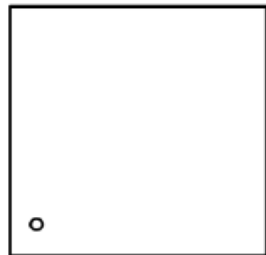


PB5A3JW

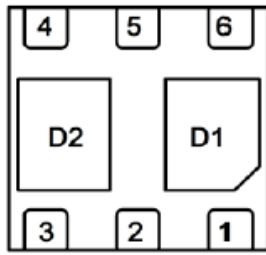
Dual P-Channel Enhancement Mode MOSFET

PRODUCT SUMMARY

$V_{(BR)DSS}$	$R_{DS(ON)}$	I_D
-20V	65mΩ @ $V_{GS} = -4.5V$	-3.6A

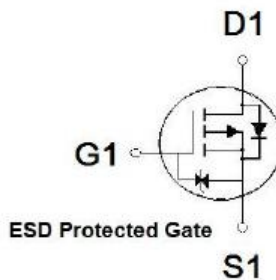


PIN1



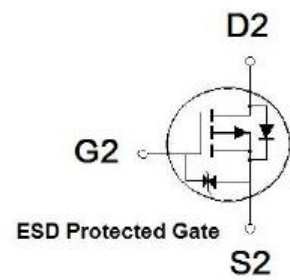
PIN1

PDFN 2X2S



ESD Protected Gate

S1



ESD Protected Gate

S2

100% RG Test , 100% UIL Test

ABSOLUTE MAXIMUM RATINGS ($T_A = 25\text{ °C}$ Unless Otherwise Noted)

PARAMETERS/TEST CONDITIONS		SYMBOL	LIMITS	UNITS
Drain-Source Voltage		V_{DS}	-20	V
Gate-Source Voltage		V_{GS}	±8	V
Continuous Drain Current	$T_A = 25\text{ °C}$	I_D	-3.6	A
	$T_A = 70\text{ °C}$		-2.9	
Pulsed Drain Current ¹		I_{DM}	14	
Power Dissipation	$T_A = 25\text{ °C}$	P_D	1.4	W
	$T_A = 70\text{ °C}$		0.9	
Operating Junction & Storage Temperature Range		T_J, T_{stg}	-55 to 150	°C

THERMAL RESISTANCE RATINGS

THERMAL RESISTANCE	SYMBOL	TYPICAL	MAXIMUM	UNITS
Junction-to-Ambient ²	$R_{\theta JA}$		86	°C / W

¹Pulse width limited by maximum junction temperature.

²The value of $R_{\theta JA}$ is measured with the device mounted on 1in² FR-4 board with 2oz. Copper.

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Dual P-Channel Enhancement Mode MOSFET

ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$, Unless Otherwise Noted)

