



DFNWB2x2-3L Plastic-Encapsulate Transistors

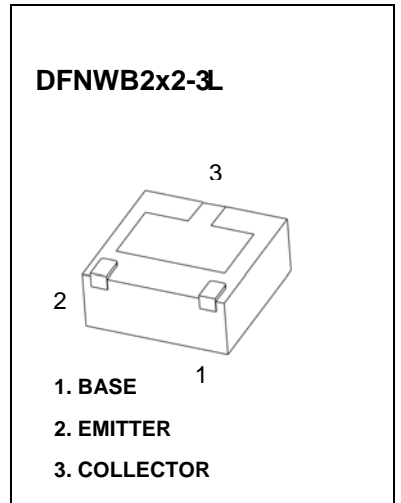
CJP718 TRANSISTOR (PNP)

FEATURE

- Low Equivalent On Resistance
- Low Saturation Voltage

APPLICATIONS

- DC-DC Converters (FET Driving)
- Charging Circuits
- Power Switches
- Motor Control



MARKING:



Maximum ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-25	V
V _{CEO}	Collector-Emitter Voltage	-20	
V _{EBO}	Emitter-Base Voltage	-7.5	
I _c	Collector Current-Continuous	-6	A
P _D	Power Dissipation	1	W
R _{θJA}	Thermal Resistance. Junction to Ambient	125	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~+150	

ELECTRICAL CHARACTERISTICS

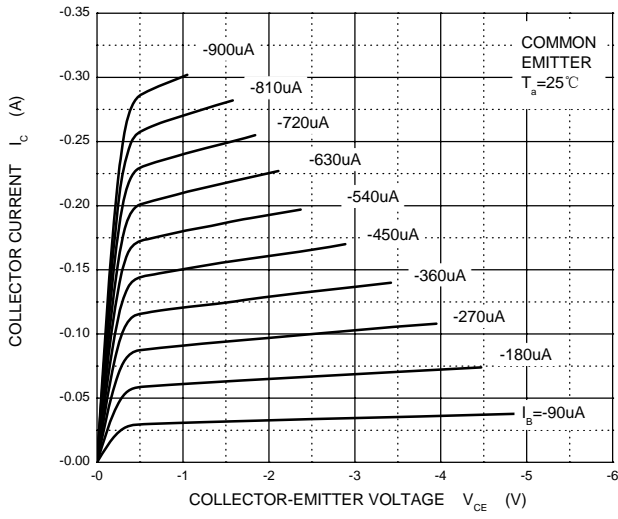
$T_a=25^{\circ}\text{C}$ unless otherwise noted

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-25			V
Collector-emitter breakdown voltage*	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-7.5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-25	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6\text{V}, I_C=0$			-25	
DC current gain*	h_{FE}	$V_{CE}=-2\text{V}, I_C=-10\text{mA}$	300			
		$V_{CE}=-2\text{V}, I_C=-100\text{mA}$	300			
		$V_{CE}=-2\text{V}, I_C=-2\text{A}$	150			
		$V_{CE}=-2\text{V}, I_C=-6\text{A}$	15			
Collector-emitter saturation voltage*	$V_{CE(sat)}$	$I_C=-0.1\text{A}, I_B=-10\text{mA}$			-30	mV
		$I_C=-1\text{A}, I_B=-20\text{mA}$			-220	
		$I_C=-1.5\text{A}, I_B=-50\text{mA}$			-250	
		$I_C=-2.5\text{A}, I_B=-150\text{mA}$			-350	
		$I_C=-3.5\text{A}, I_B=-350\text{mA}$			-300	
Base-emitter turn-on voltage*	$V_{BE(on)}$	$V_{CE}=-2\text{V}, I_C=-3.5\text{A}$			-0.95	V
Base-emitter saturation voltage*	$V_{BE(sat)}$	$I_B=-350\text{mA}, I_C=-3.5\text{A}$			-1.075	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=100\text{MHz}$	150			MHz
Turn-on time	t_{on}	$V_{CB}=-10\text{V}, I_C=-1\text{A},$		40		ns
Turn-off time	t_{off}	$I_{B1}= I_{B2}=-10\text{mA}$		670		

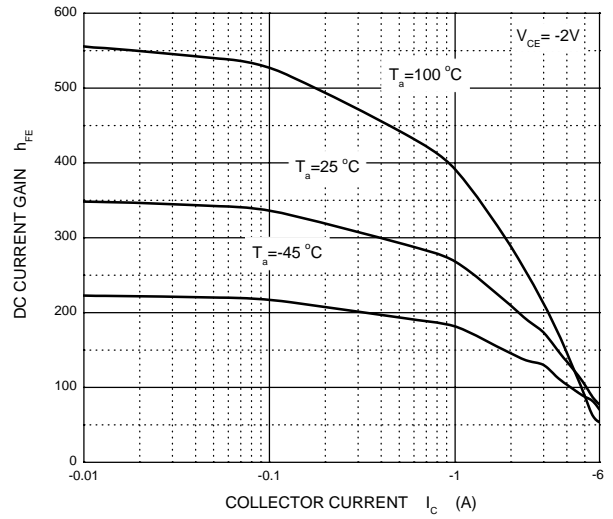
* Pulse Test : Pulse width $\leq 300\mu\text{s}$, duty cycle $\leq 2\%$.

