



5 é / Dsp

(8)2 * @ 8 ©%². Ä å 3 5 9, +: % -eO P ' / òž ¥ / Ì Ä Ä³ o z ô y³ o z Š
 Ä å 3 5 9, +: ož ¥ / Ì Ä - 90• - vo• y 90• y vo• ½o• ? è ^ _ ¾ ' ^
 k G ' / ¶ k ä |ª W • ož
 (8)2 * @ 8 J *, 4 ~ (2 / x k Ù Q ¬ } %² Š y %² k • â ç • l k W •
 ¶ U ´ ož

□ª / Fsb

< Ä å S S 3 5 9, +: z
 < *, 4 ~ (2 / x z
 < Ä å “ ‘ z
 < M y y ' z
 < Ý 4² Á v v ' z
 < Ý 4 g 2 v v '
 < —) í D } ož

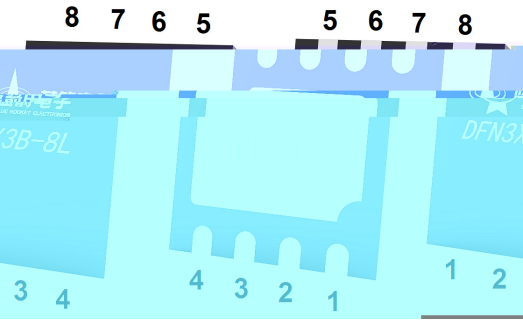
Đ ÷ / Apab

% -eO Y ÿ U - P Á k % -eO ü ` Ò U - P Á ož
 9 O T M R K R O Z N O [S O U T X K I N G X M K G H R K H R G _ Z S K X X _ X K / G I G X M Y K O G T H M R K K H R G O Z Z

À¹ € Đ Ô · ¢

h P y Š 8 P < Š > Q 4 Q 4) P < > [, k N / e / Ì Ü ¬ t k / Ì 3 o W
 • ož ò ç P } µ D k Š 8 À 1 ož

• Ú - æ / Pġ



- Ú Z	- df	- a ¢
6 OT 4 [SHKX	6 OT 4 GSK	6 OT *KYIXOVZOUT
	VDD	> €
	- 4 *	/ ì ^a kN P / ç â
	< 3	- ~ ç 9 N µ €
+ 6' *	- 4 *	/ ì ^a kN P / ç â

, M V / Maġ

• - ~^a ¢ ož

See Marking Instructions.

Static Characteristics (Ta=25℃)

Parameter	Symbol	Value	Unit
V _{DD} input pin voltage	V _{IN}	-0.3 to +8	V
V _{VM} input pin voltage	V _{VM}	-8 to +10	V
Maximum Junction Temperature	T _J	-40 to +145	
Storage Temperature	T _{stg}	-55 to +145	
ESD g HBM Mode h	ESD	±4000	V

