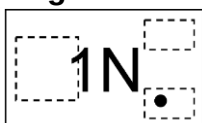


GP3904Y3 Transistor(NPN)

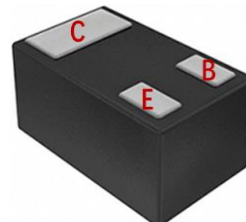
Feature

- Switching Transistor
- Collector-emitter voltage $V_{CE}=40V$
- Collector current $I_C=0.2A$

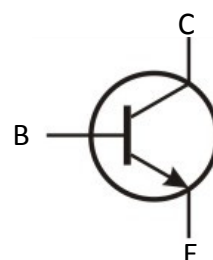
Marking: 1N



DFN1006-3L



Schematic diagram



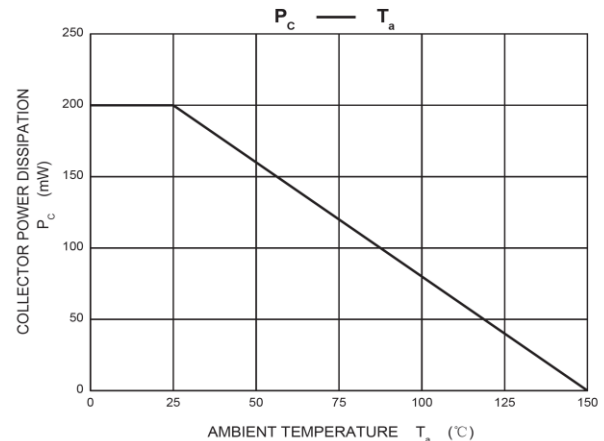
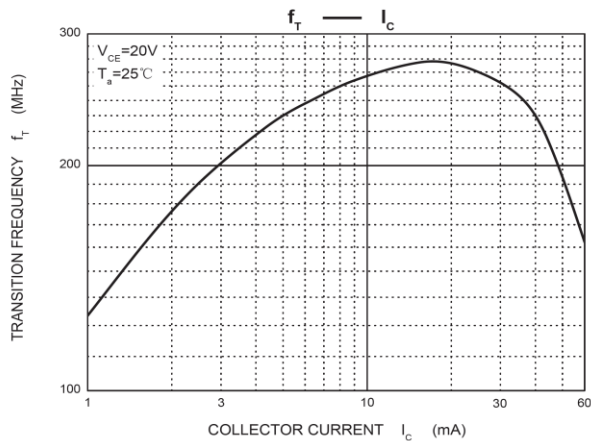
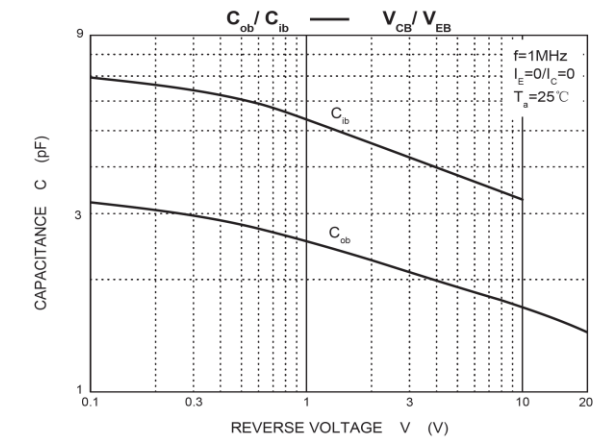
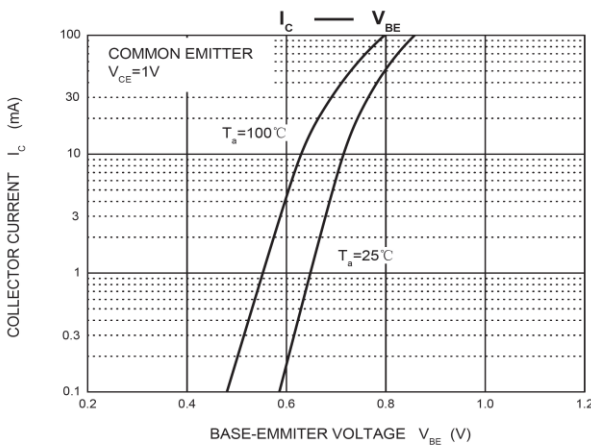
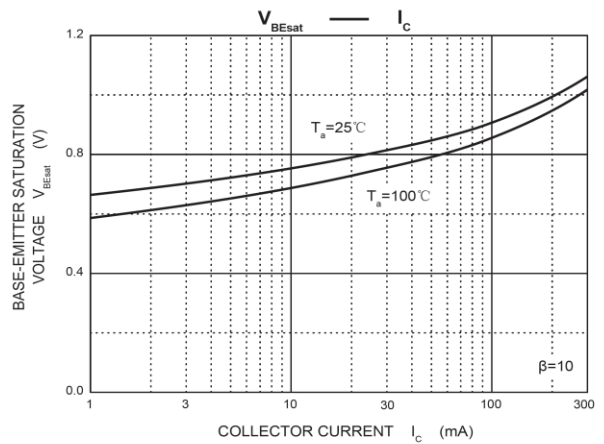
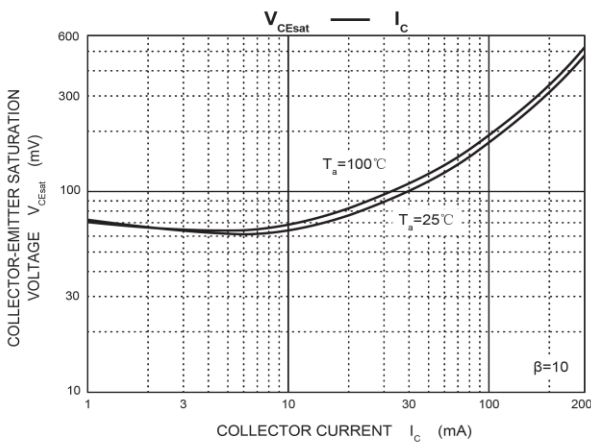
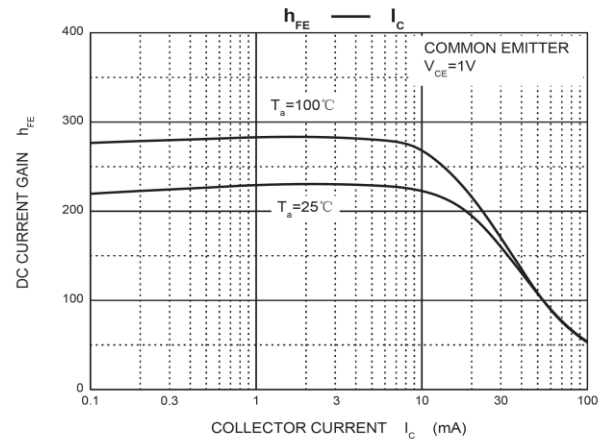
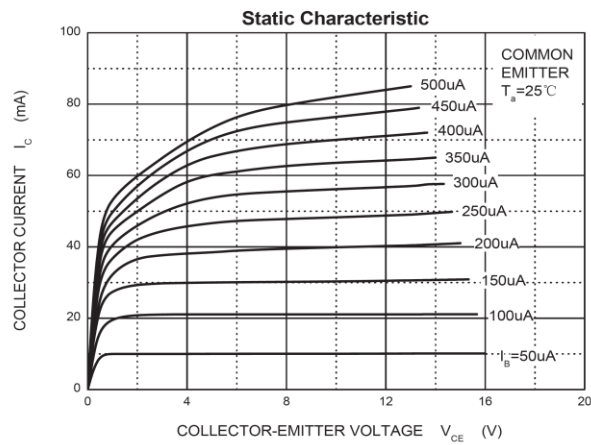
MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

