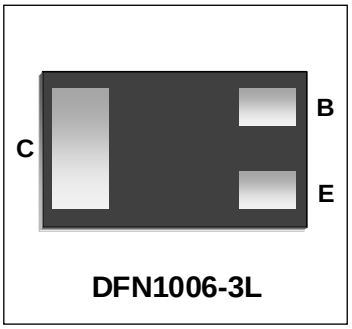
WT3906F

PNP Silicon Transistor

Features

- Complementary to WT3904F
- Epitaxial Planar Die Construction
- Ultra Small SMD Plastic Package

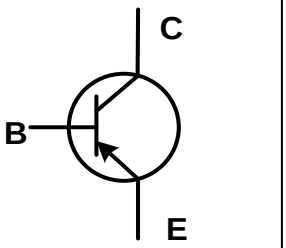


DFN1006-3L

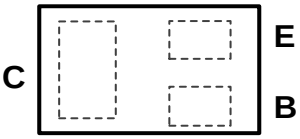
Mechanical Characteristics

- DFN1006-3L Package
- Marking : Making Code
- RoHS Compliant

Schematic & PIN Configuration



Device Symbol



DFN1006-3L(Top view)

Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	-40	V
Collector Emitter Voltage	V_{CEO}	-40	V
Emitter Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-200	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1250	°C/W

Electrical Characteristics (T_{amb}=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -10μA, I_E = 0	-40	-	-	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	-5	-	-	V
Collector Cut-off Current	I_{CEX}	V_{CE} = -30V,$V_{BE(off)}$ = -3V	-	-	-50	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = -5V,I_C = 0	-	-	-100	nA
DC Current Gain	$h_{FE(1)}$	V_{CE} = -1V, I_C = -0.1mA	60	-	-	-
	$h_{FE(2)}$	V_{CE} = -1V, I_C = -1mA	80	-	-	-
	$h_{FE(3)}$	V_{CE} = -1V, I_C = -10mA	100	-	300	-
	$h_{FE(4)}$	V_{CE} = -1V, I_C = -50mA	60	-	-	-
	$h_{FE(5)}$	V_{CE} = -1V, I_C = -100mA	30	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = -10mA, I_B = -1mA	-	-	-0.25	V
		I_C = -50mA, I_B = -5mA	-	-	-0.40	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = -10mA, I_B = -1mA	-0.65	-	-0.85	V
		I_C = -50mA, I_B = -5mA	-	-	-0.95	V
Transition Frequency	f_T	V_{CE}= -20V, I_C= -10mA,f= 100MHz	250	-	-	MHz
Collector output capacitance	C_{ob}	V_{CB}= -5V, I_E= 0, f=1MHz	-	4	-	pF
Base Input capacitance	C_{ib}	V_{EB}= -0.5V, I_E= 0, f=1MHz	-	7	-	pF
Delay Time	t_d	V_{CC} = -3V, $V_{BE(OFF)}$ = 0.5V, I_C = -10mA, I_{B1} = -1mA	-	30	-	ns
Rise Time	t_r		-	30	-	ns
Storage Time	t_s	V_{CC} = -3V, I_C = -10mA, I_{B1} = I_{B2} = -1mA	-	190	-	ns
Fall Time	t_f		-	50	-	ns