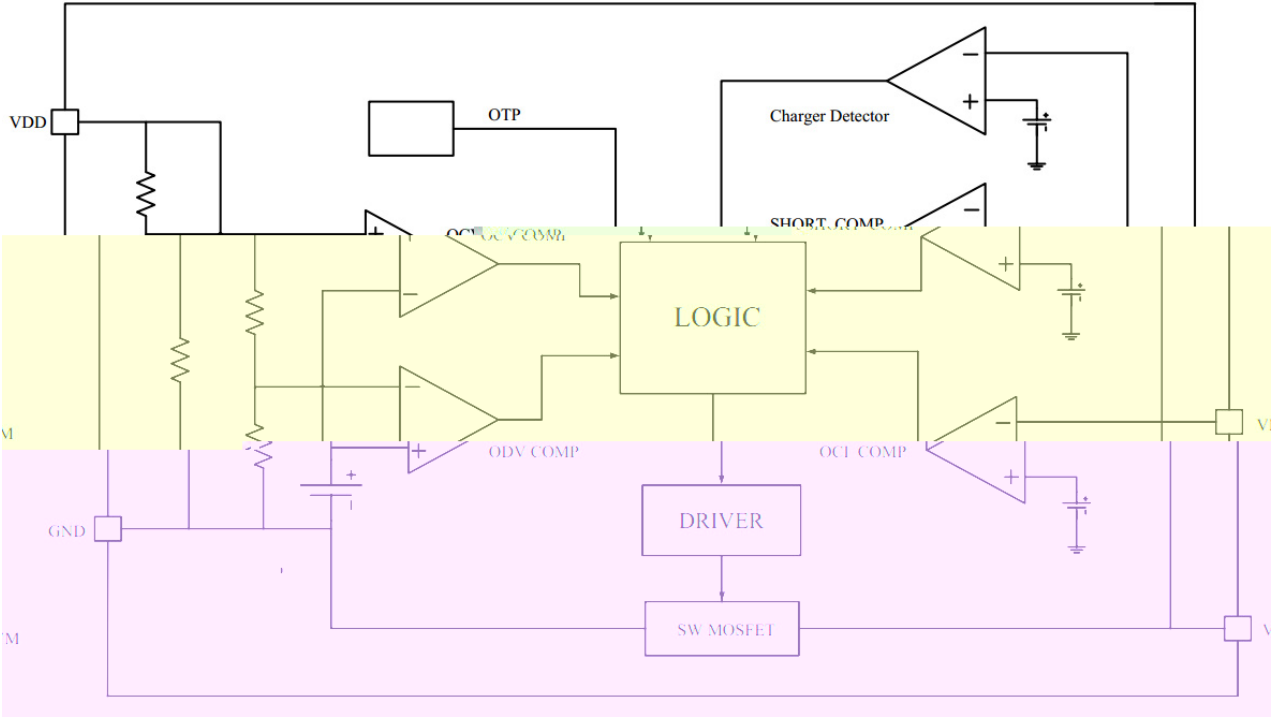
Electrical Characteristics (V_{DD}=1.8V, Ta=25℃)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Power						
Supply Voltage	V _{DD}		0		6	V
Charger input voltage	V _M		-6		6	V
Detctg						
Overcharge Detection Voltage	V _{OCV}		4.25	4.3	4.35	V
Overcharge Release Voltage	V _{OCR}		4.04	4.10	4.16	V
Overdischarge Detection Voltage	V _{ODV}		2.30	2.40	2.50	V
Overdischarge Release Voltage	V _{ODR}		2.90	3.00	3.10	V
Detctg						
Overdischarge Current Detection	I _{OCI}		9	11.5	14	A
Load Short-Circuiting Detection	I _{SHORT}		15	25	35	A
Overcharge Current Detection	I _{CHA}		7	10	13	A
Static ch						
Current Consumption in Normal Operation	I _{OPE}	V _M =0V		3.5	7	A
Current Consumption in Dormancy	I _{PDN}	V _{DD} =1.8V		0.6	1.5	A
Pin Pull-up/Pull-down						
Internal pull-up current	I _{PU}			14		A
Internal pull-down current	I _{PD}	V _M =1V		14		A
Equivalent						
Equivalent FET on Resistance	R _{DS}	I _{VM} =1A	12.5	16	18	m

Electrical Characteristics Ta=25℃

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Protection						
Over-temperature protection	OTP			145		
Over-temperature protection release temperature	OTPR			120		
Delay						
Overcharge Voltage Detection Delay Time	T _{OCV}			100		ms
Overdischarge Voltage Detection Delay Time	T _{ODV}			100		ms
Overdischarge Current1 Detection Delay Time	T _{IOV1}			8		ms
Overdischarge Current2 Detection Delay Time	T _{IOV2}			2		ms
Load Short-Circuiting Detection Delay Time	T _{SHORT}			150		ms

Functional Diagram



× 5 é **FoàlDeþ**

(8)2 * @ 8! O P 9y v kw* ••- ~êñ¿ú kŮ' %-U- eO P k
 œ - 9o• y 9o• y v Y C? è ^ Ō Ń ò C ° ož ? C... U- P W• " 6 8
 Ä ož ¥ / Ì N - %² h, Ò N y %² Ò N Š k 3 5 9, + :] Ä å k ^ | Š Á ° > S Sož
 (8)2 * @ 8 u 4 š _ g % " y 3 o W • % " o • - W • % " o • y W • % " y g 2 W • % " ož