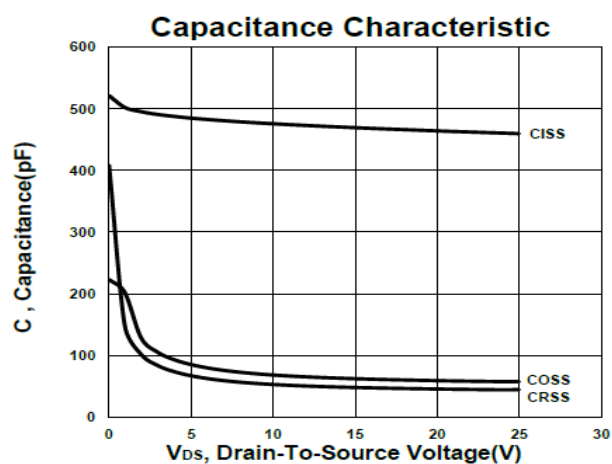
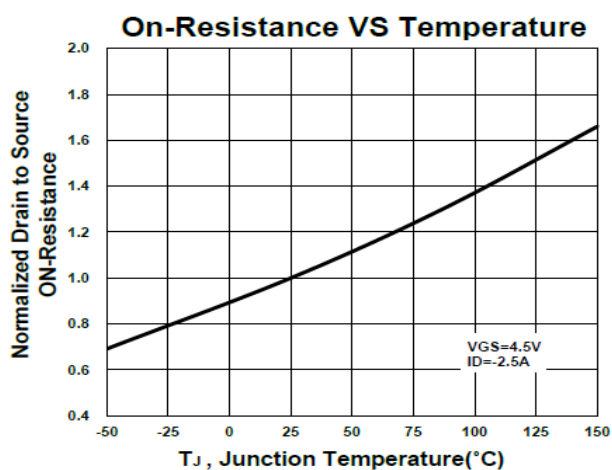
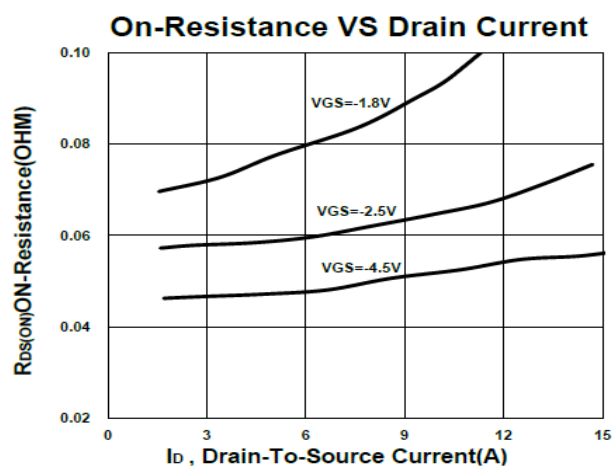
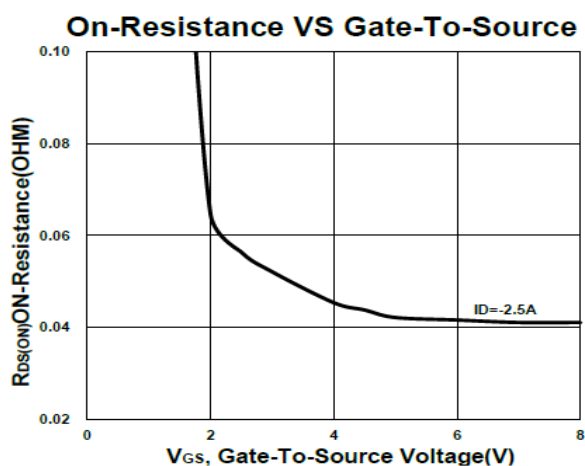
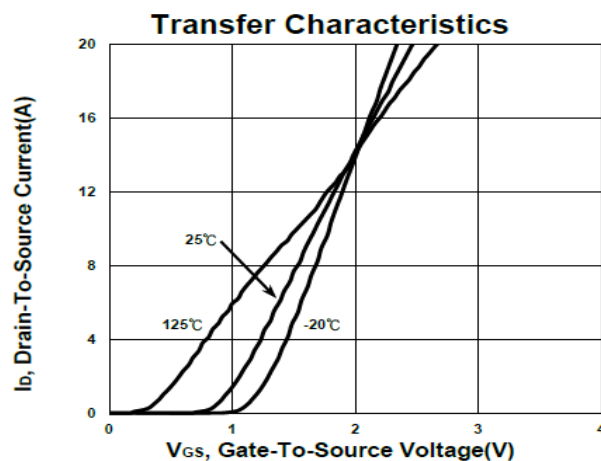
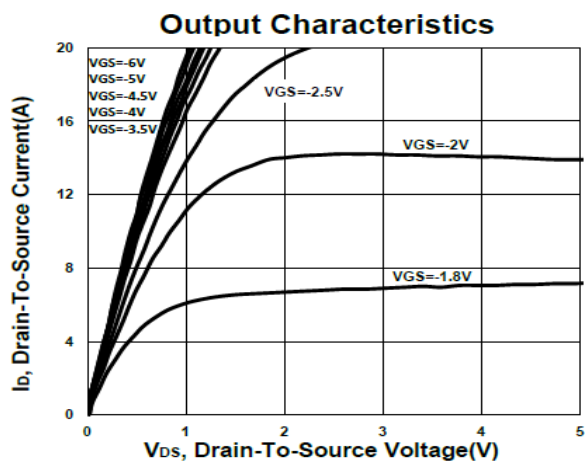
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
STATIC						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-20			V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.3	-0.45	-1	
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 8V$			± 10	μA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -16V, V_{GS} = 0V$			-1	μA
		$V_{DS} = -10V, V_{GS} = 0V, T_J = 55^\circ C$			-10	
Drain-Source On-State Resistance ¹	$R_{DS(ON)}$	$V_{GS} = -4.5V, I_D = -2.5A$		46	65	m Ω
		$V_{GS} = -2.5V, I_D = -2A$		56	85	
		$V_{GS} = -1.8V, I_D = -1A$		69	120	
Forward Transconductance ¹	g_{fs}	$V_{DS} = -5V, I_D = -2.5A$		10		S
DYNAMIC						
