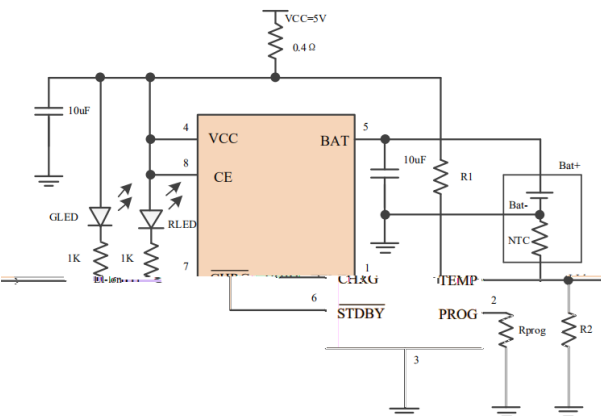


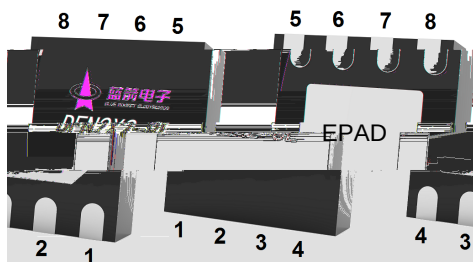
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- $\hat{U} - \hat{\alpha}$ / **Pinning**



PIN Num.	Symbol	Function
1	TEMP	P“† yŷµ€ož1:+36' Nñ P 4:)nß~ ŷß€ožòç:+36' 94 9ŷµ 9 êñŸ9ŷµ 9 kþv5 P“† äê zké- 1t¶ ož òç:+36"ŷµ 9 y \$•ké- 1ÐÒožòç1:+36' Nñªk P“† !y 1tW2ož
2	PROG	Év- v—â y- v!y€ožR685-' N%² ÙB ŠñªUY+- v g—áož"Ä- %<k4' 9t²ò" <z"Év- %<k4' 9t²ò " <ož"- ÙÁ ñÄ%"k4' 9CUYŷG µ „Ù!y- vy/ g<685- 8685.h× (': #
3	- 4 *	,ª
4	VCC	ŷµ 93ŷµ€ož4' 9 ÄB è W• >ožç<)) (': ' 9[49 S<žk(8)2 @@1 µz ô 62%"k4ž(':' v49 ['ož
5	BAT	P N€ož1 P 3€ Nñ4' ož"/ìtW2W•êñ62%"k(':' v 49 ['ož(':' g PU^- vy < ²ò 9ož
6	9:*(?	P- è6P€ožç P- èžtÄB•¼ ñz uk6P- èožkék4' 1Ô9äŠÁož
7	).8-	- ÙÁ6P€ožç- ~g P- žkÄB•¼ z uk6P- 3" gožkék 4' Ô9äŠÁož
8	CE	/ì... ŷµ€ožä uŷµ... 3oW•ÙÁkz uŷµ µtW2- ÙÁož)+ ' U Yt::2 uêñ)359 uÜ ož
9	EPAD	y°D & ,B ož¥- •@U ´ ~°D Nñ6)(ªkY ë N‡yì ½Å ož

Table 1. Absolute Maximum Ratings (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNITS
Input Supply Voltage		-0.3~10	V
TEMP, CE ÉPROG Pins Voltage		-0.3~V _{CC} +0.3	
BAT Pin Voltage		-0.3~8	
STDBY,CHRG Pins Voltage		-0.3~10	
STDBY,CHRG Pins Output sink current		10	mA
Operating Ambient Temperature Range	T _A	-40~85	°C
Junction Temperature	T _J	-40~150	°C
Storage Temperature	T _{stg}	-40~125	°C

1 Absolute Maximum Ratings(Ta=25 °C)

PARAMETER	SYMBOL	RATINGS	UNITS
Lead Temperature (Soldering, 10s)	T _{solder}	260	°C
ESD	HBM	2000	V
	MM	200	V

