

Product Summary

$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D
60V	3.3mΩ@10V	96A

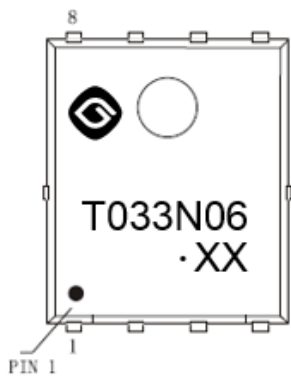
Feature

- Shielded Gate Trench Technology
- Low $R_{DS(on)}$
- Low Gate Charge

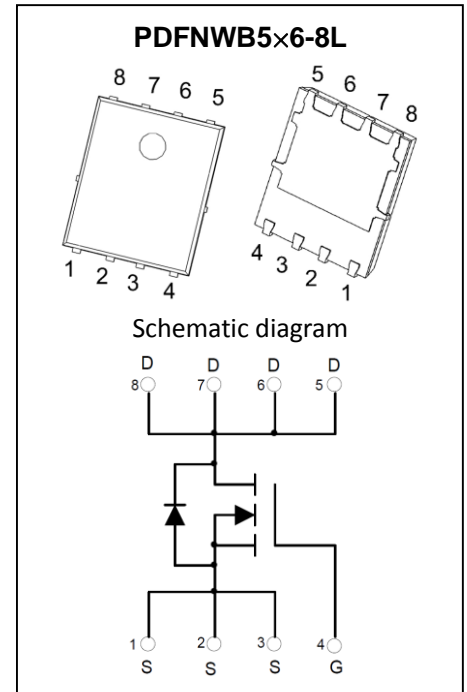
Application

- High efficiency power supply
- Secondary synchronus rectifier

MARKING:



T033N06 = Device code
 XX = Date Code
 Solid dot = Green Device



ABSOLUTE MAXIMUM RATINGS ($T_C=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	I_D	96	A
Pulsed Drain Current	I_{DM}	300	A
Power Dissipation	P_D	3.1	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	40.3	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

