



YJG013P06A

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## P-Channel Enhancement Mode Field Effect Transistor



# YJG013P06A

## Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=-250\mu A, T_j=25$	-60	-	-	V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=-60V, V_{GS}=0V, T_j=25$	-	-	-1	$\mu A$
		$V_{DS}=-60V, V_{GS}=0V, T_j=150$	-	-	-100	
Gate-Source Leakage Current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0V, T_j=25$	-	-	$\pm 100$	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250\mu A, T_j=25$	-1.2	-1.8	-2.4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10V, I_D=-35A, T_j=25$	-	10	13	m
		$V_{GS}=-4.5V, I_D=-20A, T_j=25$	-	14.5	22	m
Diode Forward Voltage	$V_{SD}$	$I_S=-35A, V_{GS}=0V, T_j=25$	-	-0.86	-1.2	V



Typical Electrical and Thermal Characteristics Diagrams

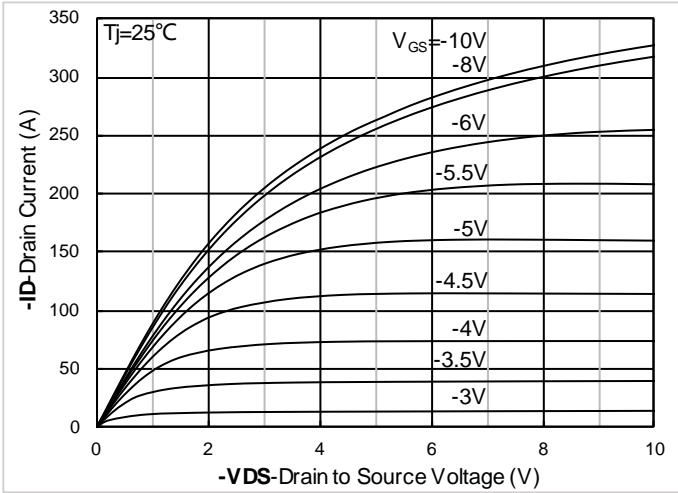


Figure 1. Output Characteristics; typical values

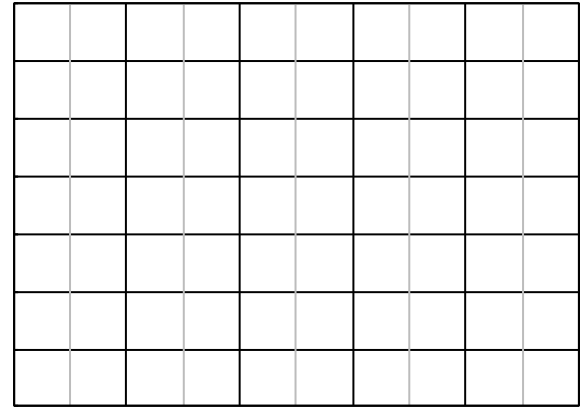


Figure 2. Transfer Characteristics; typical values

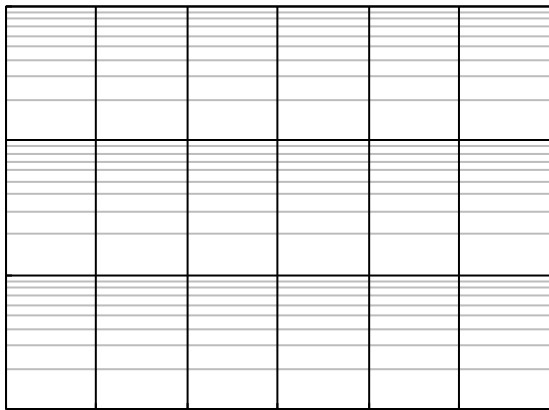


Figure 3. Capacitance Characteristics; typical values

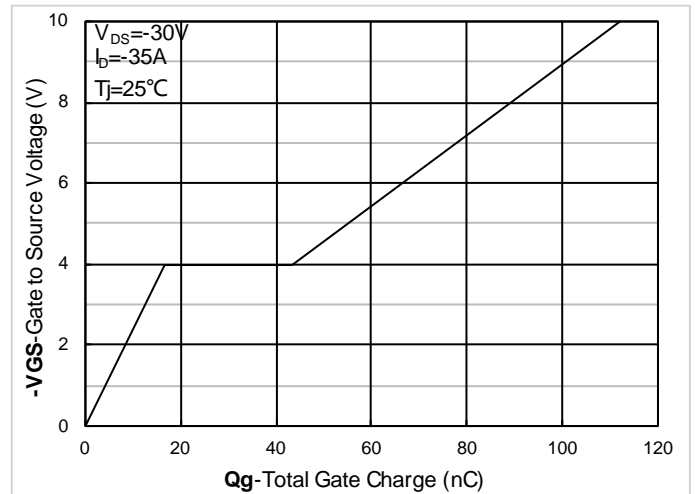


Figure 4. Gate Charge; typical values

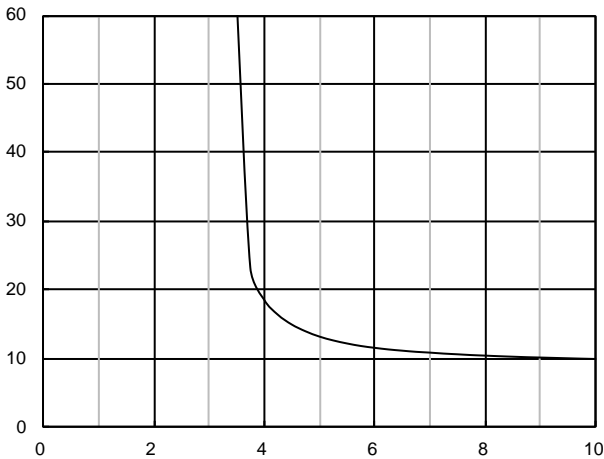


Figure 5. On-Resistance vs. Gate to Source Voltage; typical values

Figure 6. Normalized On-Resistance



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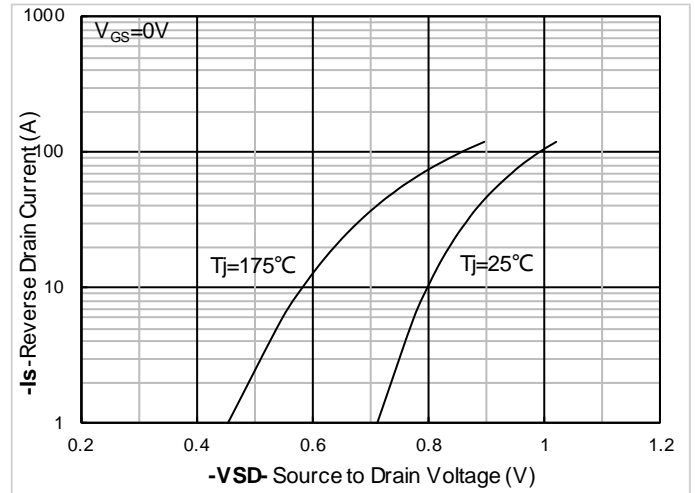
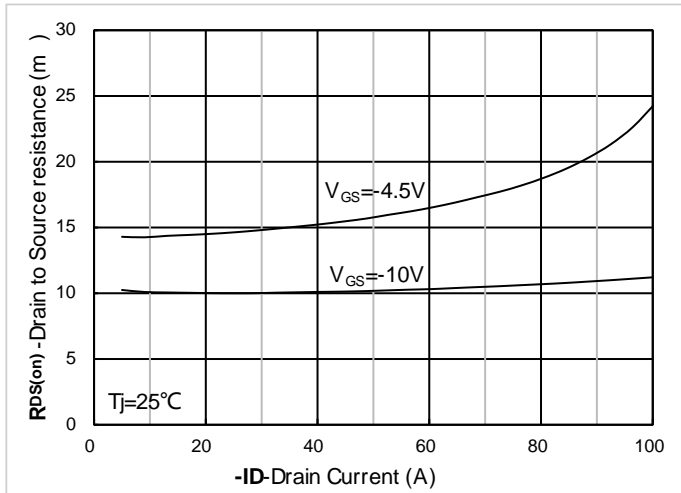