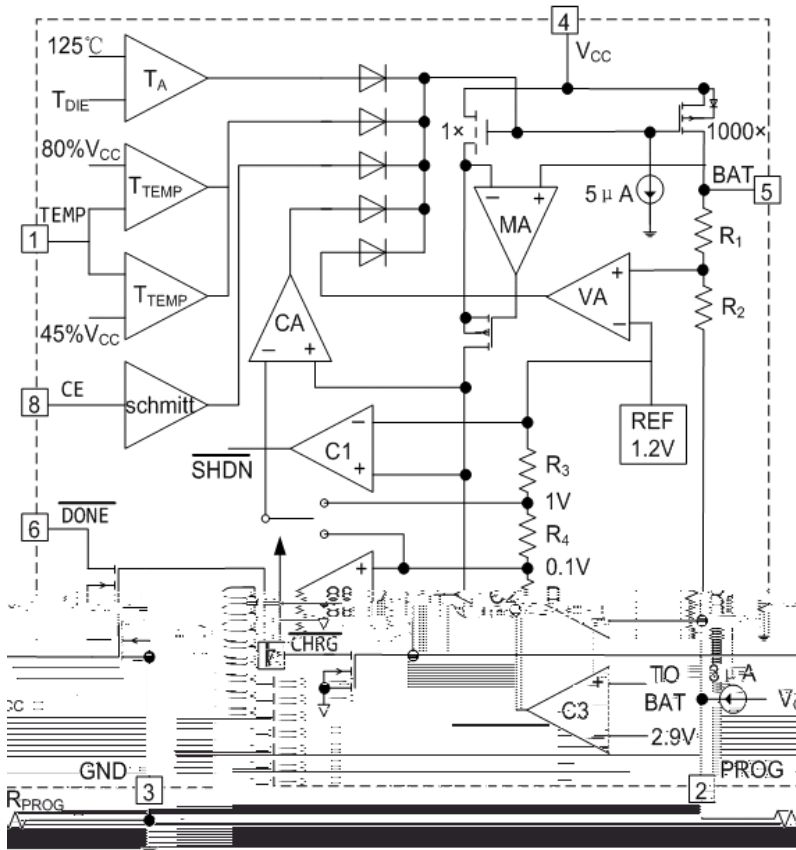
2 Electrical Characteristics(Ta=25 °C)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Supply Voltage			4.5		6.5	V
V _{CC} Under voltage Lockout Threshold	V _{UVL}	V _{CC} from Low to High		3.9		V
V _{CC} Under voltage Lockout Hysteresis	ΔV _{UVL}			150		mV
Input Supply Current	I _{CC}	Charge Mode, R _{PROG} =10K		150	500	μA
		Standby Mode (Charge Terminated)		50	100	
		Shutdown Mode: R _{PROG} Not Connected, V _{CC} <V _{BAT} , or V _{CC} <V _{UVL}		50	100	
CE "High" Level Voltage	V _{CEH}		1.5		V _{CC}	V
CE "Low" Level Voltage	V _{CEL}				0.4	V
Trickle Charge Threshold	V _{TRIKL}	R _{PROG} =10K, V _{BAT} Rising		2.9		V
Trickle Charge Hysteresis	ΔV _{TRIKL}	R _{PROG} =10K		100		mV
Trickle Charge Current	I _{TRIKL}	R _{PROG} =1K	90	100	110	mA
BAT Pin Current	I _{BAT}	R _{PROG} =1K, Current Mode(V _{BAT} =4.0V)	900	1000	1100	mA
		R _{PROG} =2K, Current Mode(V _{BAT} =4.0V)	450	500	550	
		Standby Mode, V _{BAT} =V _{FLOAT}	0	-2.5	-6.0	μA
		Shutdown Mode (R _{PROG} Not Connected)		≤ 1	≤ 2	
		Sleep Mode, V _{CC} =0V			-2	
PROG Pin Voltage	V _{PROG}	R _{PROG} =1K, Current Mode	0.9	1.0	1.1	V
PROG Pin Pull-Up Current	I _{PROG}			3		μA
Regulated Output (Float) Voltage	V _{FLOAT}	R _{PROG} =10K	4.158	4.200	4.242	V
C/10 Termination Current Threshold	I _{TERM}	R _{PROG} =1K		0.1		mA/mA