n V € " **NaiOpthe**

ò ç Z Ä y ñ ` ~ ' o Ō Ń k - y y i C 1 ô E k _ Ō Ń f 3 o W • % " ož

Ú - Ô 85Š Ð **Ozàg/bgCdb**

" 3 o Ů ^ - i k ¢ P 9 ä 9 - y 9 < 5) < kw 4 Ò ž • ñ - 9 y •
 ž • : 5) < ê ¾ x k (8) 2 * @ 8 1 O ò 3 5 9, + : Y 2 - ož _ Ō Ń f - 9 Ō Ń ož ò ç '
 o Ō Ń " - 9 y • ž • : 5) < Ä f â k © ĭ 1 • ož Y _ Ō Ń k - 9 Ō Ń 1 t K y y
 o • - ~ N Ō Ń k < 3 € 9 z 9 - ~ y 9 <) . ' k P 9 J - K y 9 < 5) 8 ož
 o • - ~ ì N Ō Ń k P 9 J - y 9 < U I \ ož ¢ - ~ ì t N ž k 9 Q À
 ä 9 - y 9 k P 1 * Ä B 8 â ' y ož

Ú - Ô W5Š Ð 5 \ K X I N G X M K) [X X K T Z) U T J O Z O U T

" - W • % " k ò ç v > Ý /) . ' w 4 Ò %² < ž • : 5) / ê ¾ x k / Ì 1 O ò 3 5 9, + : Y
 2 - k _ Ō Ń t f - v Ō Ń ož (8) 2 * @ 8 1 4 Ò ! O v Ù Á k N ¿ ú ê ñ - ~ •
 • k / Ì 1 K y - v Ō Ń ož

Ú Z Ô 85Š Ð **Ozàg/bgCdb**

" 3 o Ů ^ y i k ¢ P 9 J y y 9 < 5 * < kw 4 Ò ž • ñ y 9 y
 • ž • : 5 * < ê ¾ x k (8) 2 * @ 8 1 ä • P y ¿ ú N k Y 2 y ož _ Ō Ń t f y
 9 Ō Ń ož 4 ž y O ò 3 5 9, + : • • k Ä B v ' ø • ož ¢ < * * 9 4 9 ^ 9 < Á ° > k v
 f ô 1 ' z g 2 Ù Á v f ô / 6 * 4 _ Ō Ń t f g 2 Ō Ń ož ¢ < * * 9 ^ 9 < Á ° >
 ê ¾ ä ž k g 2 Ù ^ 1 t K y ož P 9 Ý 9 ^ 9 y y K y 9 < 5 * 8 ž k (8) 2 * @ 8 1 > ñ 3
 o W • Ů ^ ož

Ú Z Ô W5Š Ð **Ozàg/bgCdb**

ò ç y v Ý Ì > k 4 Ò ž • Ý 9 ^ 9 y v y • ž • k P y ¿ ú 1 t • • ož ò
 ç " y v y • ž • Ä k v A ' Ì > 8 \$ Ä k © ĭ 1 • ož / Ì Ä B v < 3 k
 ¢ < 3 9 4 9 ê ^ 9 y v @ ð 9 k y v Ù Á 1 t Ö y ož

Ž É . 5Š Ð **Lad Sbàg/bgCdb**

3 < 3 ' 9 4 9 ^ 9 ? è ' 9 < 9 . 5 8 : k © ĭ 1 2 y P y ¿ ú N 1 • • ož
 : 9 . 5 8 : © ä • v Â Ý • ž • ož ¢ < 3 9 4 9 ê ^ 9 y v @ ð 9 k ¿ ú ? è Ù Á 1 t Ö
 y ož

