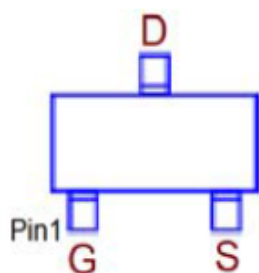


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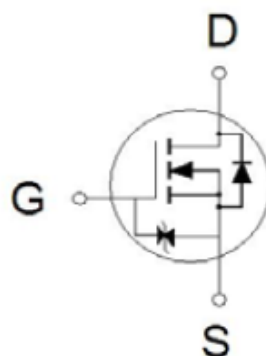
N-Channel Enhancement Mode MOSFET

PRODUCT SUMMARY

$V_{(BR)DSS}$	$R_{DS(ON)}$	I_D
20V	300m Ω @ $V_{GS} = 4.5V$	0.8A



SOT-723



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

PARAMETERS/TEST CONDITIONS		SYMBOL	LIMITS	UNITS
Gate-Source Voltage		V_{GS}	± 10	V
Continuous Drain Current ²	$T_A = 25\text{ }^{\circ}\text{C}$	I_D	0.8	A
	$T_A = 70\text{ }^{\circ}\text{C}$		0.62	
Pulsed Drain Current ¹		I_{DM}	2.4	
Power Dissipation	$T_A = 25\text{ }^{\circ}\text{C}$	P_D	0.3	W
	$T_A = 70\text{ }^{\circ}\text{C}$		0.2	
Operating Junction & Storage Temperature Range		T_J, T_{stg}	-55 to 150	$^{\circ}\text{C}$

THERMAL RESISTANCE RATINGS

THERMAL RESISTANCE	SYMBOL	TYPICAL	MAXIMUM	UNITS
Junction-to-Ambient	$R_{\theta JA}$		400	$^{\circ}\text{C} / \text{W}$

¹Limited by maximum junction temperature.

²Limited by package.

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ELECTRICAL CHARACTERISTICS (T_J = 25 °C, Unless Otherwise Noted)