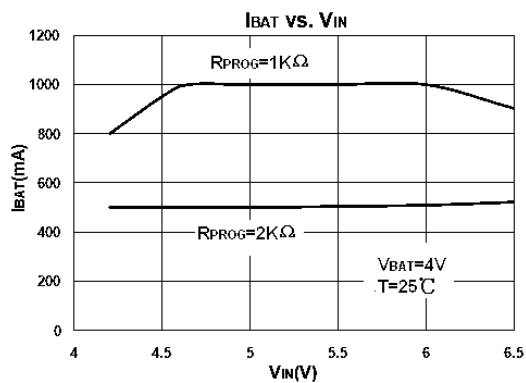
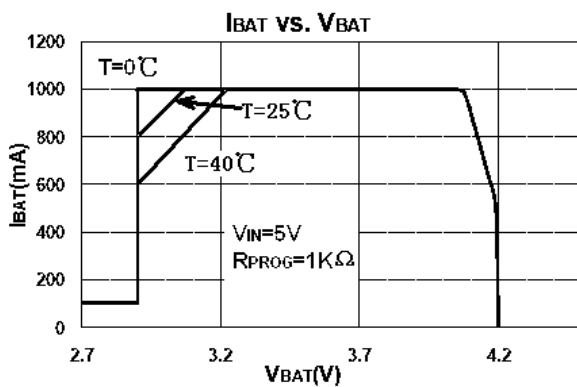
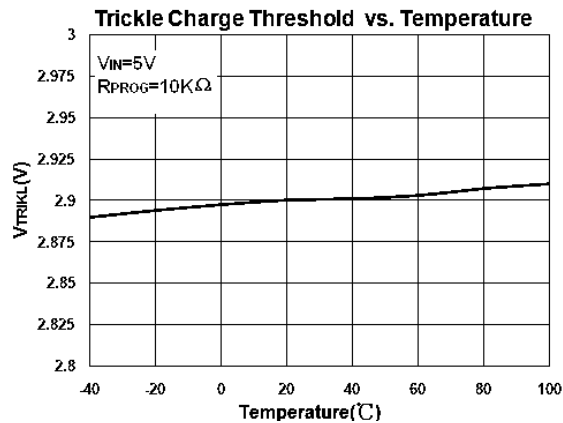
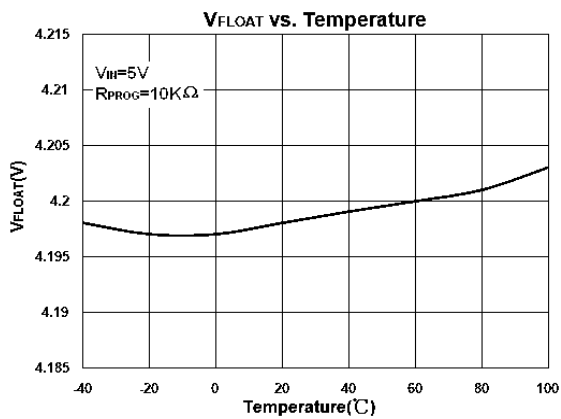
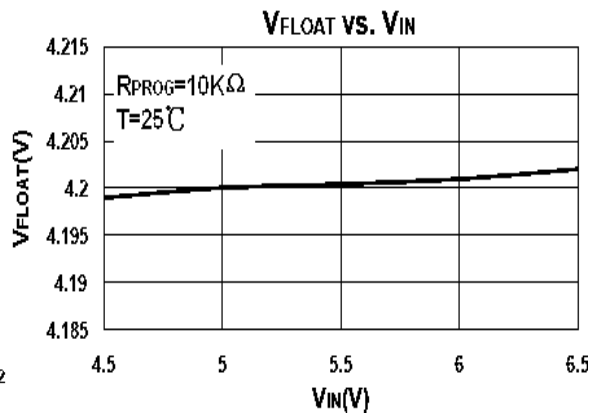
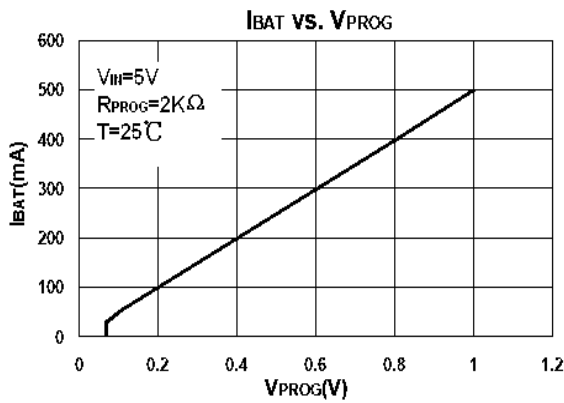
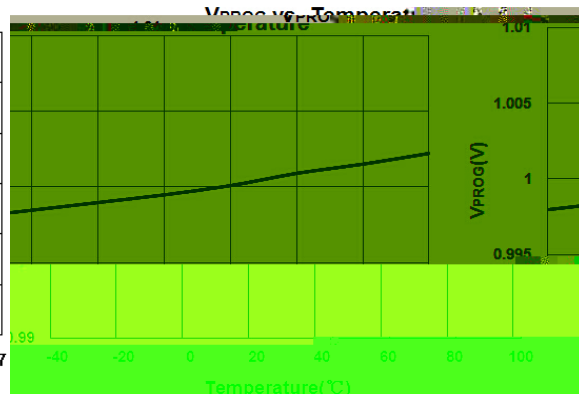
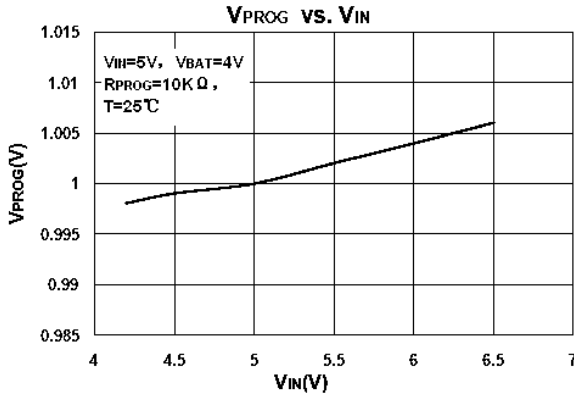
Electrical Characteristics(Ta=25)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Termination Comparator Filter Time	t_{Term}	I_{BAT} Falling Below I_{TERM}	0.3	0.8	2.0	mS
Recharge Battery Threshold	V_{RECHG}	$V_{\text{FLOAT}} \dot{=} V_{\text{RECHG}}$		150		mV
Recharge Comparator Filter Time	t_{RECHARGE}	V_{BAT} High to Low	0.3	0.8	2.0	mS
$V_{\text{CC}} - V_{\text{BAT}}$ Lockout Threshold	A_{MSD}	V_{CC} from Low to High		100		mV
		V_{CC} from High to Low		80		mV
TEMP High Shift Voltage Level			76	80	82	%V _{CC}
TEMP Low Shift Voltage Level			43	45	49	
Soft-Start Time	t_{SS}	$I_{\text{BAT}}=0$ to $I_{\text{BAT}}=1000V/R_{\text{PROG}}$		20		μS
Power FET “ON” Resistance (Between V_{CC} and BAT)	R_{ON}	$I_{\text{BAT}}=1000\text{mA}$		400		m
Junction Temperature in Constant Temperature Mode	$T_{\text{J(REG)}}$			125		$^{\circ}\text{C}$

