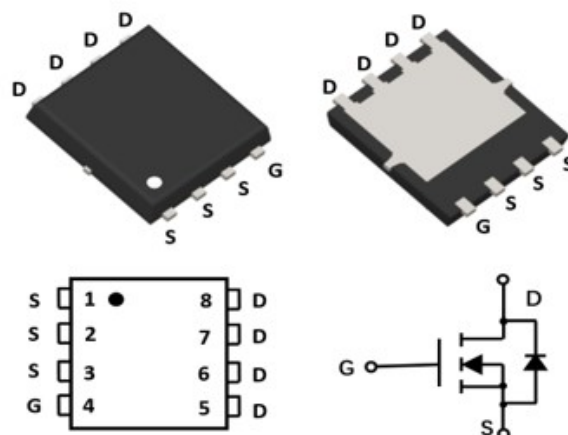


MOSFET (N-CHANNEL)
FEATURES

- Low on-resistance
- Fast switching speed
- Easily designed drive circuits
- Easy to parallel

MECHANICAL DATA

- Case: PDFN5x6
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.016 grams (approximate)
- **Marking:G150N03**

PDFN 5X6

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V _{DS}	30	V
Gate-source voltage	V _{GS}	±20V	V
Continuous drain current	I _D	120	A
Power dissipation	P _D	75	W
Thermal resistance from Junction to ambient	R _{θJA}	20	°C/W
Junction and Storage temperature	T _J , T _{STG}	-55 ~ +150	°C