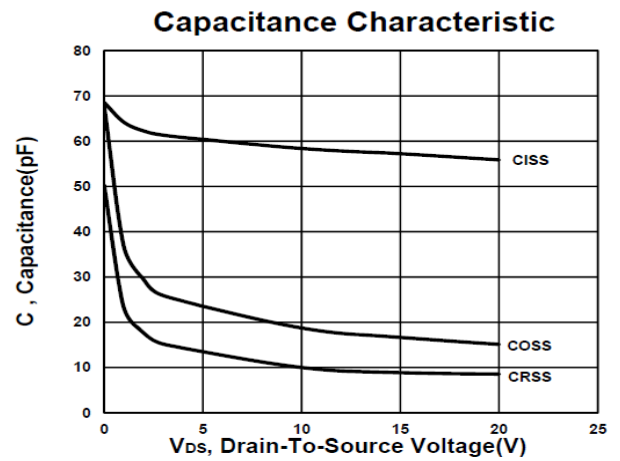
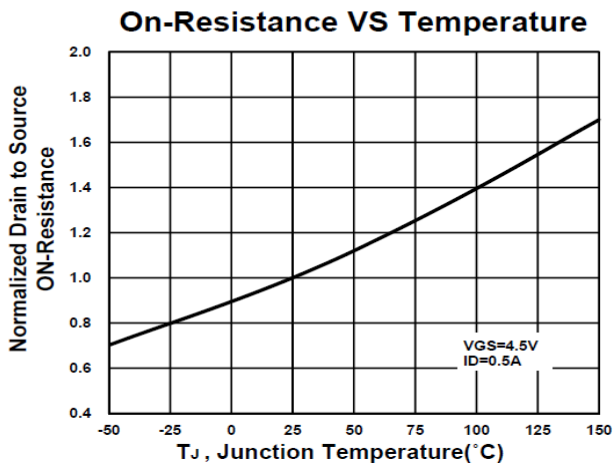
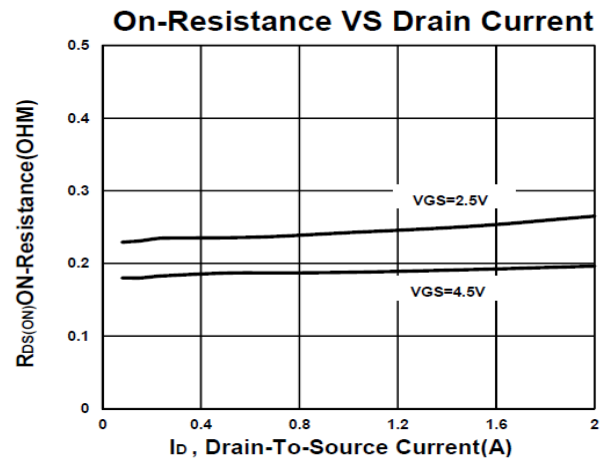
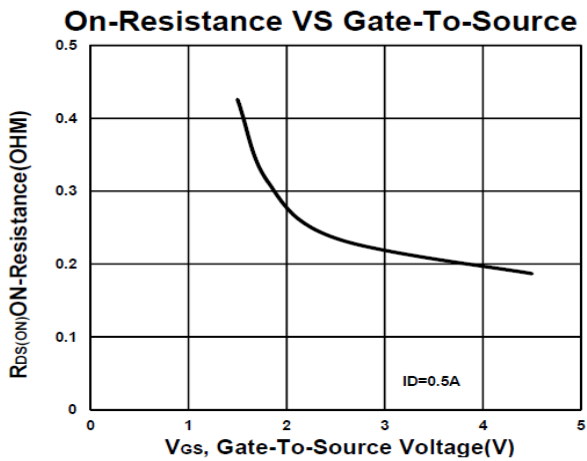
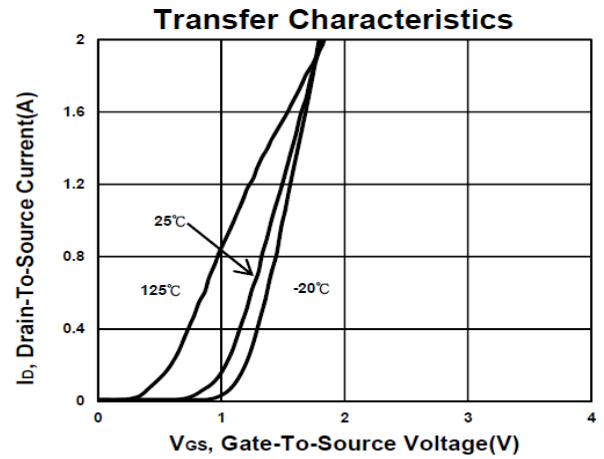
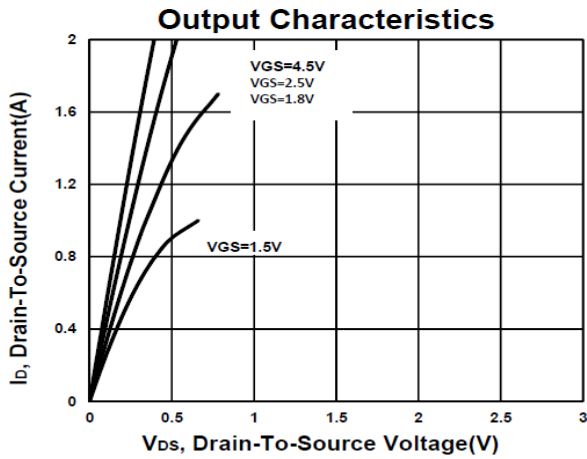
PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
STATIC						
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = 250μA	20			V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = 250μA	0.4	0.63	1	
Gate-Body Leakage	I _{GSS}	V _{DS} = 0V, V _{GS} = ±10V			±30	μA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 16V, V _{GS} = 0V			1	μA
		V _{DS} = 10V, V _{GS} = 0V , T _J = 125 °C			10	
Drain-Source On-State Resistance ¹	R _{DS(ON)}	V _{GS} = 4.5V, I _D = 0.5A		177	300	mΩ
		V _{GS} = 2.5V, I _D = 0.25A		226	400	
		V _{GS} = 1.8V, I _D = 0.2A		300	700	
Forward Transconductance ¹	g _{fs}	V _{DS} = 5V, I _D = 0.5A		5		S
DYNAMIC						
Input Capacitance	C _{iss}	V _{GS} = 0V, V _{DS} = 10V, f = 1MHz		60		pF
Output Capacitance	C _{oss}			19		
Reverse Transfer Capacitance	C _{rss}			10		
Turn-On Delay Time ²	t _{d(on)}	V _{DD} = 10V, I _D ≅ 0.5A V _{GS} = 4.5V, R _{GEN} = 5.1Ω		17		nS
Rise Time ²	t _r			36		
Turn-Off Delay Time ²	t _{d(off)}			86		
Fall Time ²	t _f			173		
SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS (T _J = 25 °C)						
Continuous Current	I _S				0.25	A
Forward Voltage ¹	V _{SD}	I _F = 0.5A, V _{GS} = 0V			1.2	V
Reverse Recovery Time	t _{rr}	I _F = 1A , dI/dt = 100A / μS		111		nS
Reverse Recovery Charge	Q _{rr}			102		nC