—óZ

ChgDeb

çÔ9 y ÙÁ

Py- ~, k3<3' 949^9- ~ y 9 <

9Ý9^9 y y 9 <

5*< k(8)2

@81Ky y ÙÁož

)'. kç P

<Ô1-Ô x

0V BatChgFob

UY <- k P 9z9

<k- /ì µg2ÙÁk4ž359••k/ì* }8â'- ož

P 9z9 <k- v Ý9

S'kY² Py/ìC°ož



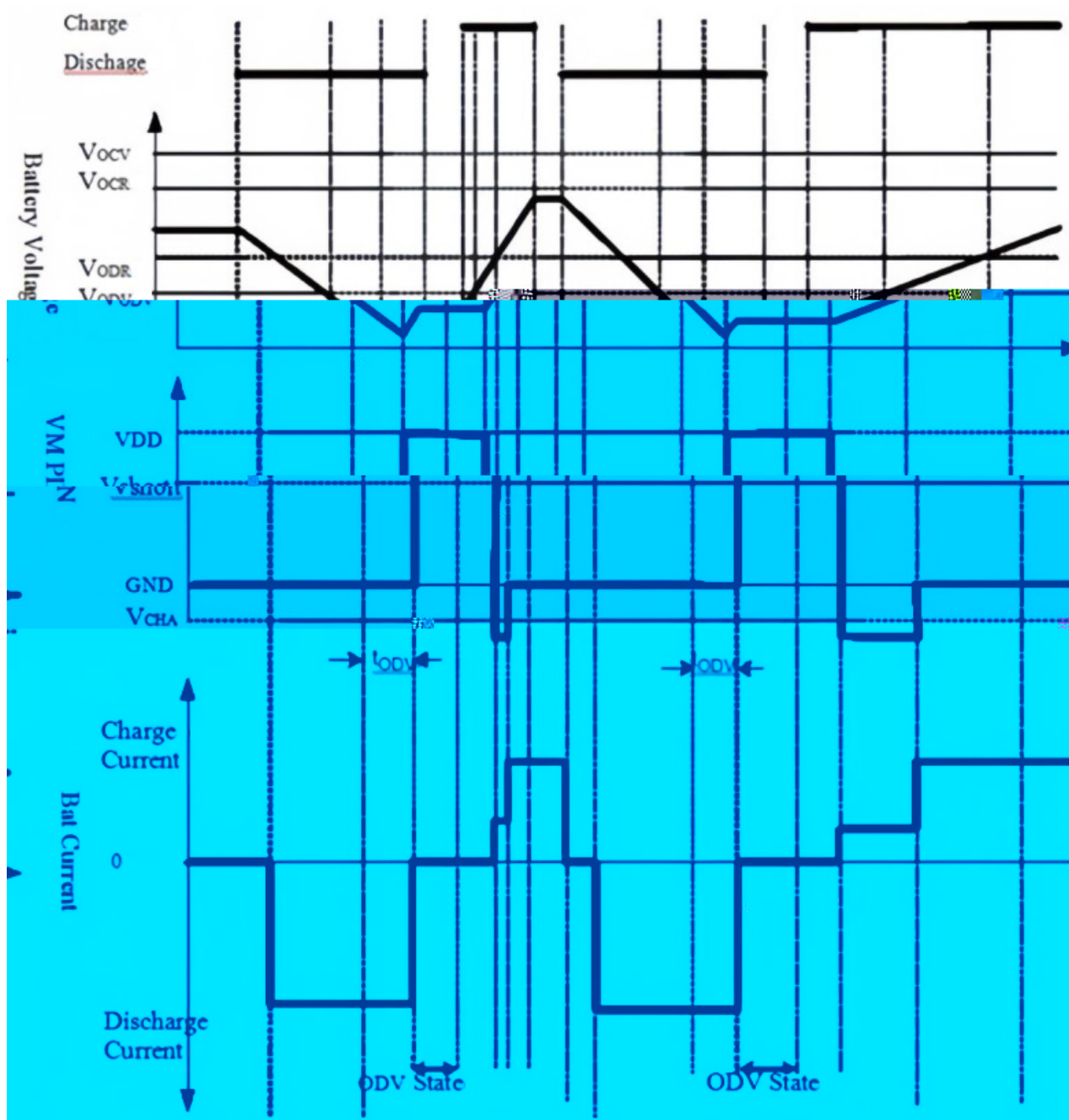
• } ¢ Tight

Ú Z` - Ô` n V €

Od is hg

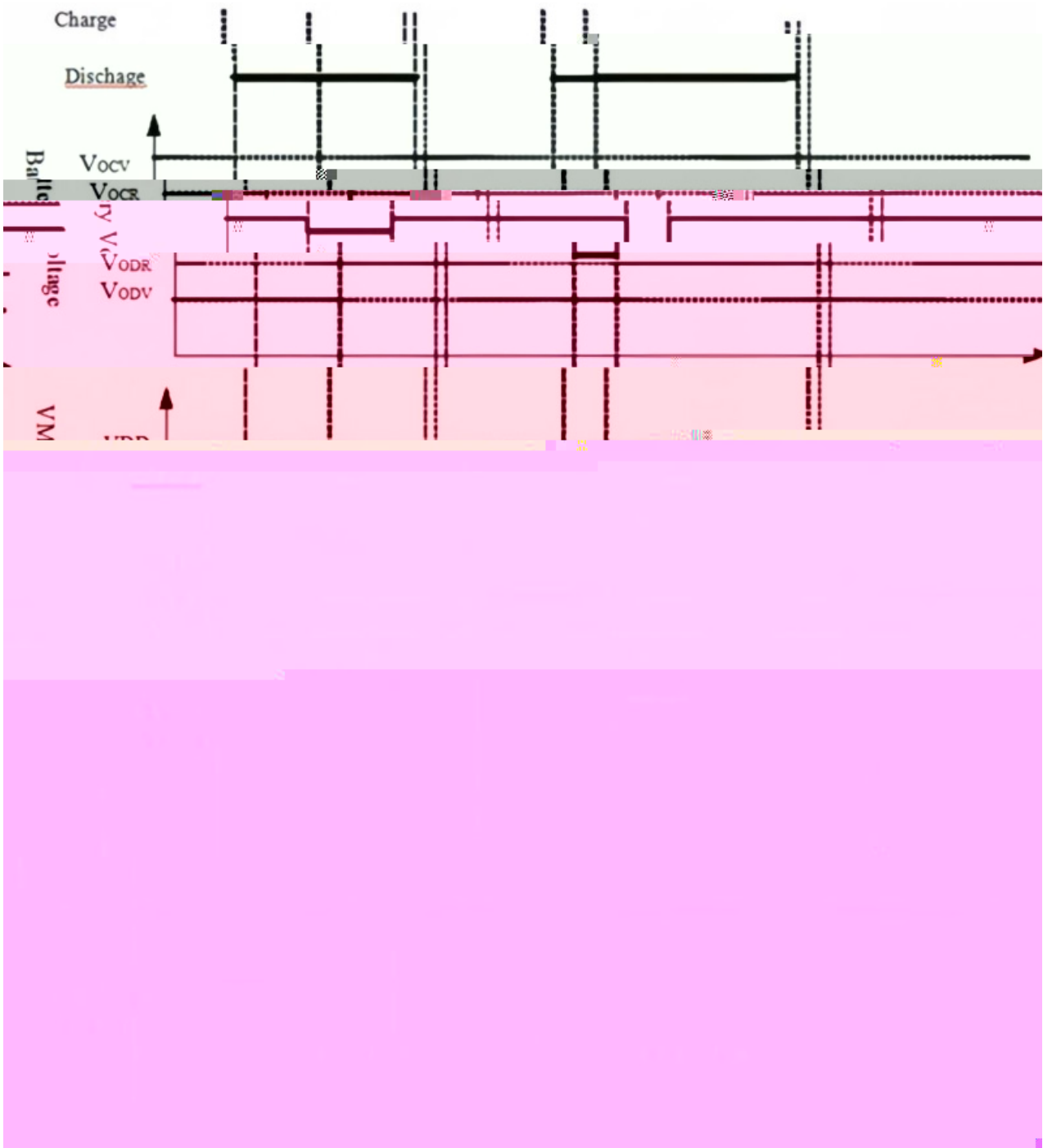
` Chig

` Nœi Opb

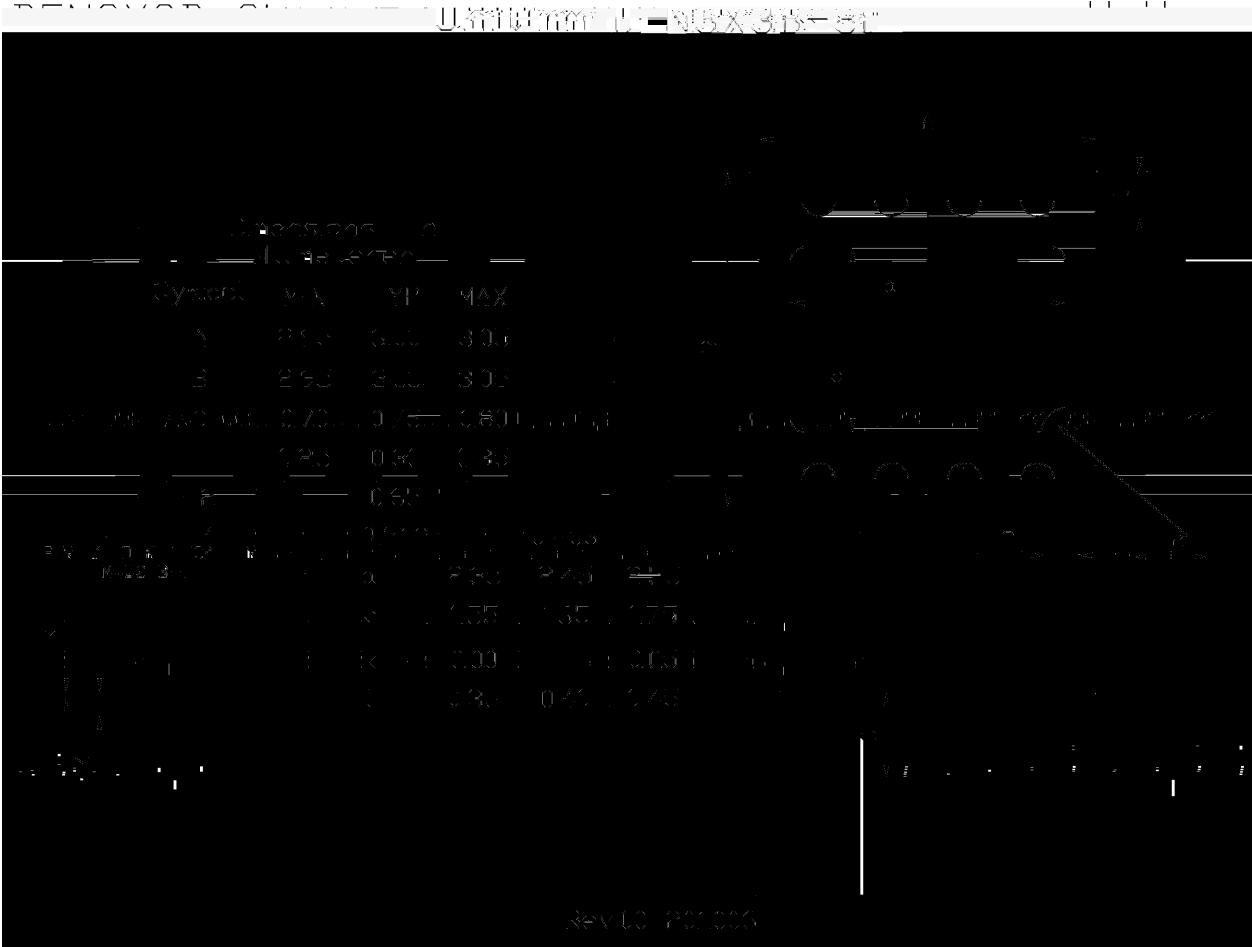


• } ¢ **TiGat**