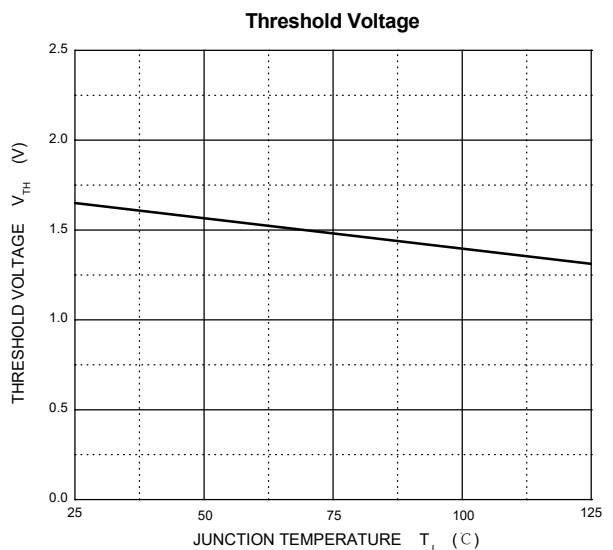
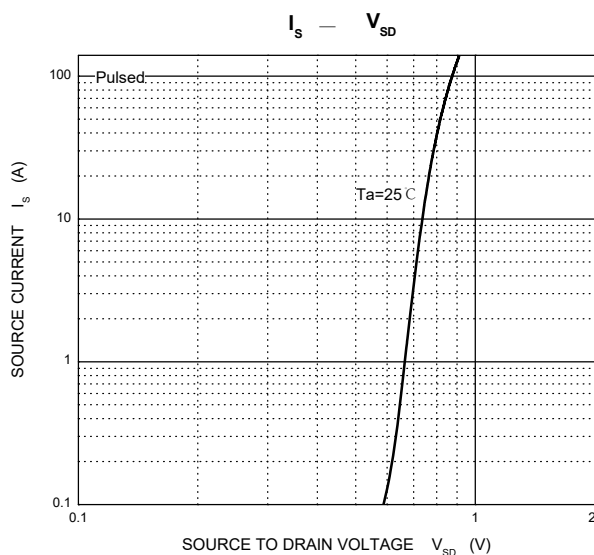
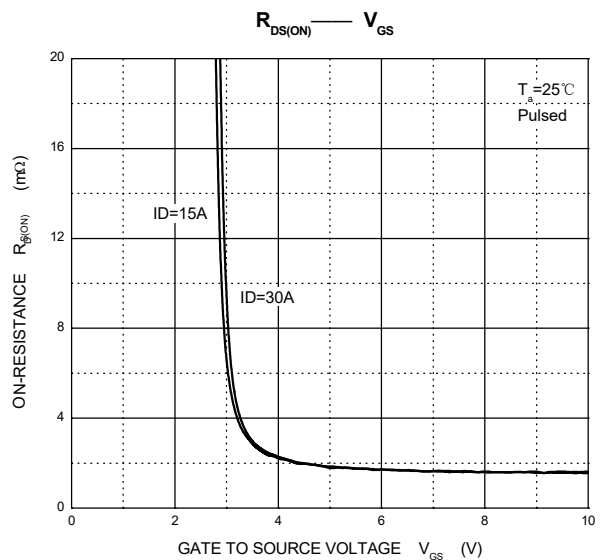
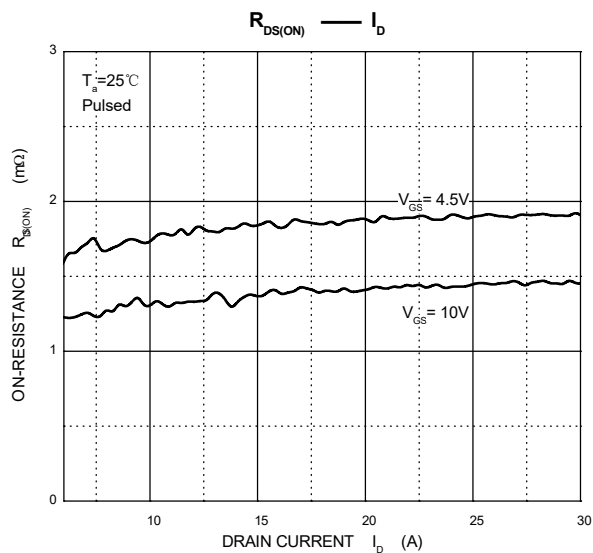
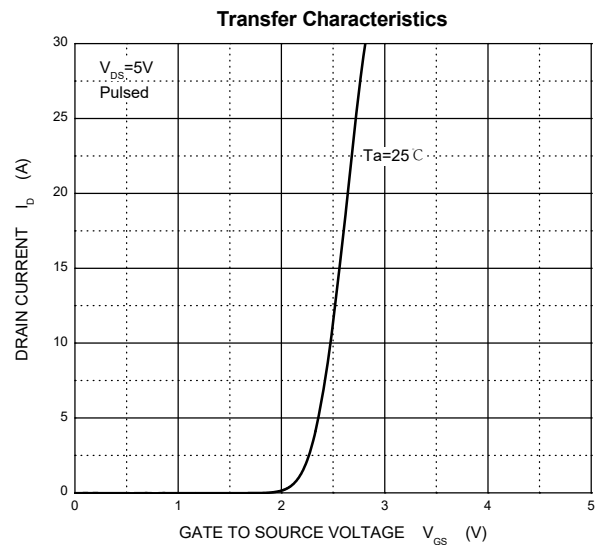
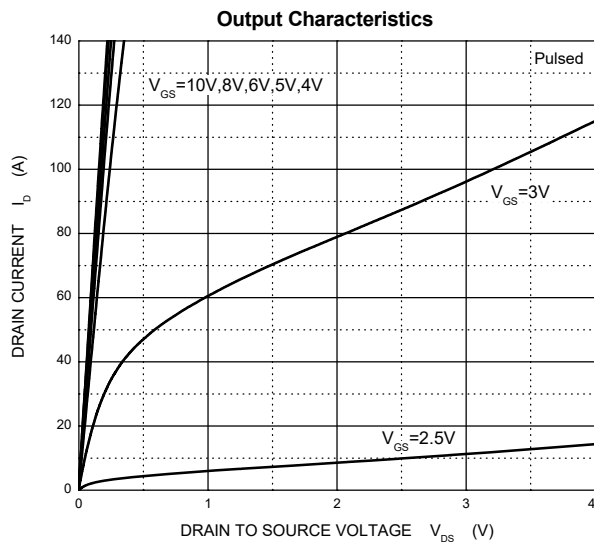
ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Off Characteristics						
Drain-Source breakdown voltage	V _{(BR)DSS}	30			V	V _{GS} =0V, I _D =250uA
Zero gate voltage drain current	I _{DSS}			1	μA	V _{DS} =30V, V _{GS} =0V
Gate-body leakage current	I _{GSS}			±100	nA	V _{DS} =0V, V _{GS} =±20V
Gate-threshold voltage (note 1)	V _{GS(th)}	1.0	1.5	2.4	V	V _{DS} =20V, I _D =250μA
Drain-source on-resistance (note 1)	R _{DS(ON)}		2.7	3.4	mΩ	V _{GS} =10V, I _D =20A
			3.6	6	mΩ	V _{GS} =4.5V, I _D =20A
Dynamic Characteristics						
Input capacitance	C _{iSS}		4500		pF	V _{DS} =15V, V _{GS} =0V, f=1MHz
Output capacitance	C _{oSS}		800		pF	
Reverse transfer capacitance	C _{rSS}		640		pF	
Switching Characteristics						
Turn-on delay time	t _{d(on)}		11		nS	V _{DD} =20V, V _{GS} =10V, I _D =4A R _g =3Ω, R _L =0.75Ω
Turn-on rise time	t _r		80		nS	
Turn-off delay time	t _{d(off)}		39		nS	
Turn-off fall time	t _f		92		nS	