¹Pulse test : Pulse Width ≤ 300 μsec, Duty Cycle ≤ 2%.

²Independent of operating temperature.

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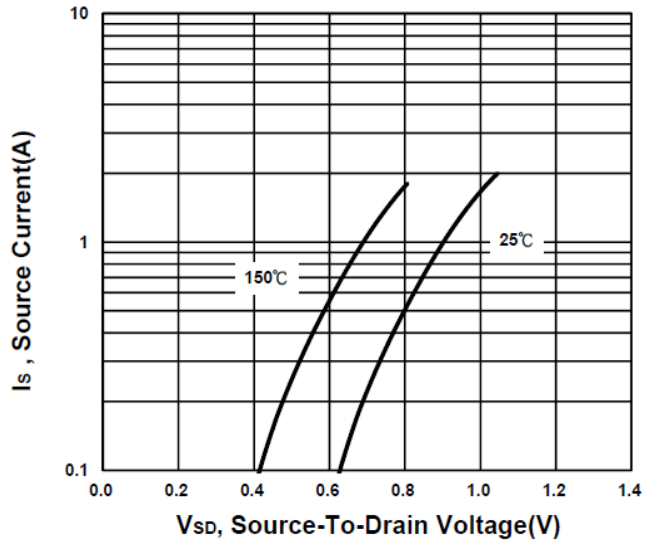
N-Channel Enhancement Mode MOSFET



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Source-Drain Diode Forward Voltage