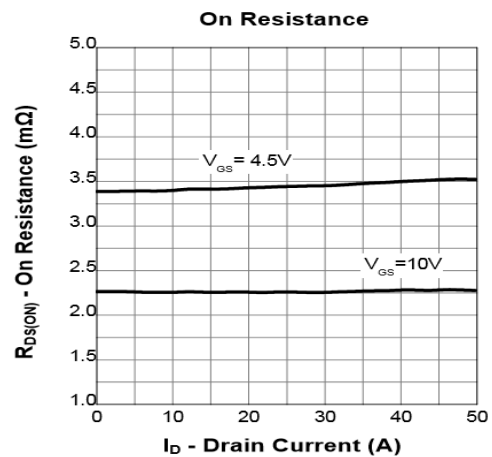
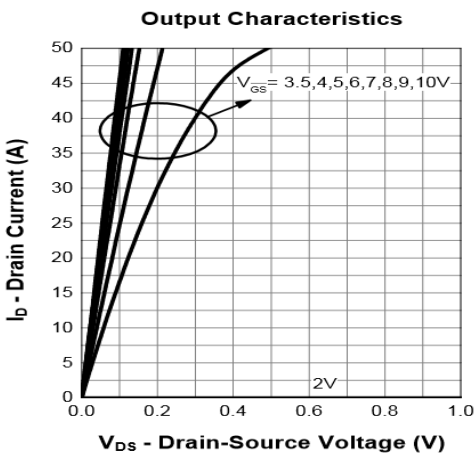
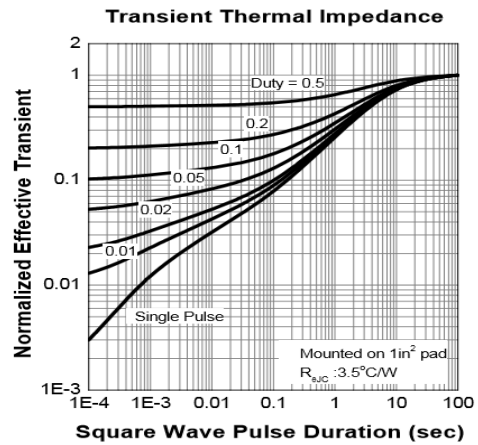
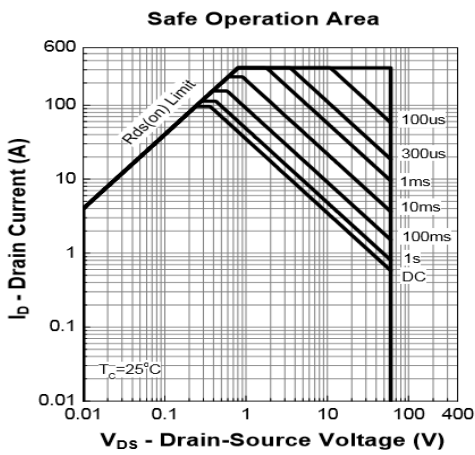
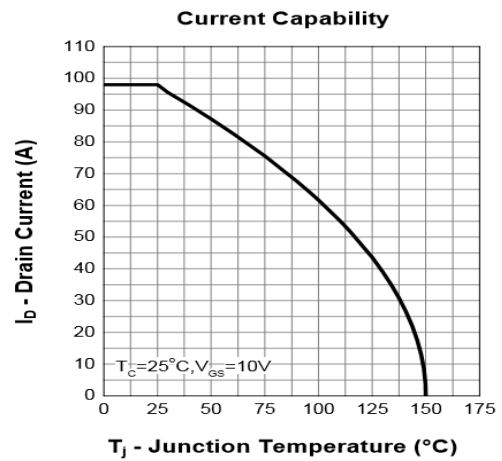
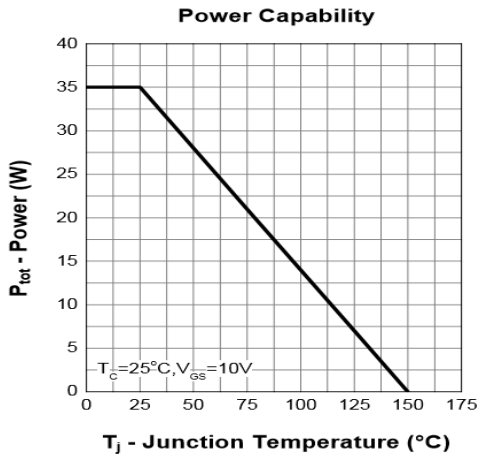
MOSFET ELECTRICAL CHARACTERISTICS (T_J=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =250μA	60			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =48V, V _{GS} = 0V			1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±20V, V _{DS} = 0V			±100	nA
Gate threshold voltage ¹	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	1.5	2	2.5	V
Drain-source on-resistance ¹	R _{DS(on)}	V _{GS} =10V, I _D =20A		2.3	3.3	mΩ
		V _{GS} =4.5V, I _D =20A		3.5	4.6	mΩ
Dynamic characteristics²						
Input capacitance	C _{iss}	V _{DS} =30V, V _{GS} =0V, f =1MHz		4895		pF
Output capacitance	C _{oss}			2208		
Reverse transfer capacitance	C _{rss}			171		
Switching Characteristics²						
Total gate charge	Q _g	V _{DS} =30V, V _{GS} =10V, I _D =25A		99		nC
Gate-source charge	Q _{gs}			16		
Gate-drain charge	Q _{gd}			27		
Turn-on delay time	t _{d(on)}	V _{DD} =30V, R _L =1.2Ω, I _D =25A, V _{GEN} =10 V, R _g =4.5Ω		14		ns
Turn-on rise time	t _r			36		
Turn-off delay time	t _{d(off)}			75		
Turn-off fall time	t _f			50		
Diode Characteristics						
Diode Forward Voltage ¹	V _{SD}	V _{GS} =0V , I _S =25A			1.02	V