Typical Characteristics

Figure 1.Static Characteristic

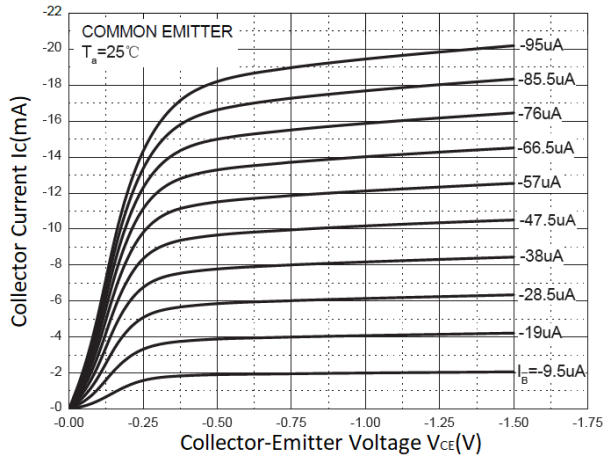


Figure 2. h_{FE} vs. I_C

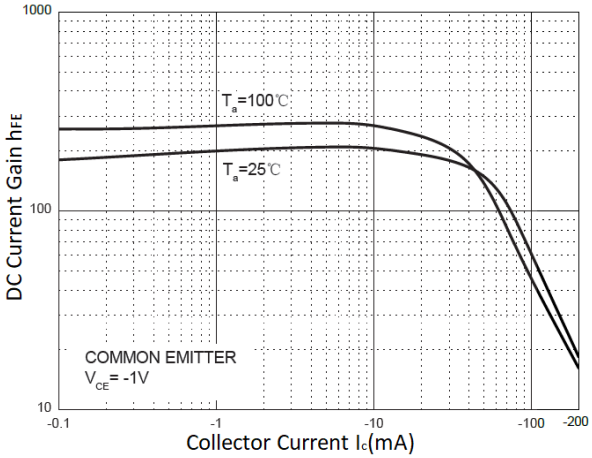


Figure 3. $V_{CE(sat)}$ vs. I_C

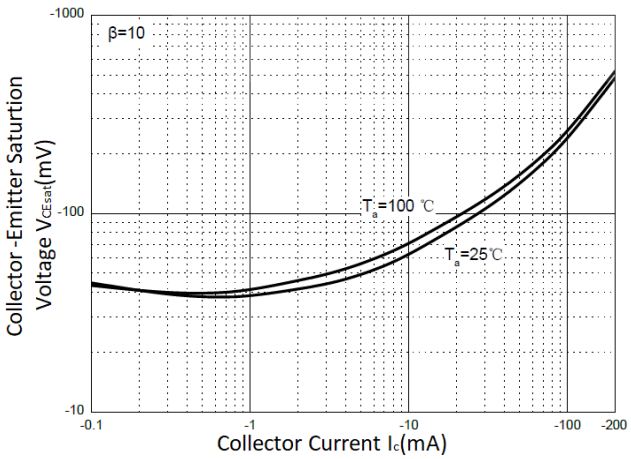


Figure 4. $V_{BE(sat)}$ vs. I_C

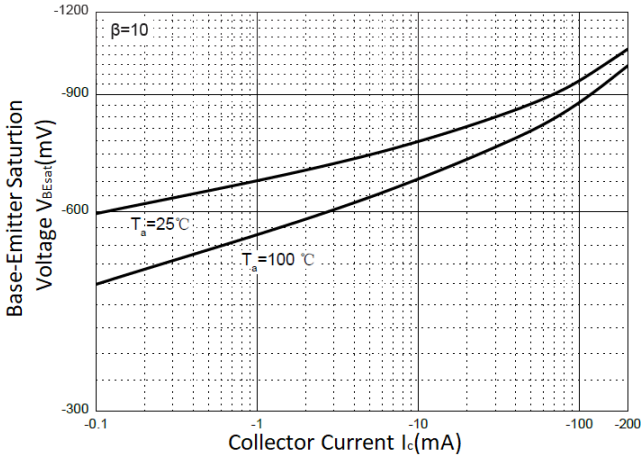


Figure 5. I_C vs. V_{BE}

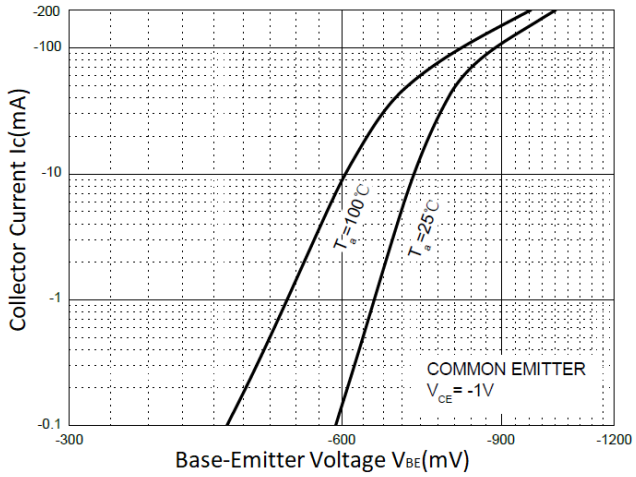


Figure 6. C_{ob} / C_{ib} vs. V_{CB} / V_{EB}

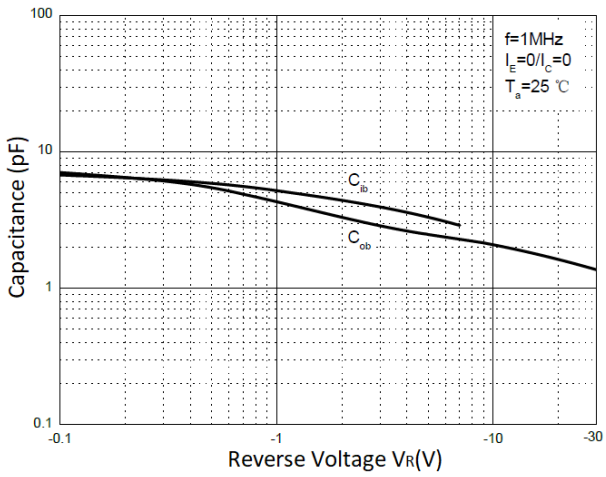


Figure 7. f_T vs. I_C

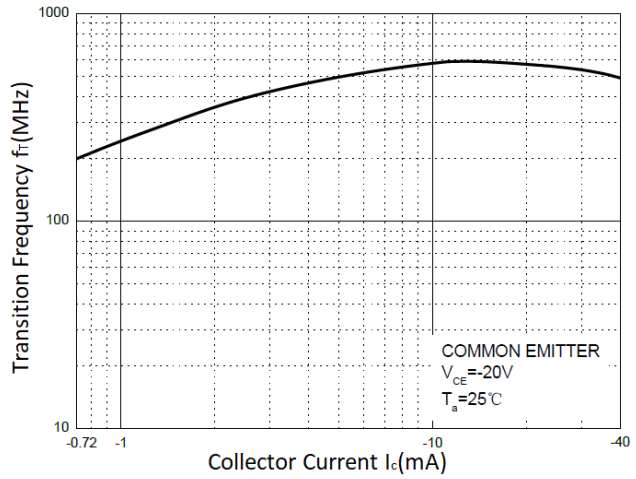
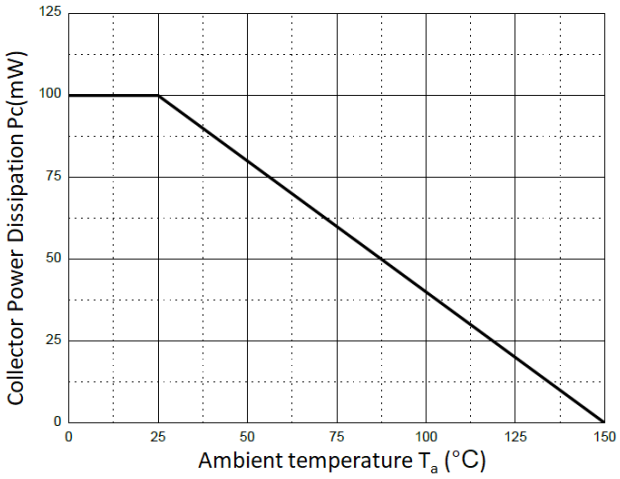
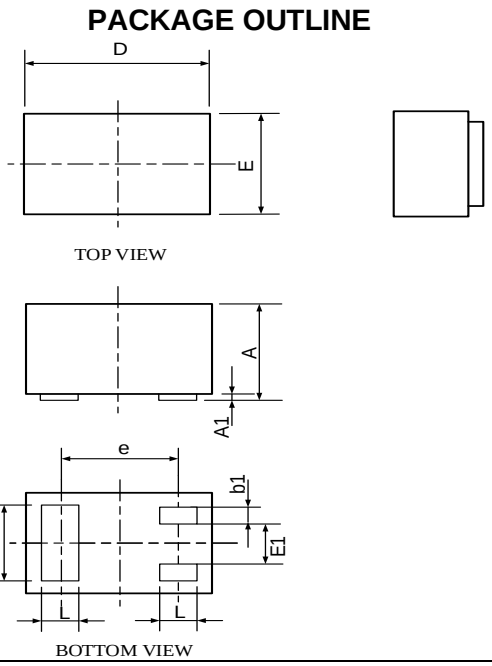


Figure 8. P_C vs. T_a



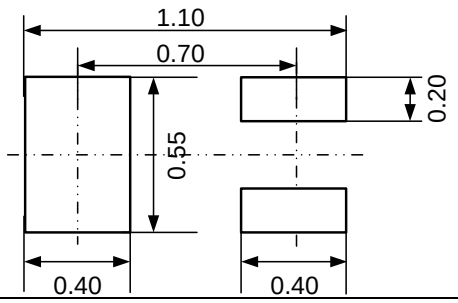
Outline Drawing – DFN1006-3L



DFN1006-3L

SYMBOL	MILLIMETER		
	MIN.	TYP.	MAX.
A	0.45	0.50	0.55
A1	0．00	-	0.05
b	0.40	0.50	0.60
b1	0.10	0.15	0.20
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
E1	0.19BSC		
L	0.20	0.25	0.30

Land Pattern



Marking Codes

Part Number	WT3906F
Marking Code	3N

Package Information

Qty：3k/Reel

CONTACT INFORMATION

No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201207
Tel: 86-21-68969993 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: **http://www.way-on.com**
For additional information, please contact your local Sales Representative.

单击下面可查看定价，库存，交付和生命周期等信息

>>WAY-ON(维安)