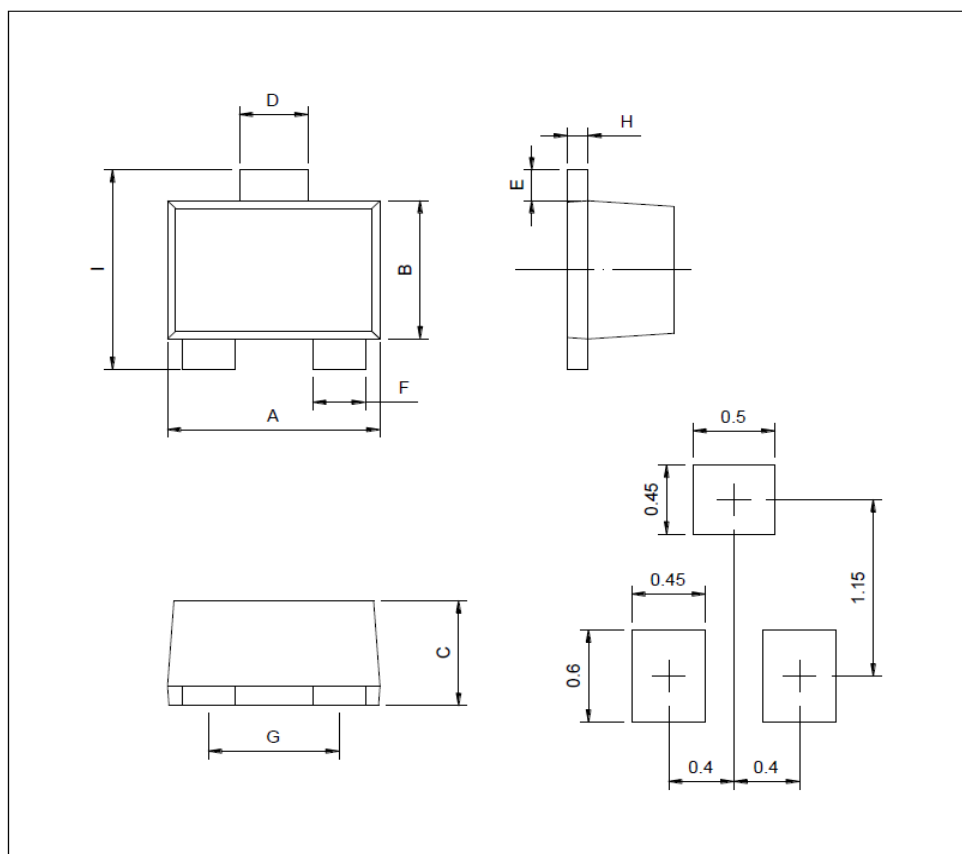
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N-Channel Enhancement Mode MOSFET

Package Dimension

SOT-723 MECHANICAL DATA

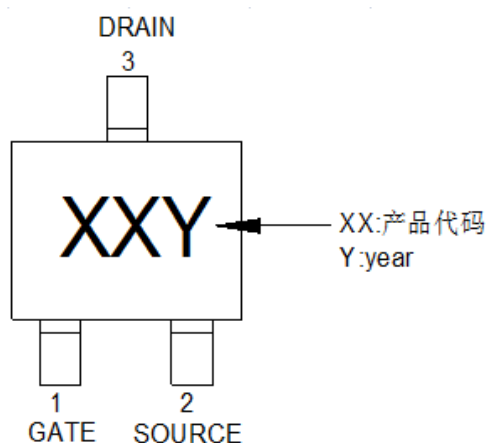
Dimension	mm			Dimension	mm		
	Min.	Typ.	Max.		Min.	Typ.	Max.
A	1.10		1.30	H	0.10Typical		
B	0.70		0.90	I	1.10		1.30
C	0.54Max						
D	0.22		0.42				
E	0.10		0.30				
F	0.12		0.32				
G	0.80Typical						