Input Capacitance	C_{iss}	$V_{GS} = 0V, V_{DS} = -10V, f = 1MHz$		501		pF
Output Capacitance	C_{oss}			68		
Reverse Transfer Capacitance	C_{rss}			53		
Gate Resistance	R_g	$V_{GS} = 0V, V_{DS} = 0V, f = 1MHz$		11		Ω
Total Gate Charge ²	$Q_g(V_{GS}=-4.5V)$	$V_{DS} = -10V, I_D = -2.5A$		7		nC
	$Q_g(V_{GS}=-2.5V)$			4		
Gate-Source Charge ²	Q_{gs}			0.6		
Gate-Drain Charge ²	Q_{gd}			1.8		
Turn-On Delay Time ²	$t_{d(on)}$	$V_{DD} = -10V,$ $I_D \cong -2.5A, V_{GEN} = -4.5V, R_G = 6\Omega$		7		nS
Rise Time ²	t_r			30		
Turn-Off Delay Time ²	$t_{d(off)}$			53		
Fall Time ²	t_f			59		
SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS ($T_J = 25^\circ C$)						
Continuous Current	I_S				-1.1	A
Forward Voltage ¹	V_{SD}	$I_F = -2.5A, V_{GS} = 0V$			1.2	V
Reverse Recovery Time	t_{rr}	$I_F = -2.5A, dI_F/dt = 100A / \mu S$		21		nS
Reverse Recovery Charge	Q_{rr}			6.8		nC

