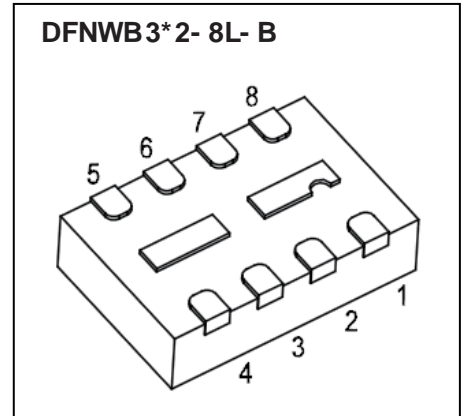


FTK5903DC Dual P- Channel MOSFET

$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D
- 20V	70mΩ @ - 4.5V	- 45A
	90 mΩ @ - 2.5V	
	120mΩ @ - 1.8V	



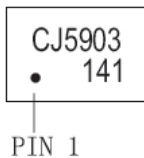
FEATURE

- Surface Mount Package
- TrenchFET Power MOSFET

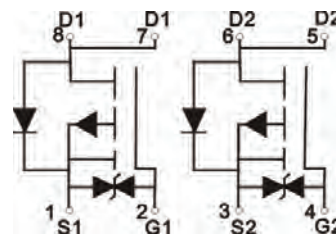
APPLICATION

- Load Swith,PA Switch and Battery Switch for Portable
- Devices and Game Consoles

MARKING



Equivalent Circuit



MAXIMUM RATINGS (T_a=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-20	V
Gate-Source Voltage	V_{GS}	±10	V
Continuous Drain Current	I_D	-4.5	A
Pulsed Drain Current	I_{DM}^*	-18	A
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	113.6	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C
Lead Temperature for Soldering Purposes(1/8" from case for 10 s)	T_L	260	°C

* Repetitive rating : Pulse width limited by junction temperature.



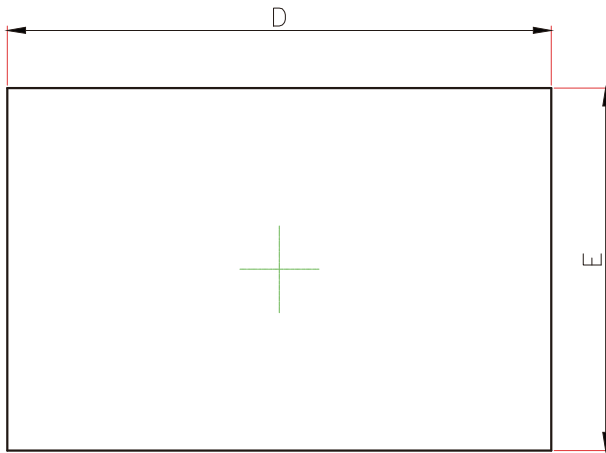
Electrical characteristics (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
STATIC PARAMETERS							
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = -250μA	-20			V	
Zero gate voltage drain current	I _{DSS}	V _{DS} = -16V, V _{GS} = 0V			-1	μA	
Gate-body leakage current	I _{GSS}	V _{GS} = ±10V, V _{DS} = 0V			±10	uA	
Gate threshold voltage (note 1)	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250μA	-0.4		-1	V	
Drain-source on-resistance (note 1)	R _{DS(on)}	V _{GS} = -4.5V, I _D = -4.3A			70	mΩ	
		V _{GS} = -2.5V, I _D = -3.6A			90	mΩ	
		V _{GS} = -1.8V, I _D = -1.5A			120	mΩ	
Forward tranconductance (note 1)	g _{FS}	V _{DS} = -6V, I _D = -4.6A		12		S	
Diode forward voltage(note 1)	V _{SD}	I _S = -4.5A, V _{GS} = 0V			-1.2	V	
DYNAMIC PARAMETERS (note 2)							
Input Capacitance	C _{iss}	V _{DS} = -6V, V _{GS} = 0V, f = 1MHz		1500		pF	
Output Capacitance	C _{oss}				260		pF
Reverse Transfer Capacitance	C _{rss}				250		pF
Total gate charge	Q _g	V _{DS} = -6V, V _{GS} = -4.5V, I _D = -5.6A			16	nC	
Gate-source charge	Q _{gs}				2.3		nC
Gate-drain charge	Q _{gd}				2.5		nC
SWITCHING PARAMETERS (note 2)							
Turn-on delay time	t _{d(on)}	V _{GS} = -4.5V, V _{DD} = -6V, R _g = 1Ω, R _L = 1.3Ω, I _D ≤ -4.5A			35	ns	
Turn-on rise time	t _r				35		ns
Turn-off delay time	t _{d(off)}				50		ns
Turn-off fall time	t _f				25		ns

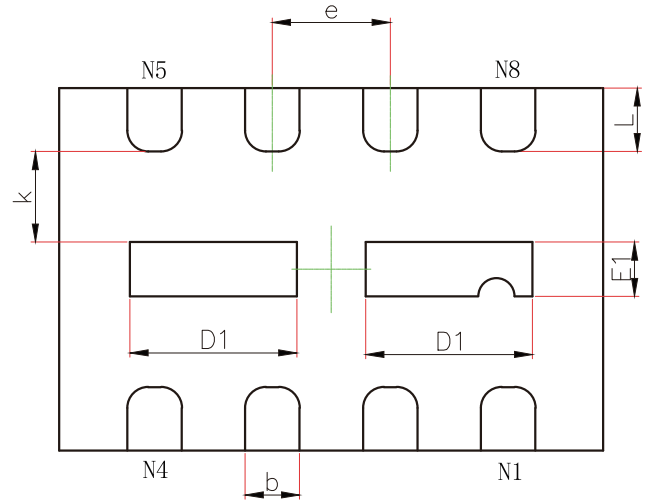
Notes :

