RECOMMEND
YJG60G10C
FOR NEW DESIGN

YJG60G10B

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	100V
I_D	60A
$R_{DS(ON)}$(at V_{GS}=10V)	8.6 mohm
$R_{DS(ON)}$(at V_{GS}=4.5V)	13 mohm

100% EAS Tested
100% V_{DS} Tested

General Description

Split gate trench MOSFET technology
Excellent package for heat dissipation
High density cell design for low $R_{DS(ON)}$
Moisture Sensitivity Level 1
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen Free

Applications

High Frequency Switching
Synchronous Rectification

Absolute Maximum Ratings (T_A=25 unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	100	V
Gate-source Voltage		V_{GS}	± 20	V
Drain Current	Tc=25	I_D	60	A
	Tc=100		38	
Pulsed Drain Current [A]		I_{DM}	240	A
Avalanche energy [B]		E_{AS}	200	mJ
Total Power Dissipation [C]	Tc=25	P_D	88	W
	Tc=100		35.2	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient [D]	t ≤ 10S	R	15	20	/W
Thermal Resistance Junction-to-Ambient [D]	Steady-State		40	50	

Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	

Typical Performance Characteristics

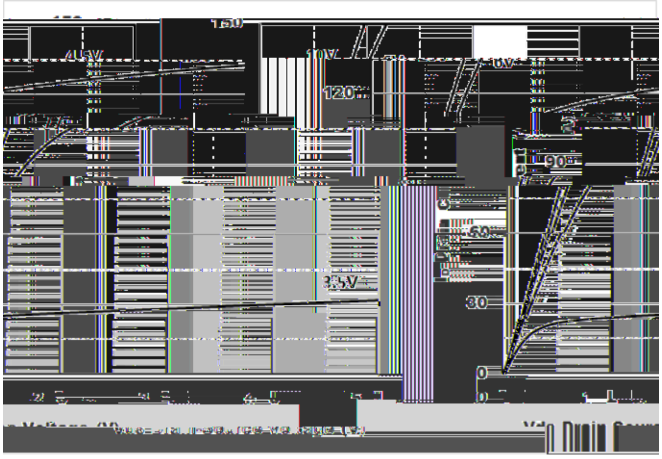


Figure1. Output Characteristics

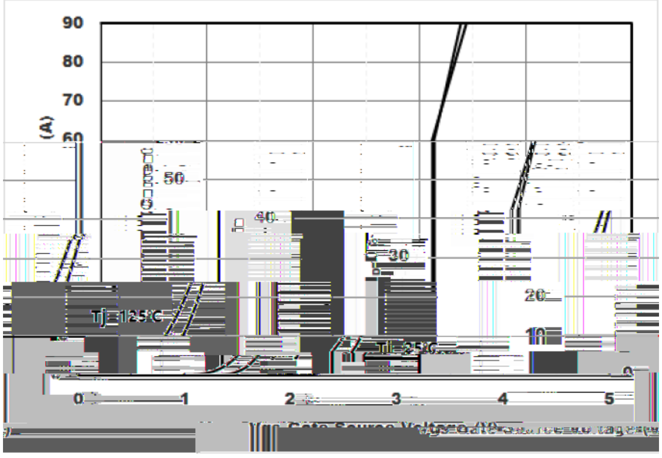


Figure2. Transfer Characteristics

Figure3. Capacitance Characteristics

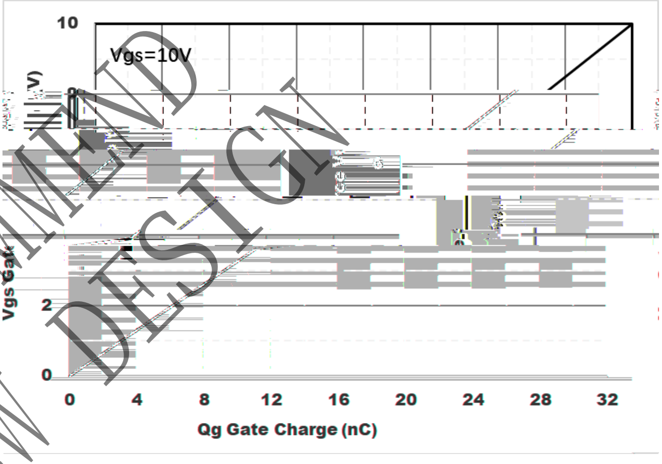


Figure4. Gate Charge

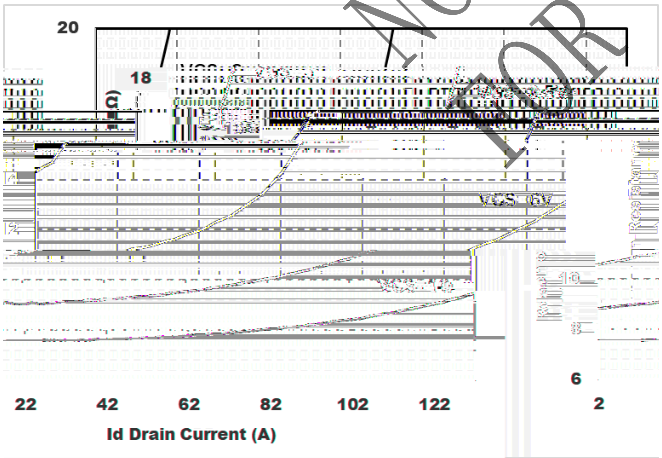


Figure5. : On-Resistance vs. Gate to Source Voltage

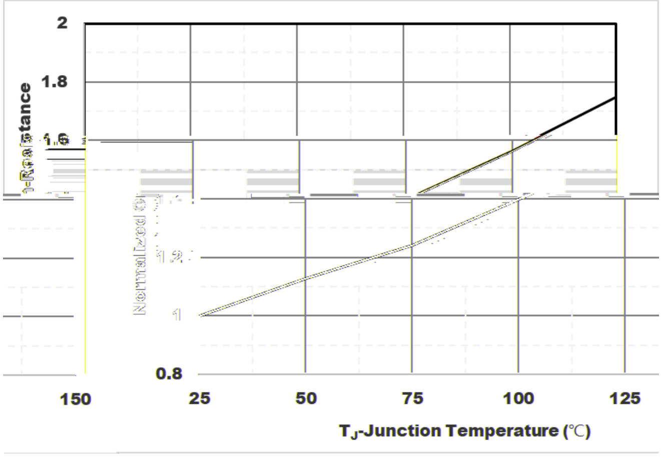
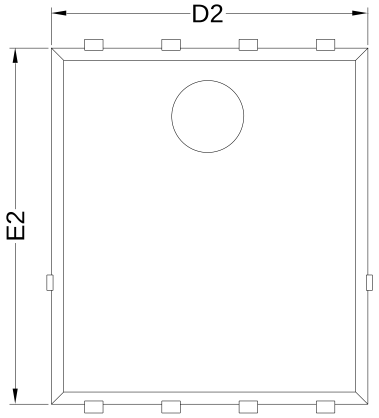


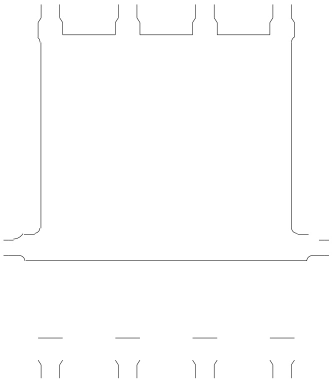
Figure6.Normalized On-Resistance

Figure7. Drain current

Figure8.Safe Operation Area

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:±0.10mm.
3.The pad layout is for reference purposes only.

Disclaimer

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