



YJG013P06A

P-Channel Enhancement Mode Field Effect Transistor



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■ Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
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	μA
		$V_{DS}=-60V, V_{GS}=0V, T_j=150$	-	-	-100	
Gate-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V, T_j=25$	-	-	± 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 Ω
		$V_{GS}=-4.5V, I_D=-20A, T_j=25$	-	14.5	22	m Ω
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

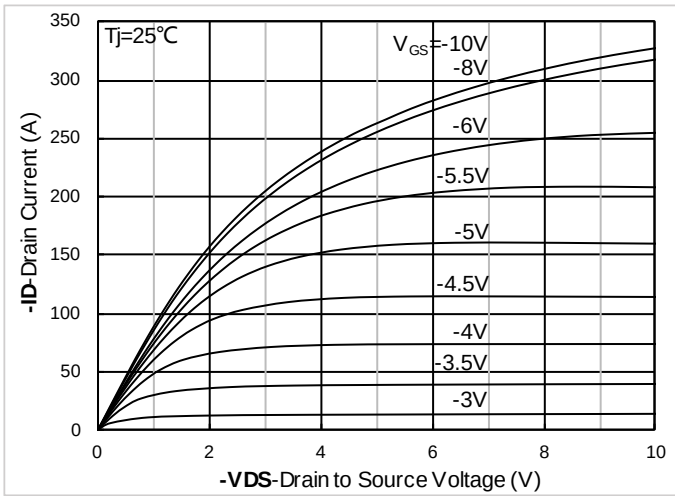