Typical Characteristics

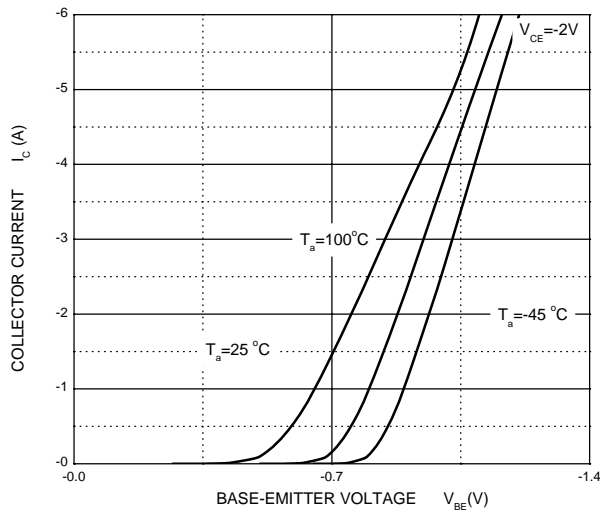
Static Characteristic



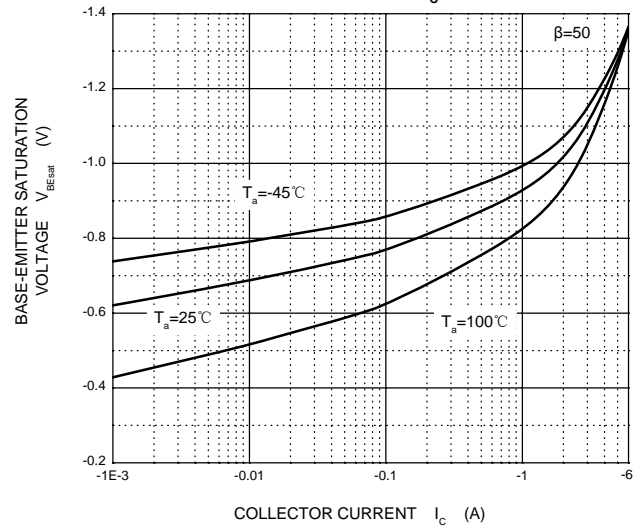
h_{FE} — I_c



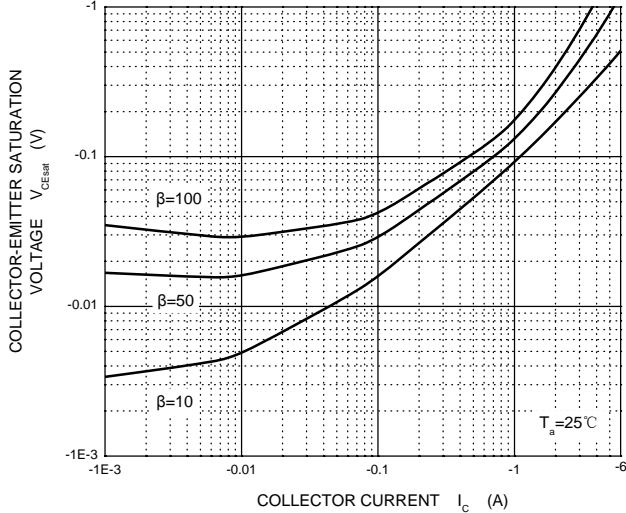
V_{BE} — I_c