1. Pulse Test : Pulse width ≤ 300μs, duty cycle ≤ 0.5%.
2. Guaranteed by design, not subject to production testing.

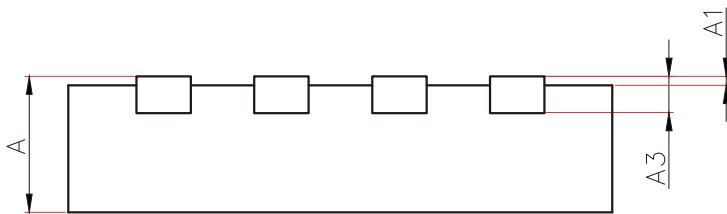
DFNWB3X2-8L-B Package Outline Dimensions



TOP VIEW



BOTTOM VIEW

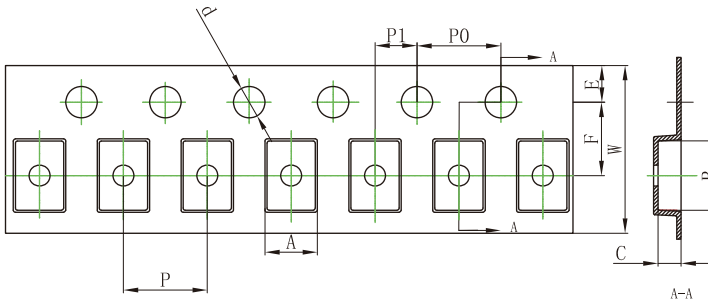


SIDE VIEW

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	2.924	3.076	0.115	0.121
E	1.924	2.076	0.076	0.082
D1	0.820	1.020	0.032	0.040
E1	0.200	0.400	0.008	0.016
k	0.200MIN.		0.008MIN.	
b	0.250	0.350	0.010	0.014
e	0.650TYP.		0.026TYP.	
L	0.274	0.426	0.011	0.017

DFNWB3X2-8L Tape and Reel

DFNWB3×2-8L Embossed Carrier Tape

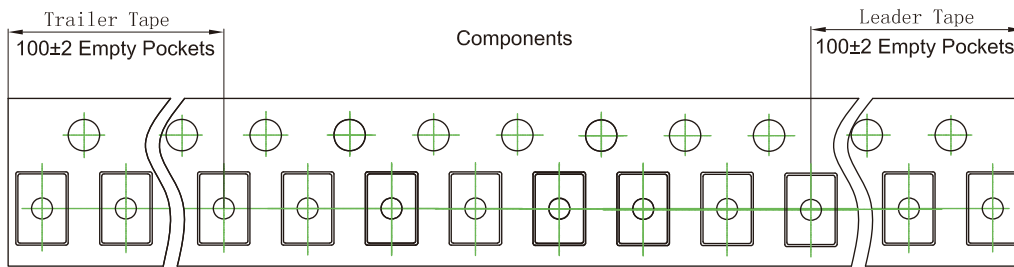


Packaging Description:

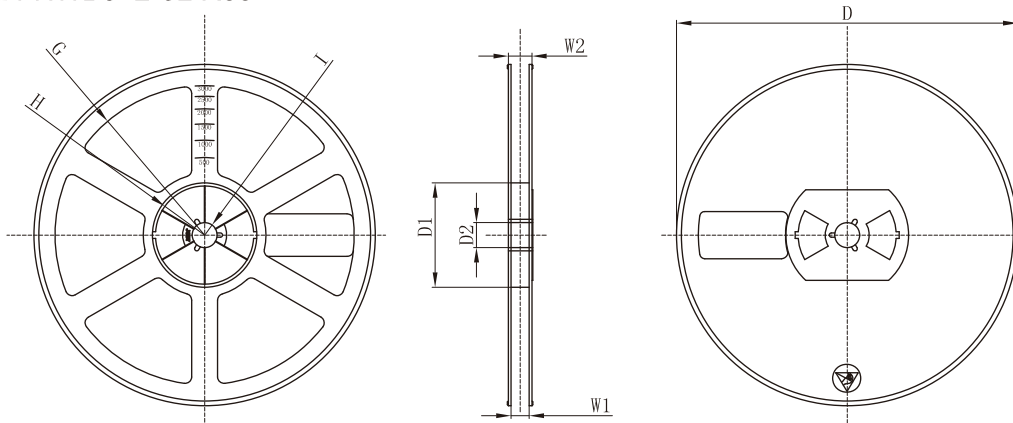
DFNWB3×2-8L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
DFNWB3×2-8L	2.30	3.30	1.10	∅1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.05	+/-0.1	+/-0.1	+/-0.05	+0.2/-0.1

DFNWB3×2-8L Tape Leader and Trailer



DFNWB3×2-8L Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	∅178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

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	