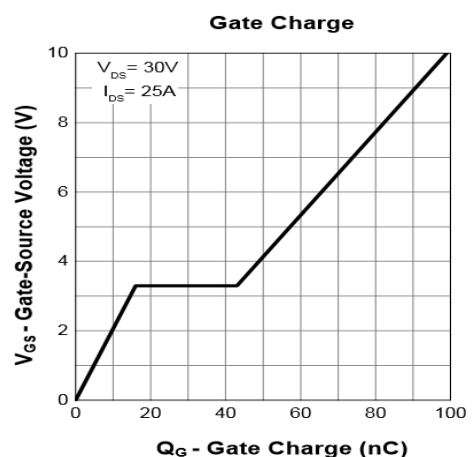
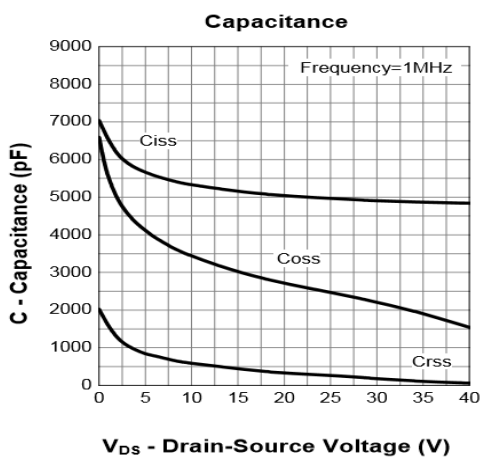
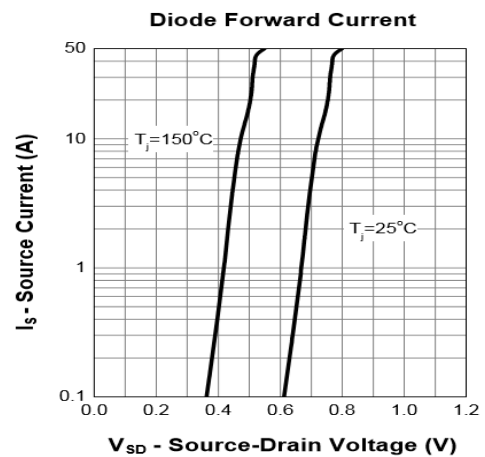
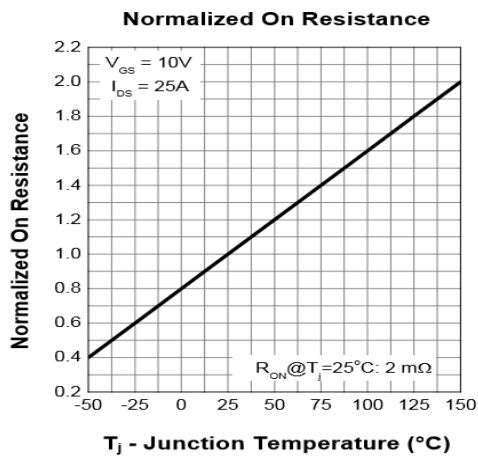
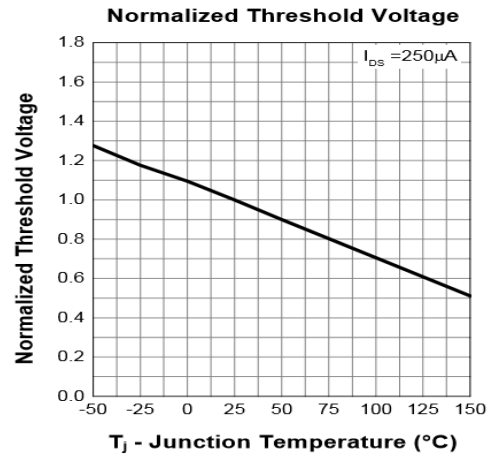
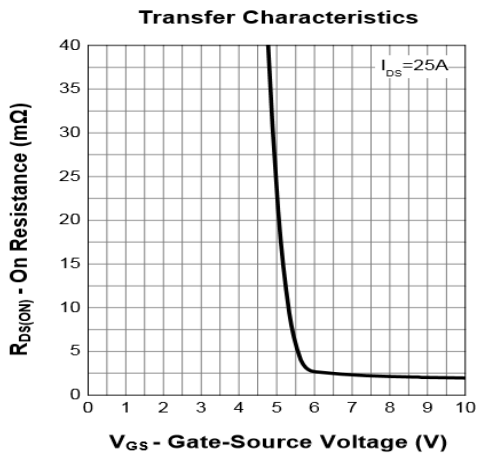
Notes:

1. Pulse Test : Pulse Width≤300μs, duty cycle ≤2%.
2. Guaranteed by design, not subject to production testing.

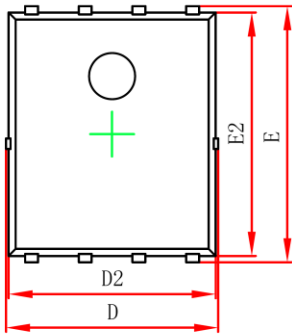
Typical Electrical and Thermal Characteristics



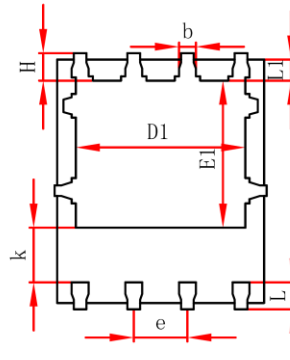
Typical Electrical and Thermal Characteristics



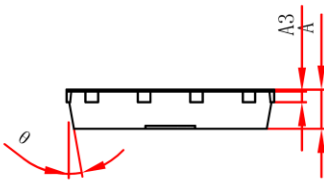
PDFNWB5x6-8L Package Information



Top View
[顶视图]



Bottom View
[背视图]