¹Pulse test : Pulse Width $\leq 300\mu\text{sec}$, Duty Cycle $\leq 2\%$.

²Independent of operating temperature.

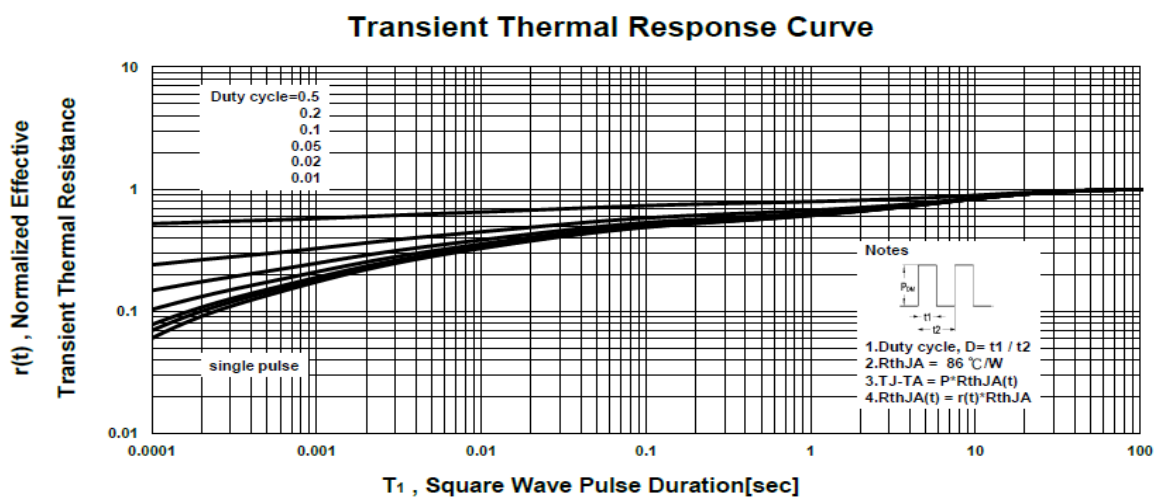
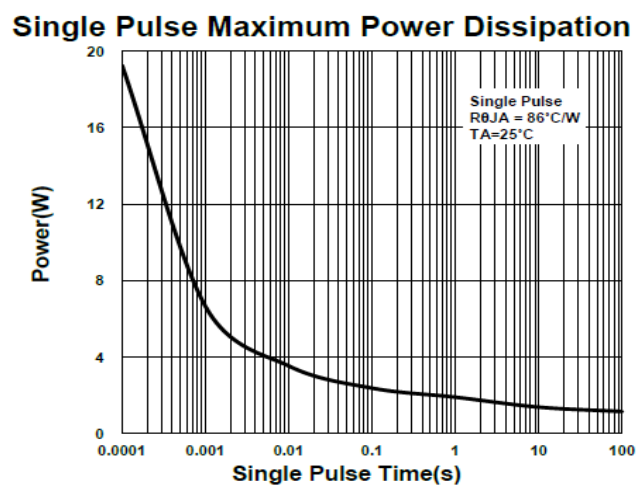
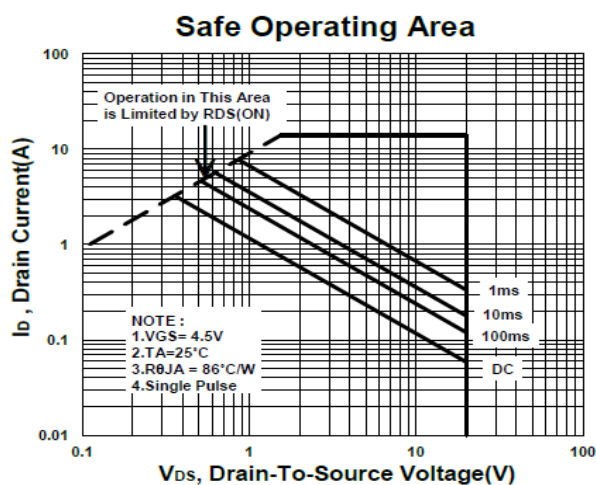
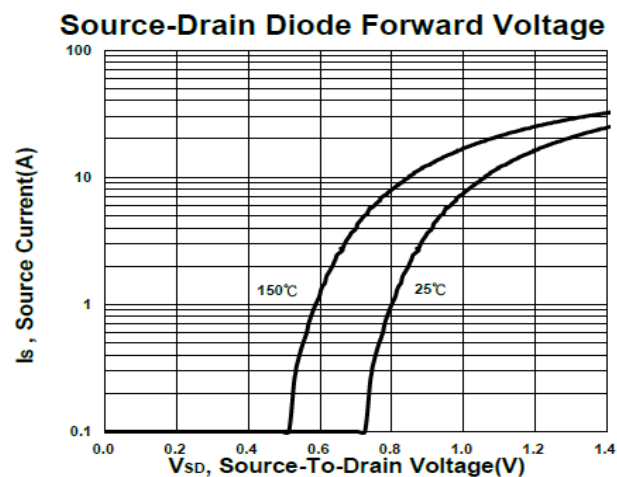
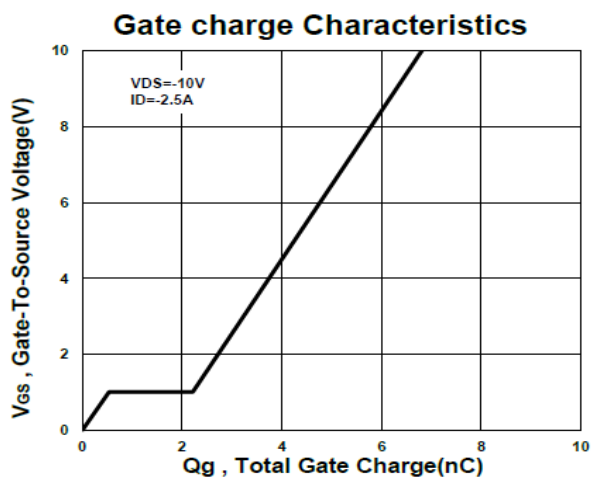
PB5A3JW