Note:1. Pulse test ; Pulse width ≤300μs, Duty cycle ≤ 2% .

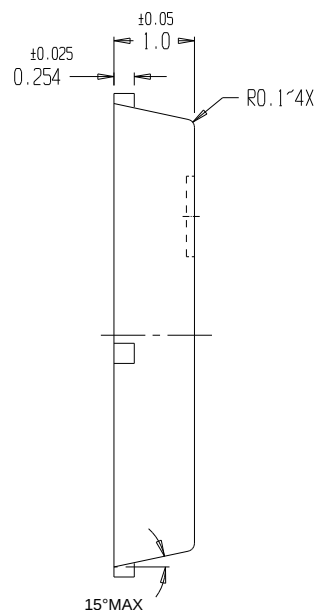
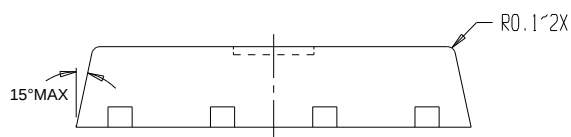
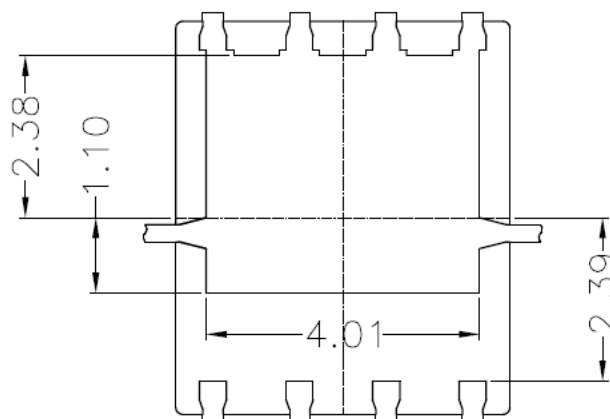
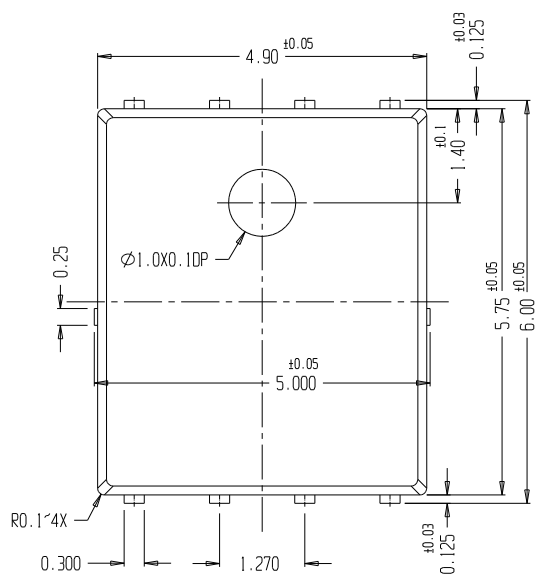
MOSFET (N-CHANNEL)

Typical Characteristics

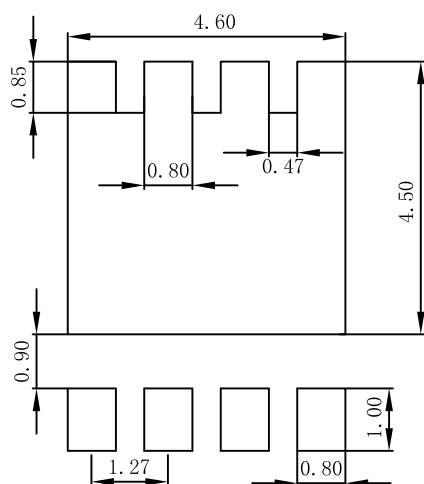


MOSFET (N-CHANNEL)