Figure 1. Output Characteristics; typical values

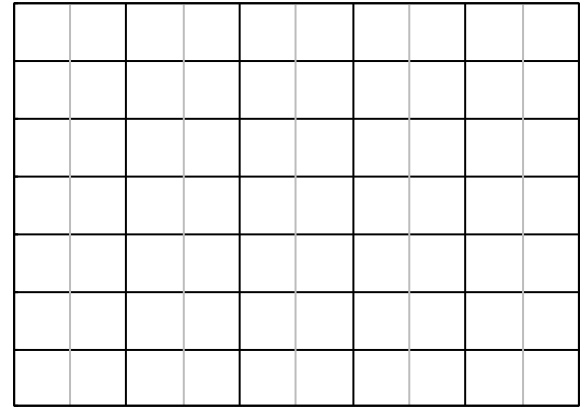


Figure 2. Transfer Characteristics; typical values

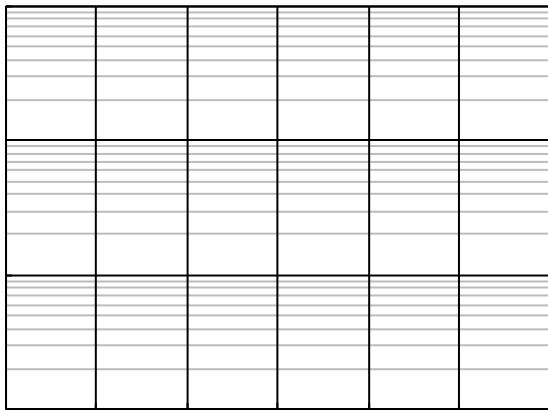


Figure 3. Capacitance Characteristics; typical values

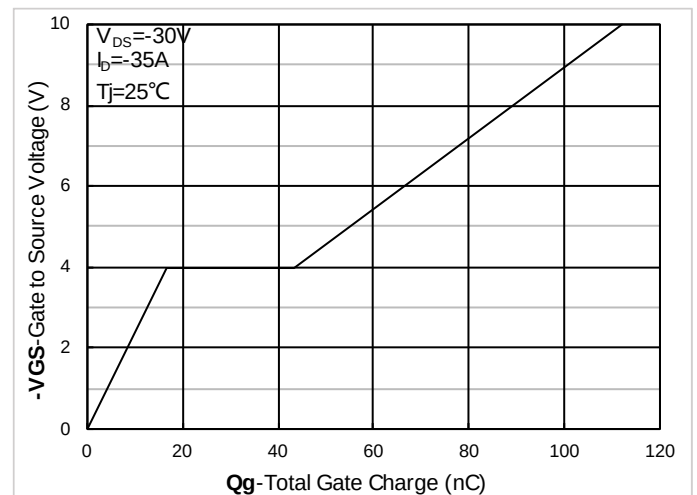


Figure 4. Gate Charge; typical values

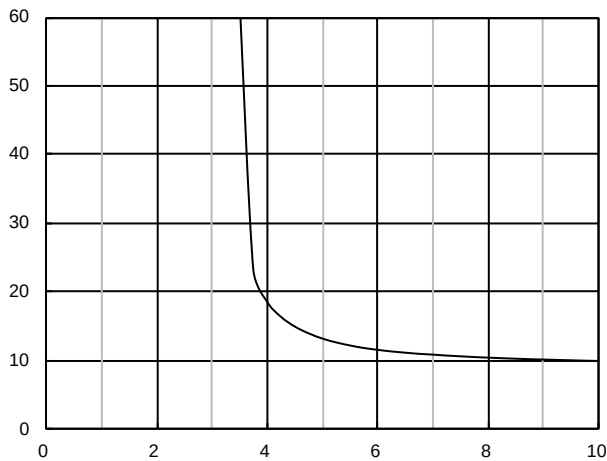


Figure 5. On-Resistance vs. Gate to Source Voltage; typical values

Figure 6. Normalized On-Resistance

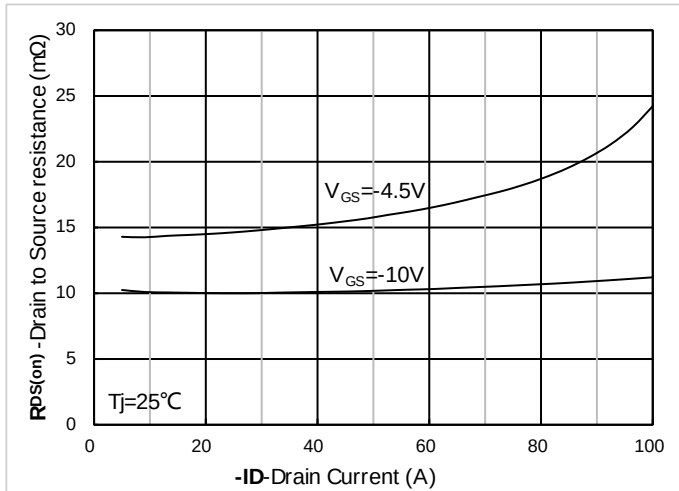
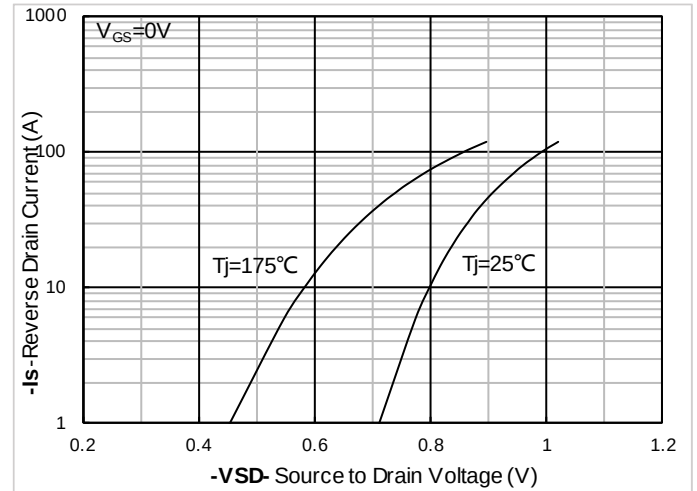