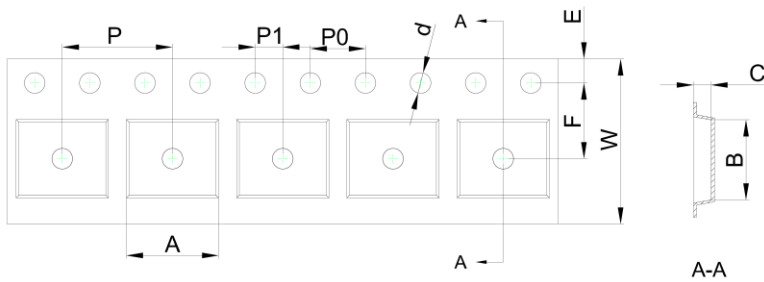


Side View
[侧视图]

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.000	0.035	0.039
A3	0.254REF.		0.010REF.	
D	4.944	5.096	0.195	0.201
E	5.974	6.126	0.235	0.241
D1	3.910	4.110	0.154	0.162
E1	3.375	3.575	0.133	0.141
D2	4.824	4.976	0.190	0.196
E2	5.674	5.826	0.223	0.229
k	1.190	1.390	0.047	0.055
b	0.350	0.450	0.014	0.018
e	1.270TYP.		0.050TYP.	
L	0.559	0.711	0.022	0.028
L1	0.424	0.576	0.017	0.023
H	0.574	0.726	0.023	0.029
θ	10°	12°	10°	12°

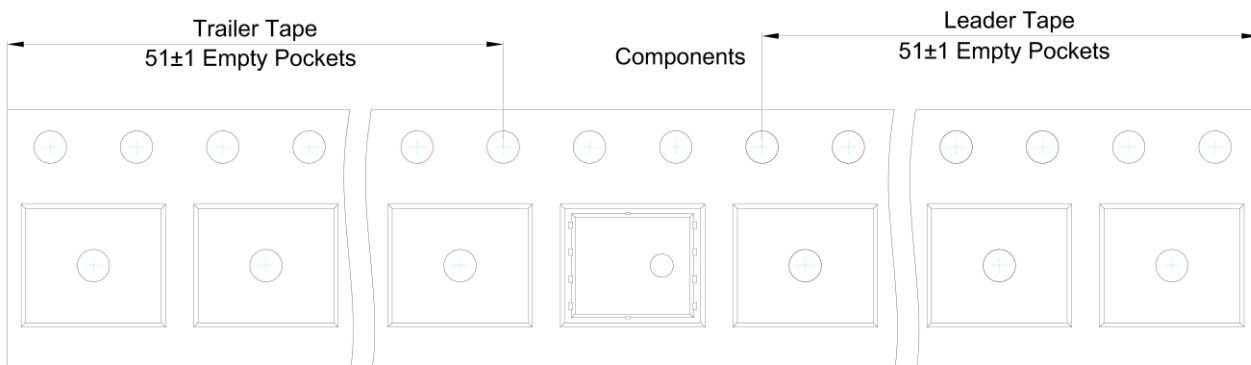
PDFNWB5×6-8L Tape and Reel

PDFNWB5×6-8L Embossed Carrier Tape

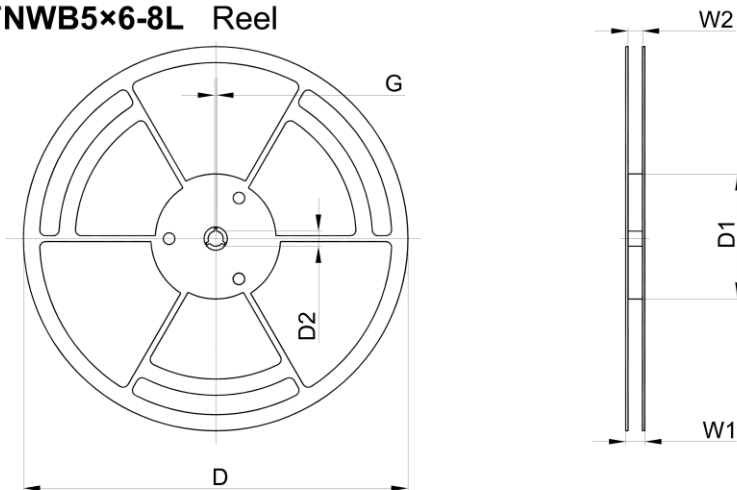


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
PDFNWB5×6-8L	6.30	5.30	1.10	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

PDFNWB5×6-8L Tape Leader and Trailer



PDFNWB5×6-8L Reel



Dimensions are in millimeter						
Reel Option	D	D1	D2	G	W1	W2
13" Dia	Ø330.00	100.00	13.00	1.90	17.60	12.40

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
5,000 pcs	13 inch	5,000 pcs	340×336×29	50,000 pcs	353×346×365

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)