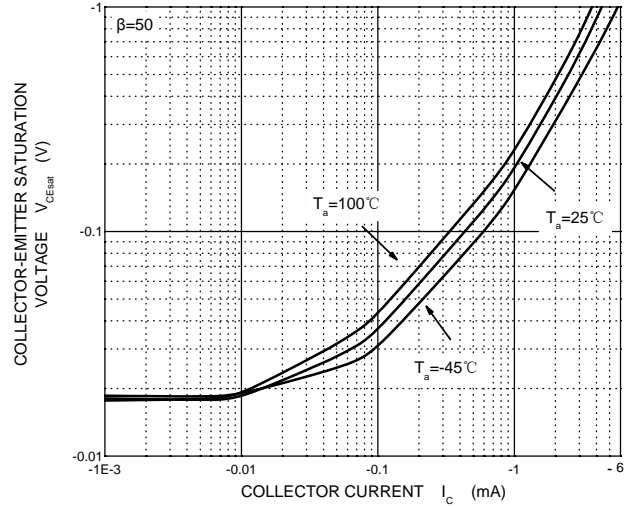
V_{BEsat} — I_c



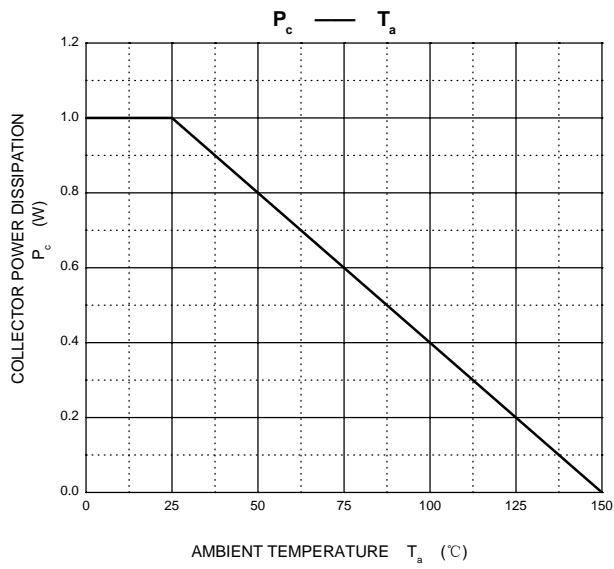
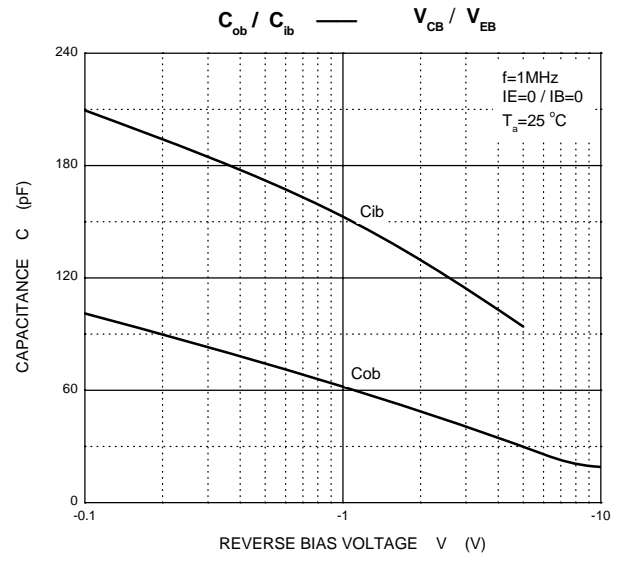
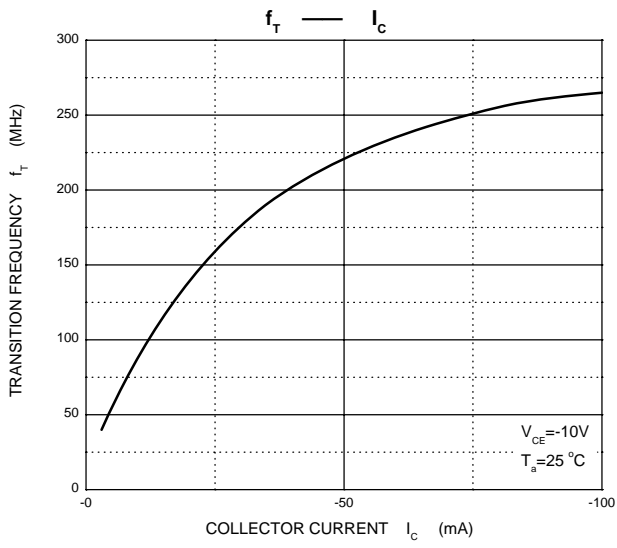
V_{CEsat} — I_c