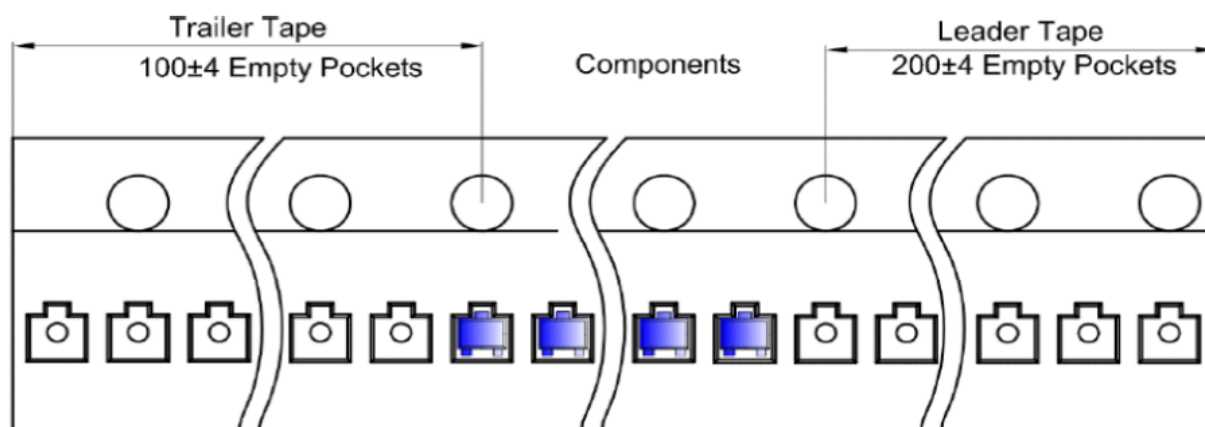
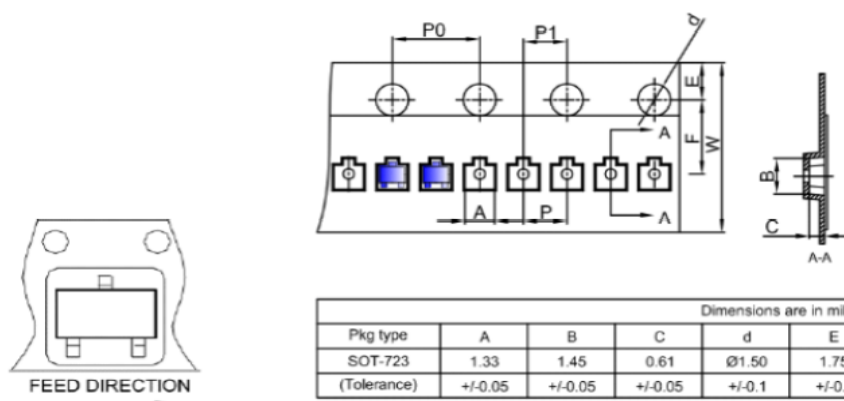
PW5D8EA

N-Channel Enhancement Mode MOSFET

A. Marking Information(产品代码为: 01)

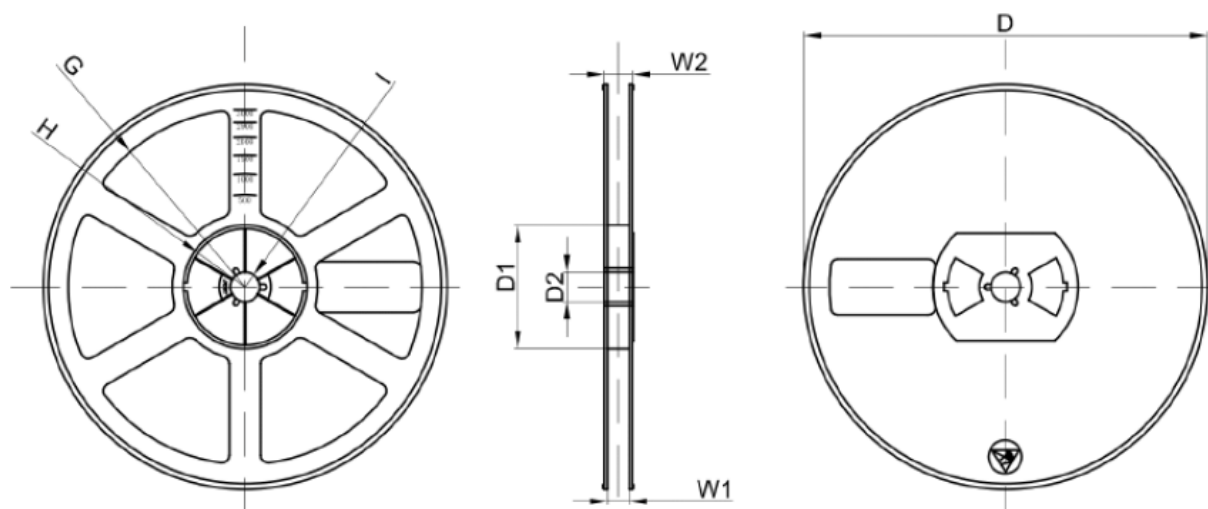


B. Tape&Reel Information:8000pcs/Reel



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Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