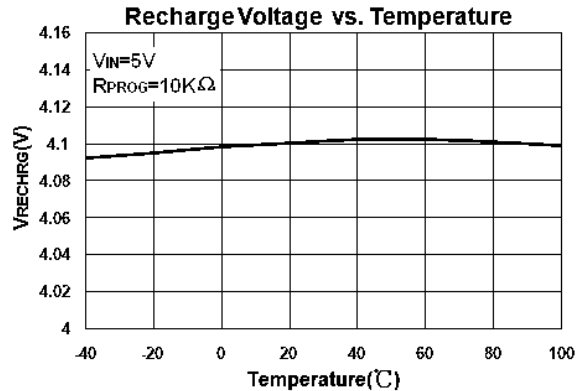
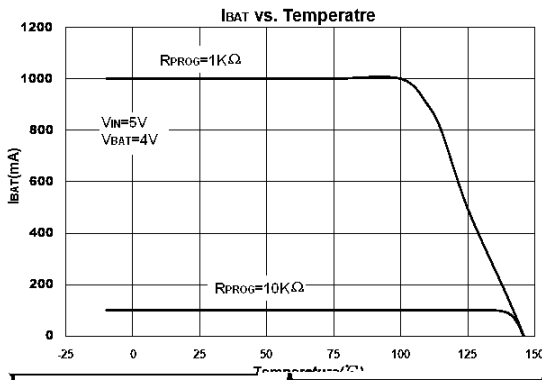
Principle block diagram