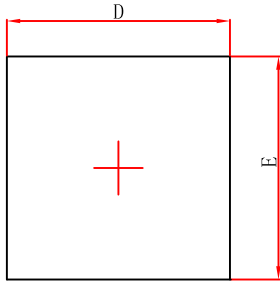
V_{CEsat} — I_c



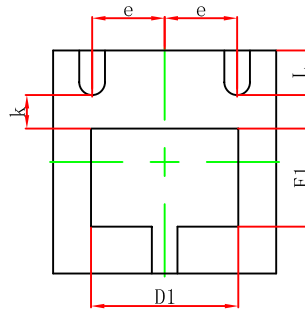
Typical Characteristics



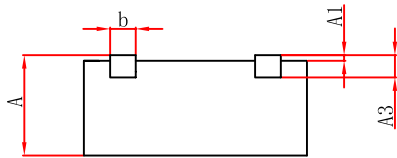
DFNWB2X2-3L Package Outline Dimensions



Top View



Bottom View

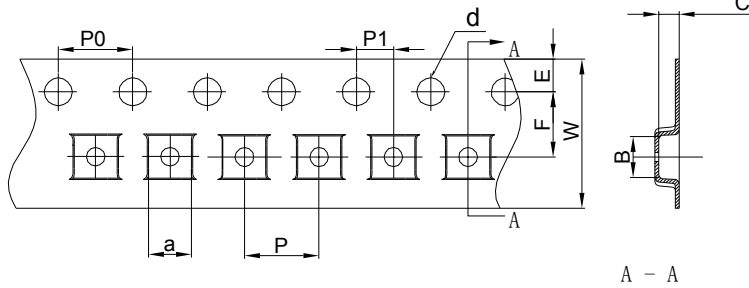


Side View

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700/0.800	0.800/0.900	0.028/0.031	0.031/0.035
A1	0.000	0.050	0.000	0.002
A3	0.203REF.		0.008REF.	
D	1.924	2.076	0.076	0.082
E	1.924	2.076	0.076	0.082
D1	1.220	1.420	0.048	0.056
E1	0.780	0.980	0.031	0.039
k	0.200MIN.		0.008MIN.	
b	0.180	0.280	0.007	0.011
e	0.650TYP.		0.026TYP.	
L	0.324	0.476	0.013	0.019

DFNWB2X2-3L Tape and Reel

DFNWB2×2-3L Embossed Carrier Tape



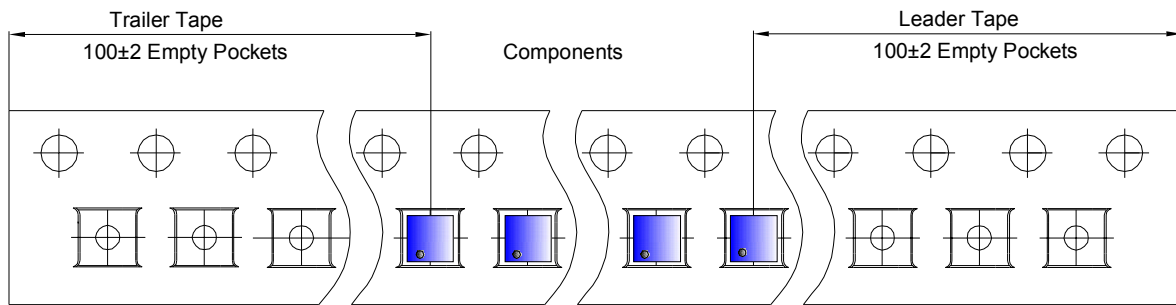
Packaging Description:

DFNWB2×2-3L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 18.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

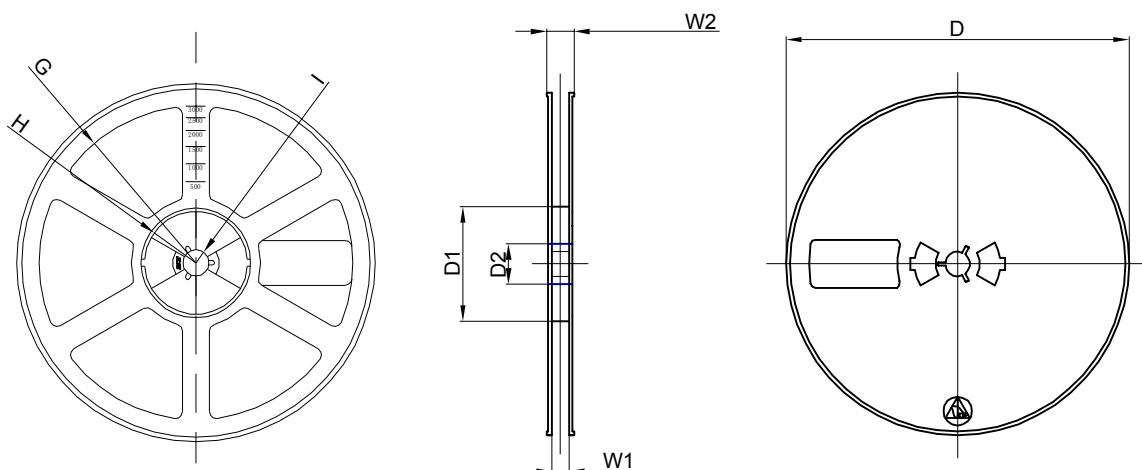
A - A

Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
DFNWB2×2-3L	2.30	2.30	1.10	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

DFNWB2×2-3L Tape Leader and Trailer



DFNWB2×2-3L Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø180.00	60.00	13.00	R78.00	R25.60	R6.50	9.50	13.10

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	30,000 pcs	203×203×195	120,000 pcs	438×438×220	