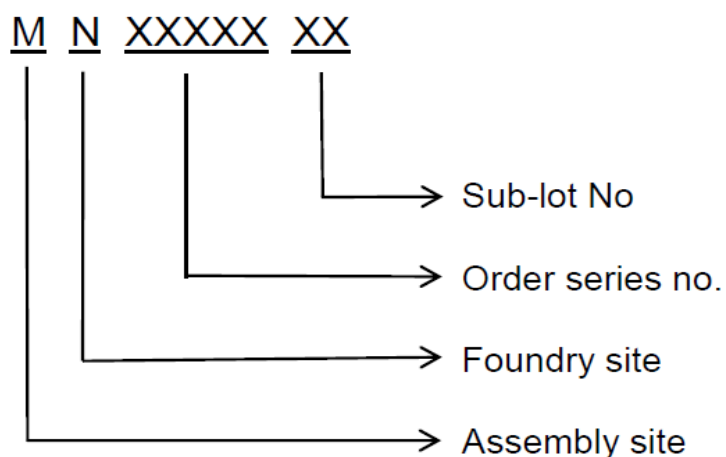
REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	

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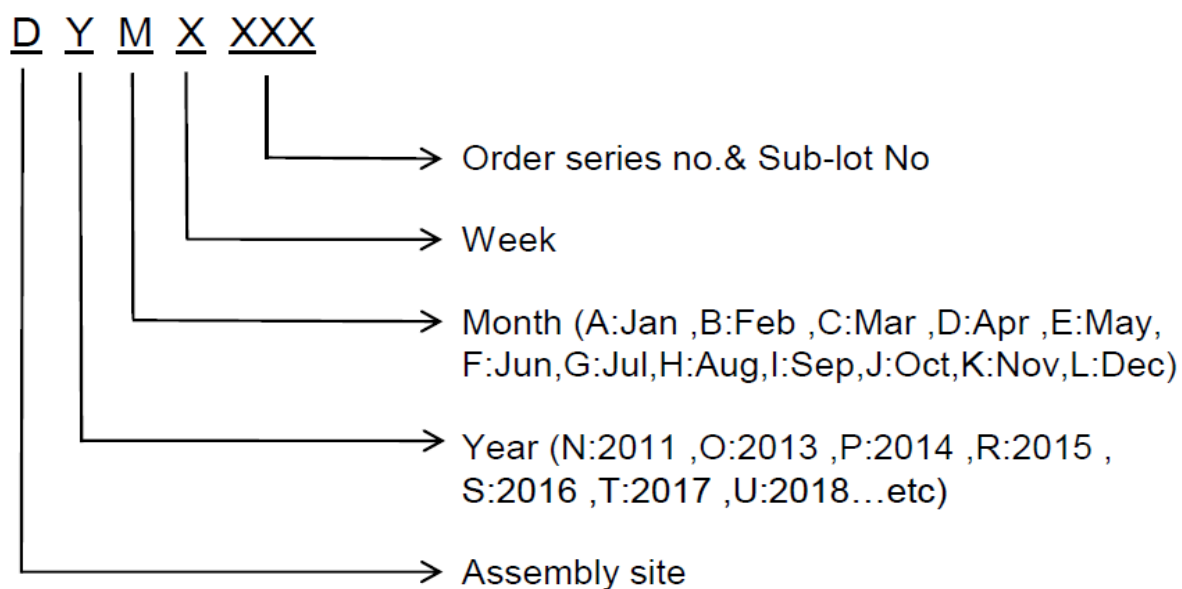
N-Channel Enhancement Mode MOSFET

C. Lot No.&Date Code rule

1.Lot No.



2.Date Code



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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