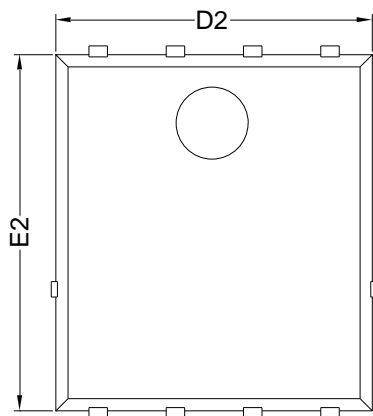
Figure 7.  $R_{DS(on)}$  vs. Drain Current; typical values      Figure



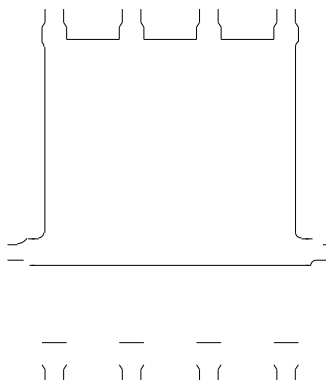


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## PDFN5060-8L-B-1.1MM Package information



Top View



Bottom View

Side View

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	5.15	5.35	5.55
E	5.95	6.15	6.35
A	1.00	1.10	1.20
A1	0.254 BSC		
A2			0.10
D1	3.92	4.12	4.32
E1	3.52	3.72	3.92
D2	5.00	5.20	5.40
E2	5.66	5.86	6.06
E3	0.254 REF		
E4	0.21 REF		
L1	0.56	0.66	0.76
L2	0.50 BSC		
b	0.31	0.41	0.51
e	1.27 BSC		

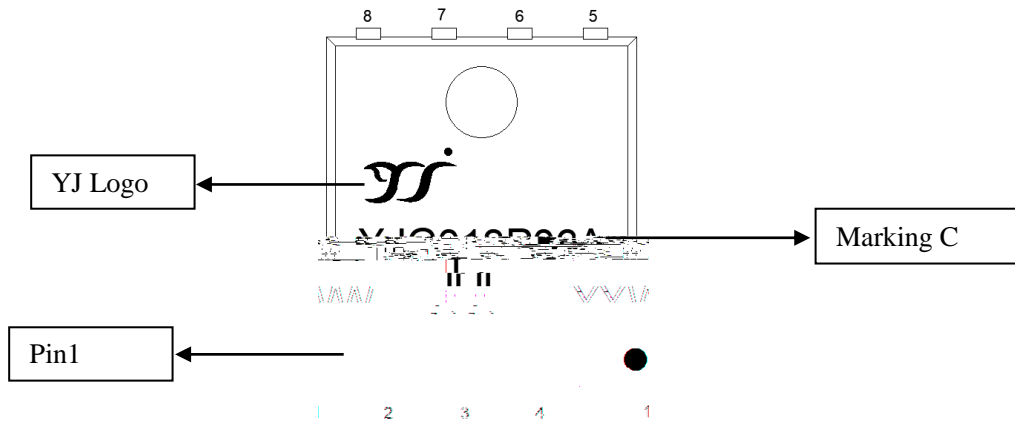
Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.10$ mm.
3. The pad layout is for reference purposes only.



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## Marking Information



### Note

1. All marking is at middle of the product body
2. All marking is in laser printing
3. YJG013P06A is Marking Code, YYWW is date code, "YY" is year, "WW" is week
4. Body color: Black



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