Z Ô Ú W` n V €      **DisagDe b**      ` **NaiOpb**



Ø =) / Pack



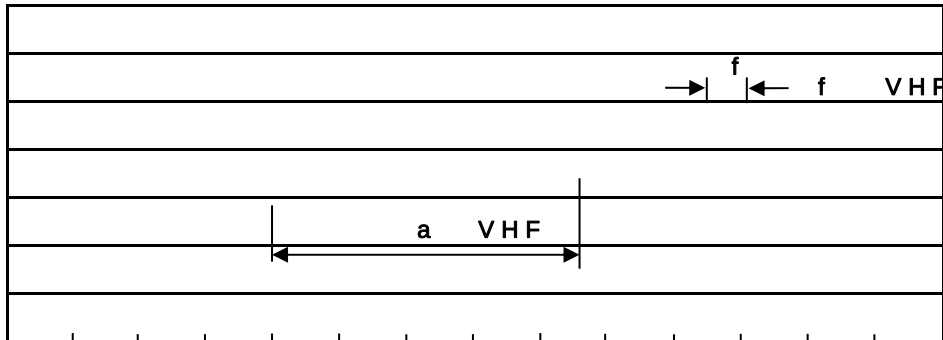
, My f / Ma



a ¢ y
(8 y , [W A
* y ° Z W A
y ŷ D Z W A k š ŷ D Z J



šWD t...•Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



7 L P H V H F

^ač y

10• Ä ½ “† 150 ½180 - k ž • 60 ½90sec;

20• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;

30•D N ò i Ò 0 ,† 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / RãcãSãHãTãCãb

“† y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / PackãSPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û H					Dimension ;>û p . (unit /mm³)		
	Units/Reel /-	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
DFN3×3B-8L	5,000	2	10,000	6	60,000	13 s ×12	360×360×50	380×335×366

„Đ y f / N b e

Î† U ^ ñ Ä ' Î @ I c ^ 2 Á Ò ç ³ Ø o ž

All information provided in this document is subject to legal disclaimers.