Dual P-Channel Enhancement Mode MOSFET



PB5A3JW

Dual N-Channel Enhancement Mode MOSFET



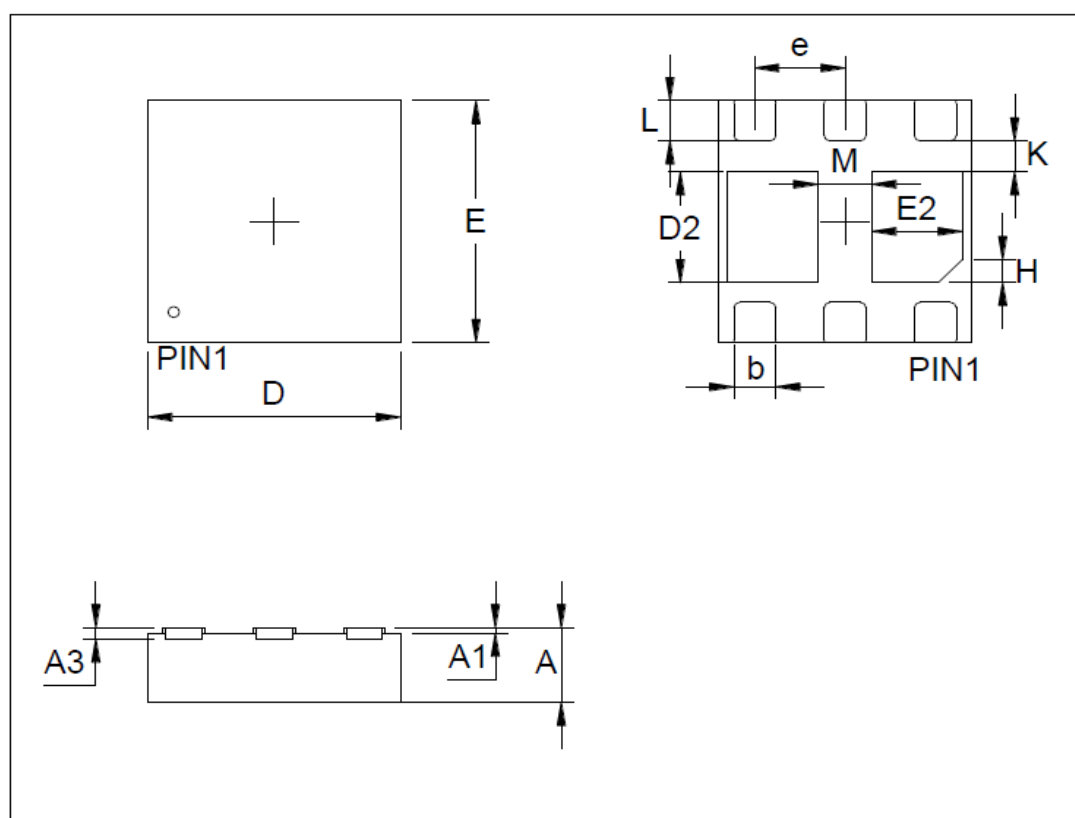
PB5A3JW

Dual N-Channel Enhancement Mode MOSFET

Package Dimension

PDFN 2x2S (Dual) MECHANICAL DATA

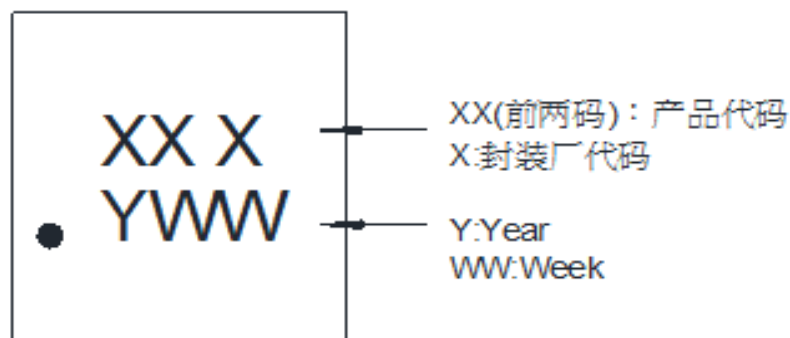
Dimension	mm			Dimension	mm		
	Min.	Typ.	Max.		Min.	Typ.	Max.
A	0.50	0.55	0.65	e	0.55	0.65	0.75
A1	0.00	0.02	0.05	H	0.20REF		
A3	0.10REF			K	0.17	0.27	0.37
b	0.25	0.30	0.35	L	0.25	0.30	0.35
D	1.90	2.00	2.10	M	0.25	0.35	0.45
E	1.90	2.00	2.10				
D2	0.76	0.86	0.96				
E2	0.55	0.65	0.75				