Electrical Characteristic Curve

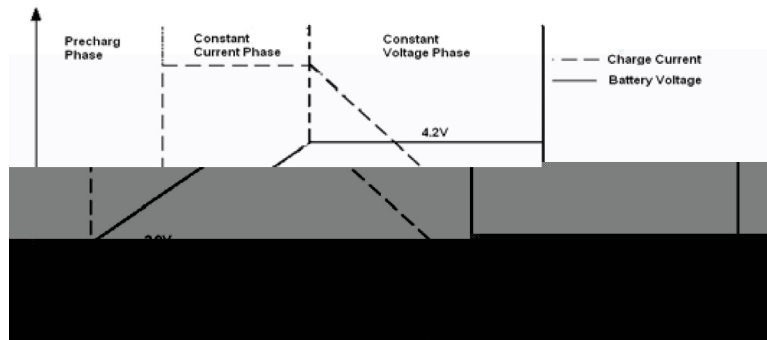


Electrical Characteristic Curve



$V \in \hat{A}$ / Description of the Principle

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V € < Â / Description of the Principle

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$$R1 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{(R_{TL} - R_{TH}) K_1 K_2}$$

$$\frac{R_{TL} R_{TH} (K_2 - K_1)}{(R_{TL} - R_{TH}) K_1 K_2}$$

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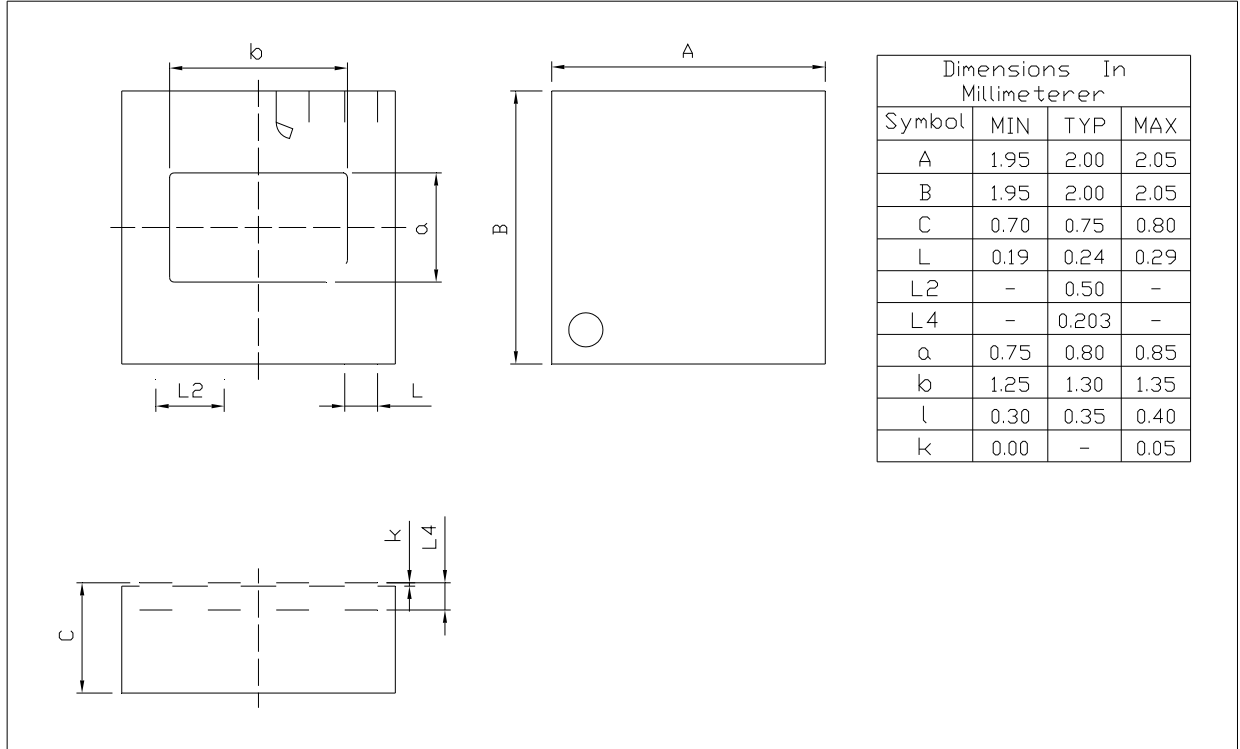
$$R1 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{(R_{TH} - R_{TL}) K_1 K_2}$$