PDFN5X6 Package information

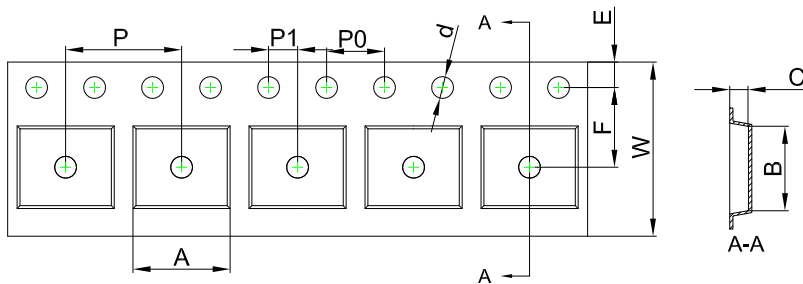


PDFN 5x6 Suggested Pad Layout

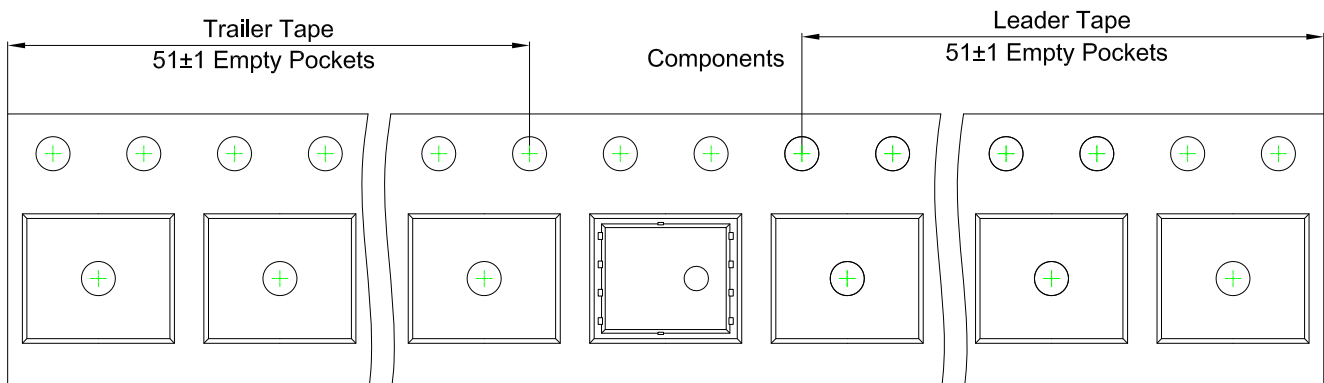
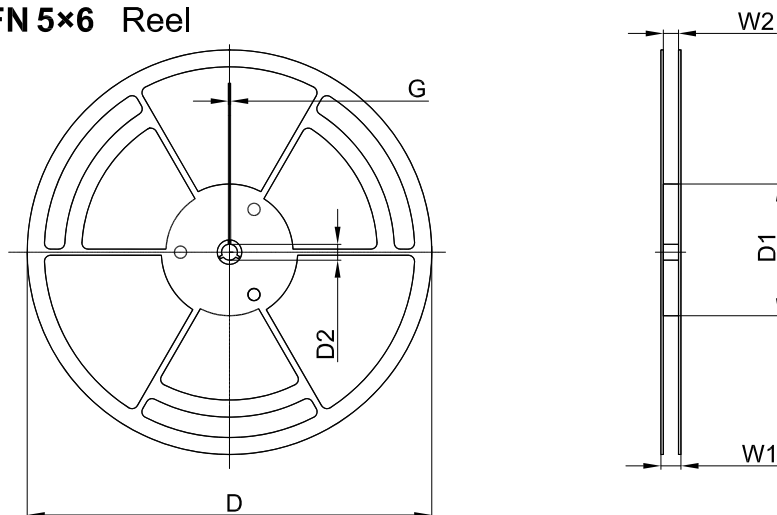


Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.

MOSFET (N-CHANNEL)
PDFN 5×6 Embossed Carrier Tape


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
PDFN 5×6	6.30	5.30	1.10	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

PDFN 5×6 Tape Leader and Trailer

PDFN 5×6 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