Figure 7. $R_{DS(on)}$ vs. Drain Current; typical values



Figure



Figure 13. Maximum Transient Thermal Impedance

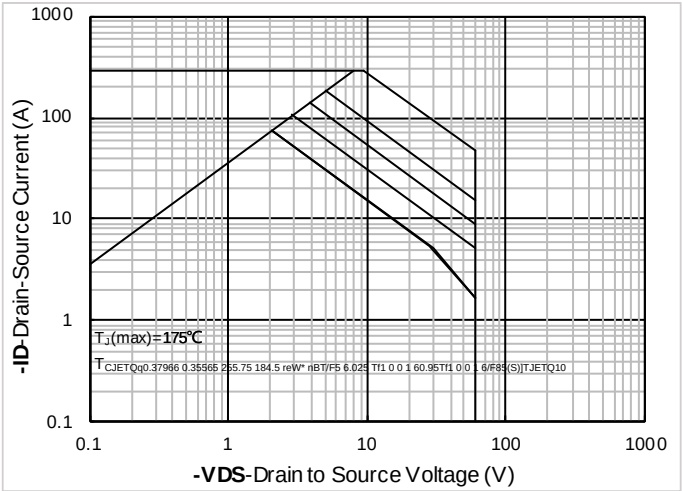
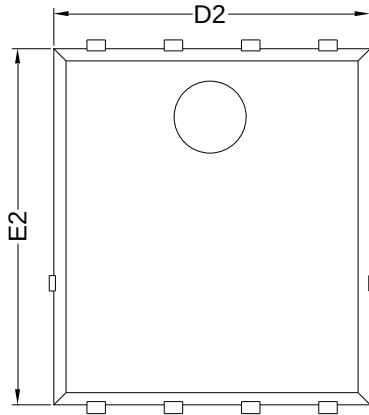


Figure 14. Safe Operation Area

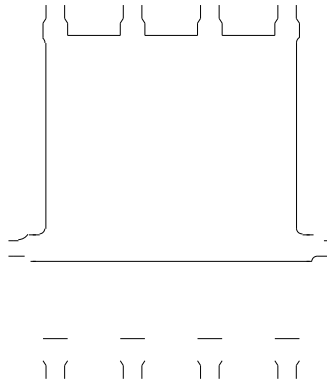


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■ PDFN5060-8L-B-1.1MM Package information



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		

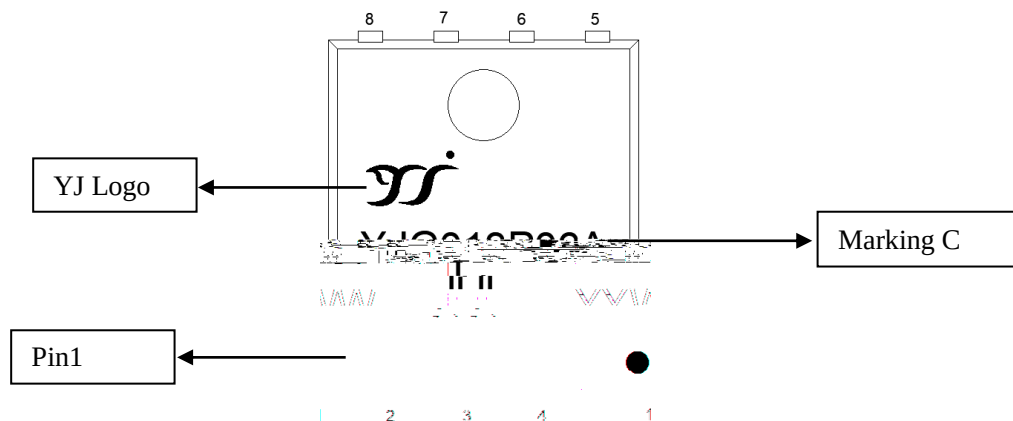
Note:

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



YJG013P06A

■ 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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