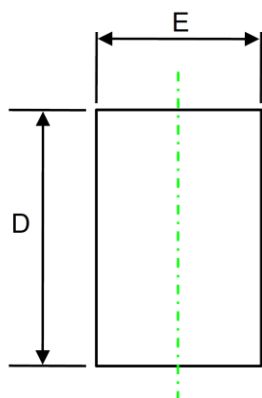
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	0.2	A
Power Dissipation	P_d	0.1	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

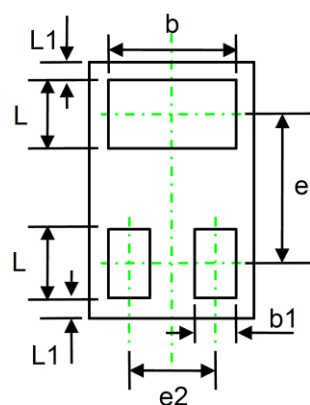
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	60		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	40		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6		V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0		100	nA
Collector cut-off current	I _{CEX}	V _{CE} =30V, V _{EB(off)} =3V		50	nA
Base cut-off current	I _{BEX}			50	nA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0		100	nA
DC current gain	h _{FE1}	V _{CE} =1V, I _C =0.1mA	40		
	h _{FE2}	V _{CE} =1V, I _C =1mA	70		
	h _{FE3}	V _{CE} =1V, I _C =10mA	100	300	
	h _{FE4}	V _{CE} =1V, I _C =50mA	60		
	h _{FE5}	V _{CE} =1V, I _C =100mA	30		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =50mA, I _B =0mA		0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =50mA, I _B =0mA		0.95	V
Transition frequency	f _T	V _{CE} = 20V, I _C =10mA, f=100MHz	300		MHZ
Delay Time	t _d	V _{CC} =3V, I _C = 10mA,		35	ns
Rise Time	t _r	V _{BE(off)} =-0.5V, I _{B1} =1mA		35	ns
Storage Time	t _s	V _{CC} =3V, I _C =10mA,		200	ns
Fall Time	t _f	I _{B1} = I _{B2} =1mA		50	ns

Typical Characteristics

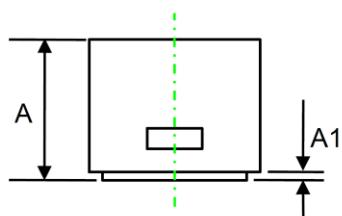


DFN1006-3L Package Information

TOP VIEW

[顶视图]


BOTTOM VIEW

[底视图]


SIDE VIEW

[侧视图]

	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	0.43	0.45	0.47
D	0.95	1.00	1.05
E	0.55	0.60	0.65
b	0.45	0.50	0.55
e	-	0.65	-
e2	-	0.35	-
L	0.20	0.25	0.30
L1	0.05 REF.		
b1	0.10	0.15	0.20