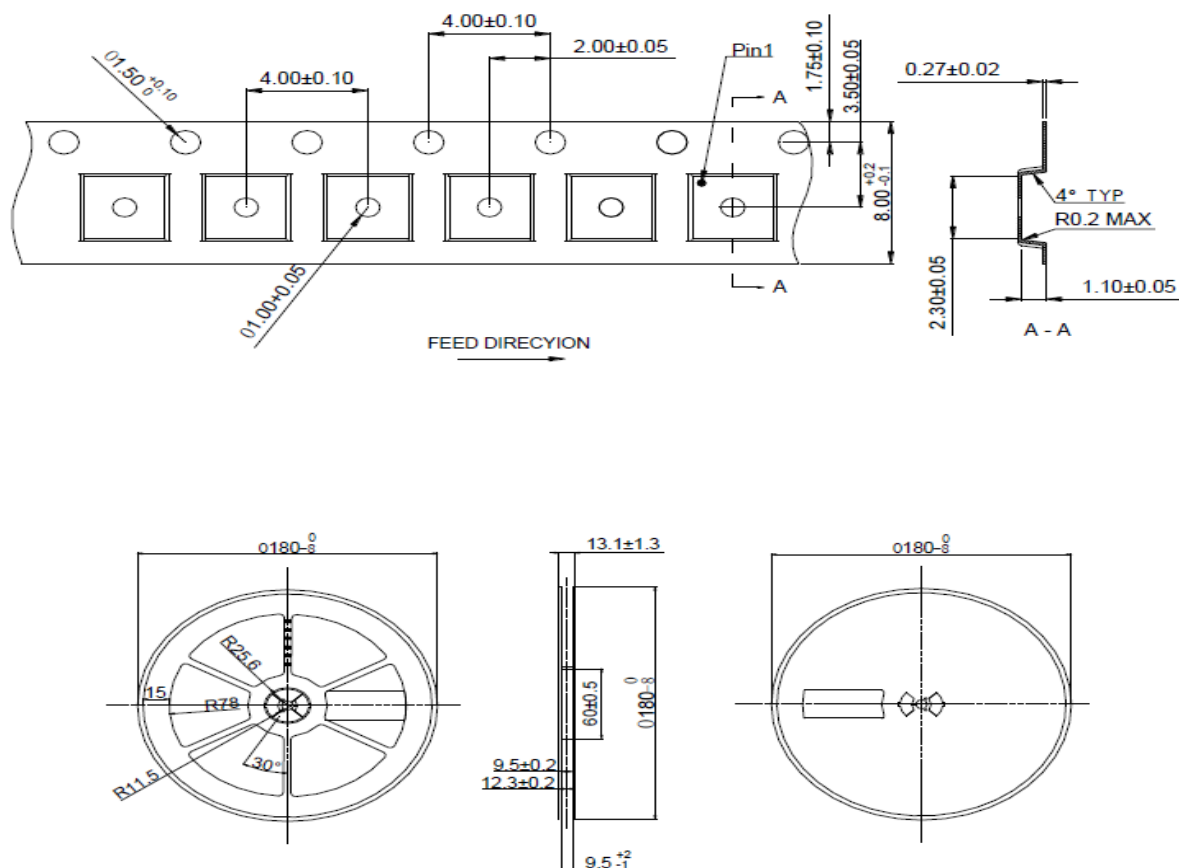
PB5A3JW

Dual N-Channel Enhancement Mode MOSFET

A. Marking Information(此产品代码为: C3)



B. Tape & Reel Information: 3000pcs/Reel

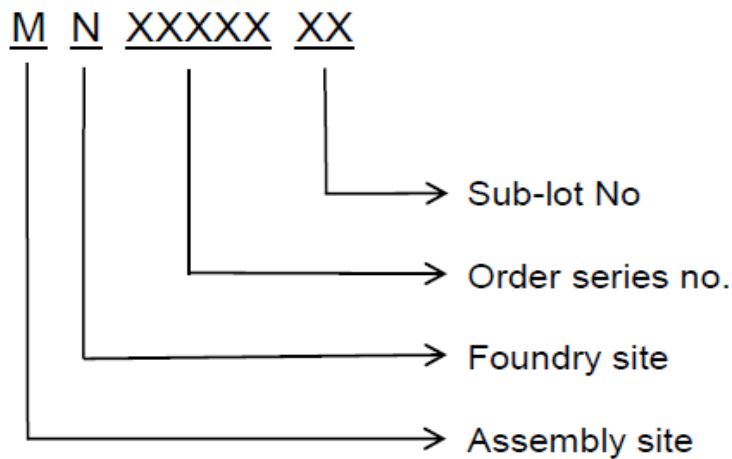


PB5A3JW

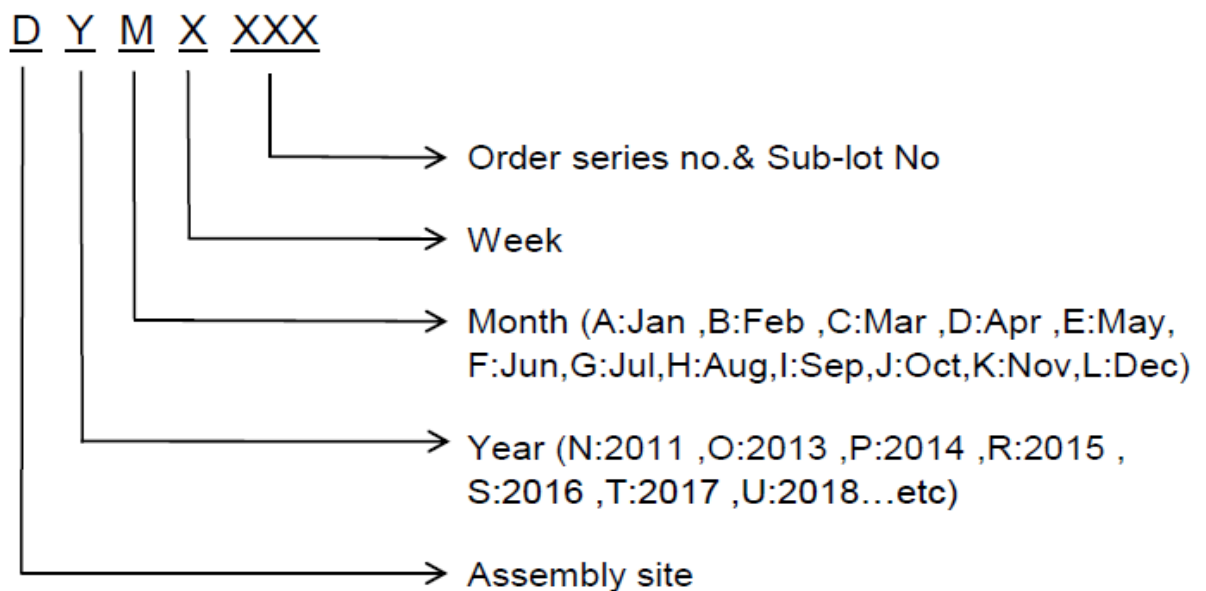
Dual N-Channel Enhancement Mode MOSFET

C. Lot No.&Date Code rule

1.Lot No.



2.Date Code



PB5A3JW

Dual N-Channel Enhancement Mode MOSFET

D.Label rule

标签内容(Label content)



1	Label Size	30 * 90 mm
2	Font style	Times New Roman or Arial (或可区分英文”0”和数字”0”，”G和”Q”的字型即可)
3	U-NIKC	Height: 4 mm
4	Package	Height: 2 mm
5	Date	Height: 2 mm Shipping date: YYYY/MM/DD, ex. 2008/09/12
6	Device	Height: 3 mm (Max: 16 Digit)
7	Lot	Height: 3 mm (Max: 9 Digit) Sub lot
8	D/C	Height: 3 mm (Max: 7 Digit)
9	QTY	Height: 3 mm (Max: 6 Digit) Thousand mark is no needed
10	RoHS label	 long axis: 12 mm minor axis: 6 mm bottom color: White Font color: Black Font style: Arial
11	Halogen Free label	 Diameter: 10 mm bottom color: Green Font color: Black Font style: Arial
12	Scan information	Device / Lot / D/C / QTY , Insert “ / “ between every parts. for example: P3055LDG/G12345601/GGG2301/2000 DPI (Dots per inch): Over 300 dpi Code : Code 128 Height: 6 mm at least