$$R2 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{R_{TH} (K_1 - K_1 K_2) - R_{TL} (K_2 - K_1 K_2)}$$

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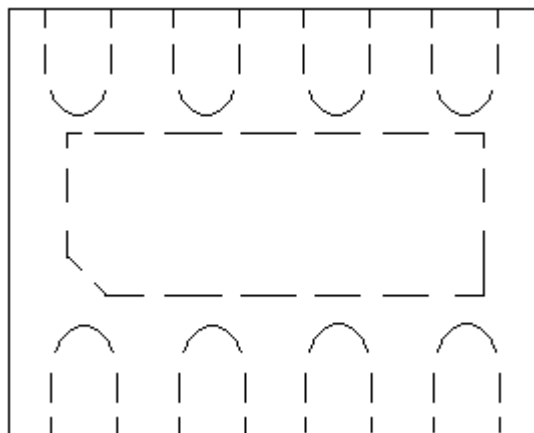
Ø □ =) ⌀ / Package Dimensions

DFN2 x2-8L-0.75Unit:mm



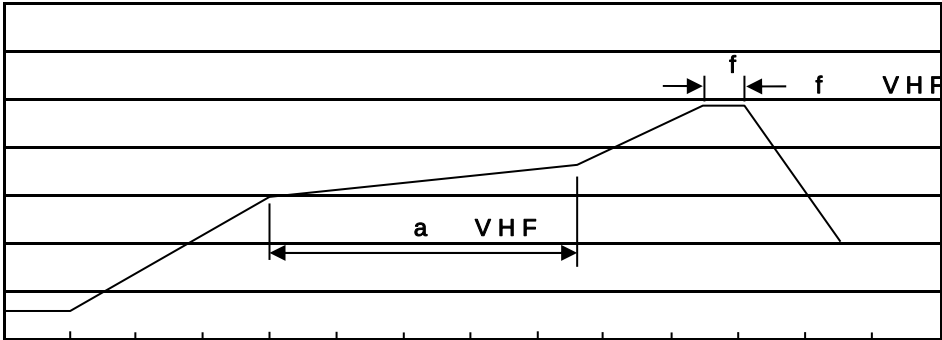
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7HPSHUDWXXUH



7LPH VHF

ačy

- 10•Ä½“† 150½180 - kž • 60½90sec;
- 20•Q>“† 245 r5 - kž • 4 Ò 5 r0.5sec;
- 30•D Nò 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 /Că p ~ »] / Resistance to Soldering Heat Test Conditions

“†y 260 r5 - ž • y 10 r1 sec. Temp.:260 r5 - Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û !H					Dimension ;>û p . (unit Åmm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
DFN2×2-8L	4,000	10	40,000	4	160,000	7 s ×8	210×205×205	445×230×435

„Đ y f / Notices