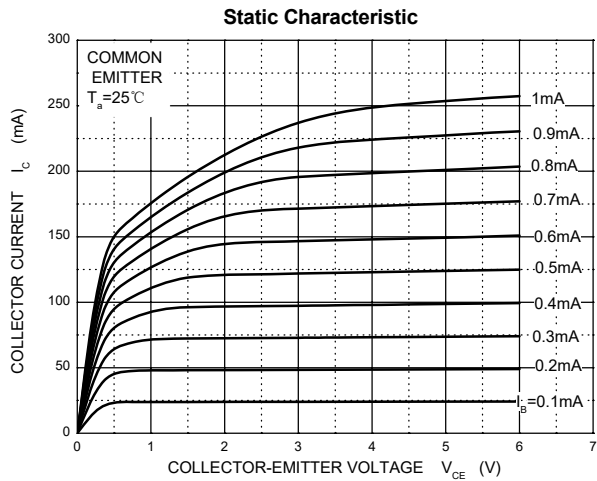
* Device mounted on an FR4 PCB, single-sided copper, tin-plated, mounting pad for collector 1 cm².

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}C$ unless otherwise noted)

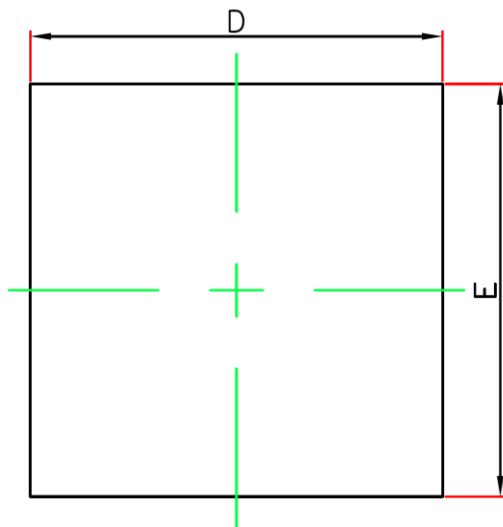
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	160		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}=150V, I_E=0$		1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$		1	μA
DC current gain	h_{FE1}	$V_{CE}=5V, I_C=200mA$	60	320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$		1	V
Base-emitter voltage	V_{BE}	$I_C=5mA, V_{CE}= 5V$	0.45	0.75	V
Transition frequency	f_T	$V_{CE}= 5V, I_C=200mA,$	20		MHZ
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		20	pF

* Pulse test

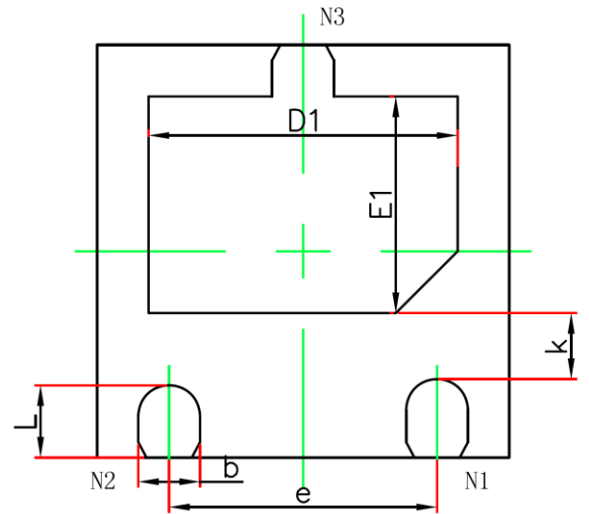
Typical Characteristics



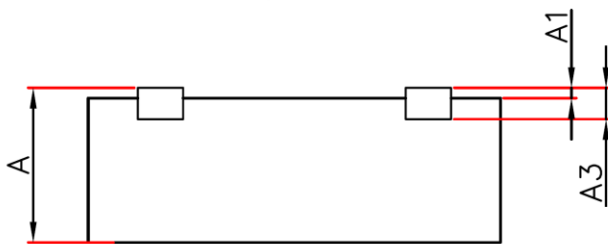
DFN2*2-3L Package Outline Dimensions



TOP VIEW
[顶视图]



BOTTOM VIEW
[背视图]



SIDE VIEW
[侧视图]

Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.550	0.650
A1	0.000	0.050
A3	0.152REF.	
D	1.924	2.076
E	1.924	2.076
D1	1.400	1.600
E1	0.950	1.150
K	0.220Min.	
b	0.250	0.350
e	1.30(BSC)	
L	0.330	0.430