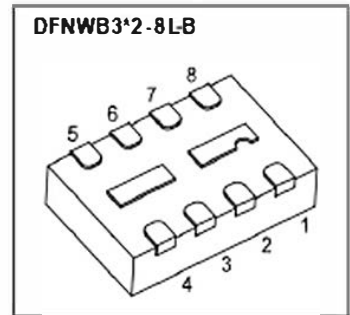


DFNWB3*2-8L-B Plastic-Encapsulate MOSFETS

CJ5903DC Dual P-Channel MOSFET

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



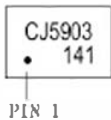
FEATURE

- Surface Mount Package
- TrenchFET Power MOSFET

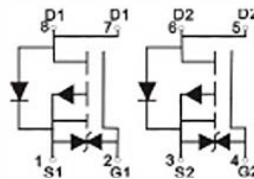
APPLICATION

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

MARKING



Equivalent Circuit



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ 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	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$
Lead Temperature for Soldering Purposes(1/8" from case for 10 s)	T_L	280	$^\circ\text{C}$

* Repetitive rating : Pulse width limited by junction temperature.

MOSFET ELECTRICAL CHARACTERISTICS

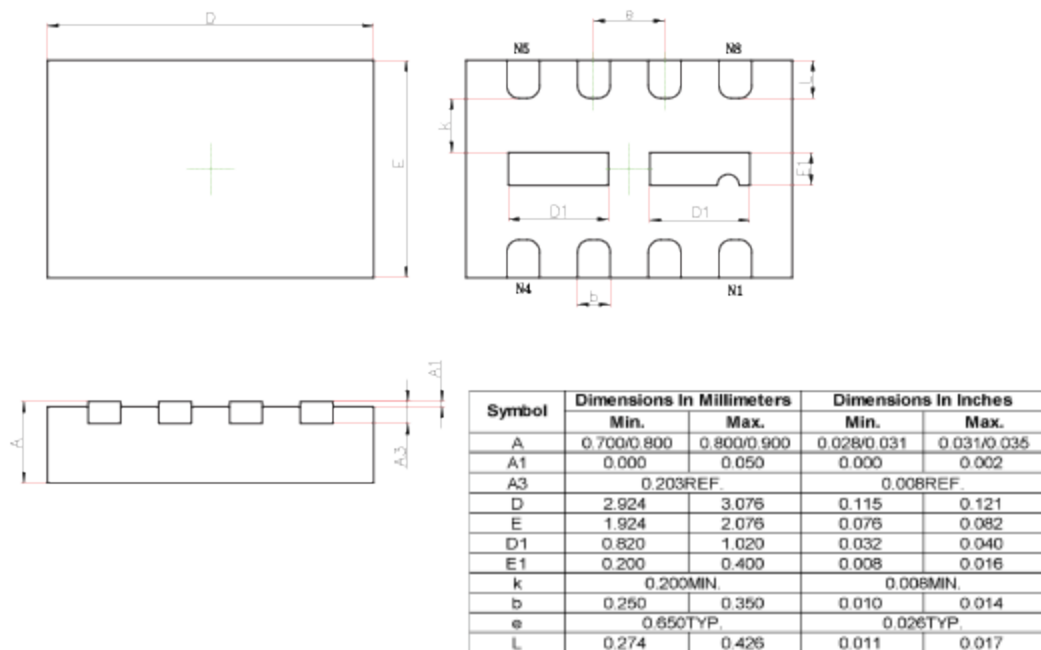
$T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-20			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -16V, V_{GS} = 0V$			-1	μA
Gate-body leakage current	I_{GBSS}	$V_{GS} = \pm 10V, V_{DS} = 0V$			± 10	μA
Gate threshold voltage (note 1)	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.4		-1	V
Drain-source on-resistance (note 1)	$R_{DS(on)}$	$V_{GS} = -4.5V, I_D = -4.3A$			70	$m\Omega$
		$V_{GS} = -2.5V, I_D = -3.6A$			90	$m\Omega$
		$V_{GS} = -1.8V, I_D = -1.5A$			120	$m\Omega$
Forward transconductance (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		μF
Output Capacitance	C_{oss}			260		μF
Reverse Transfer Capacitance	C_{rss}			250		μF
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	$t_{d(on)}$	$V_{GS} = -4.5V, V_{DS} = -6V,$ $R_g = 1\Omega, R_L = 1.3\Omega, I_{D1} = -4.5A$			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

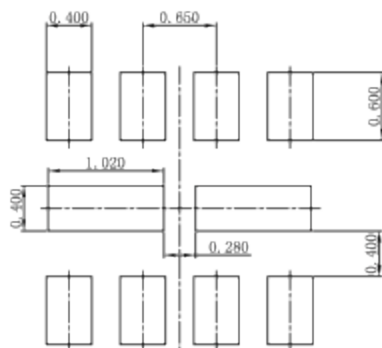
Notes :

1. Pulse Test : Pulse widths $300\mu s$, duty cycles 0.5% .
2. Guaranteed by design, not subject to production testing.

DFNWB3X2-8L-B Package Outline Dimensions



DFNWB3X2-8L-B Suggested Pad Layout



Note:

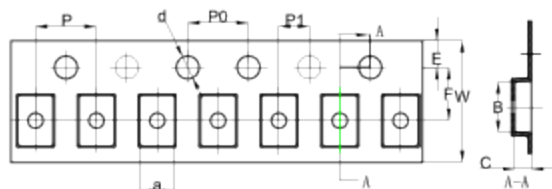
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.050\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

DFNWB3X2-8L Tape and Reel

DFNWB3*2-8L Embossed Carrier Tape



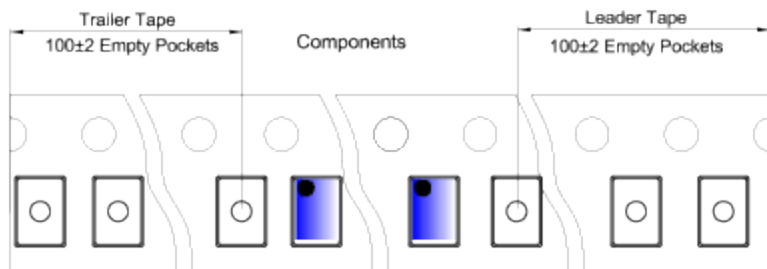
Packaging Description:

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 18.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

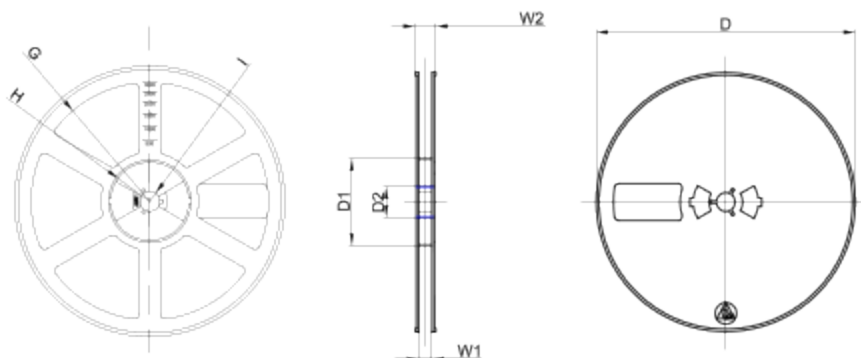
ALL DIM IN mm

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	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

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	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)
3,000 pcs	7 inch	30,000 pcs	203×203×195	120,000 pcs	438×438×220	