



YJG60G10BQ

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	100V
I_D	60A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	12 mohm
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	15 mohm
100% UIS Tested	
100% VDS Tested	

General Description

Split gate trench MOSFET technology
 Excellent package for heat dissipation
 High density cell design for low $R_{DS(ON)}$
 Part no. with suffix "Q" means AEC-Q101 qualified

Applications

Frequency Switching
 Continuous Rectification
 and 48V Automotive systems

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	$T_C=25$	I_D	60	A
	$T_C=125$		28	
Pulsed Drain Current ^A		I_{DM}	240	A
Avalanche energy ^B		EAS	200	mJ

Total Power Dissipation ^C

x	Units
	V
	μA
0	nA
3	V
	m
	m

	A
--	---



Typical Performance Characteristics

Figure 1. Output Characteristics

Figure 2. Transfer Characteristics

Figure 3. Capacitance Characteristics

Figure 4. Gate Charge

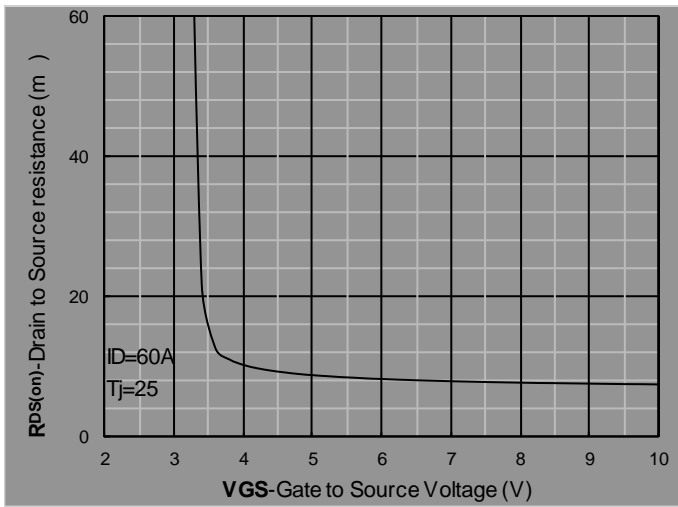


Figure 5.

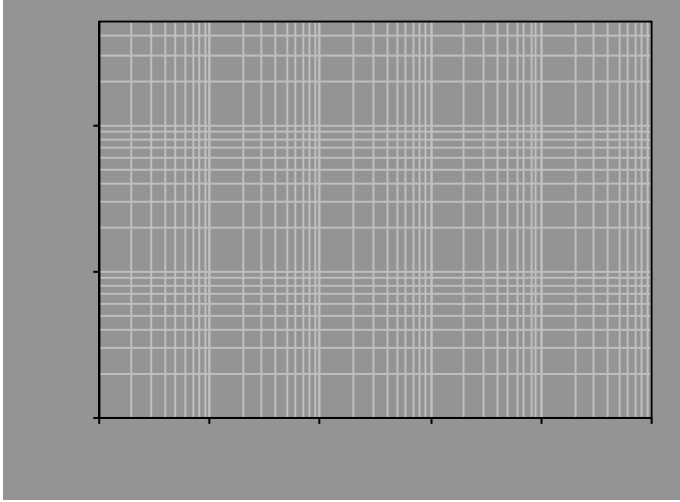


Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area

YJG60G10BQ



YJG60G10BQ

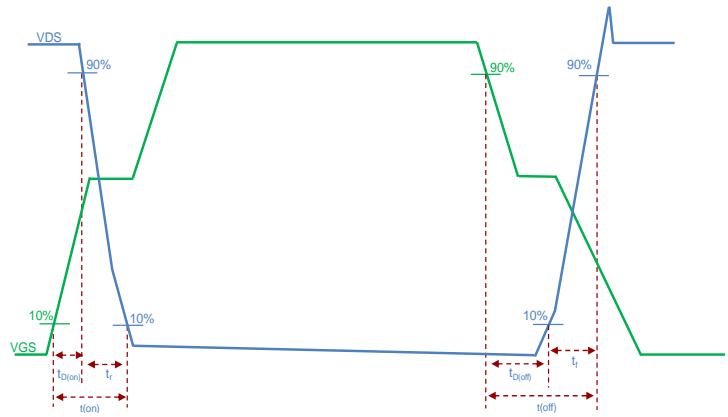
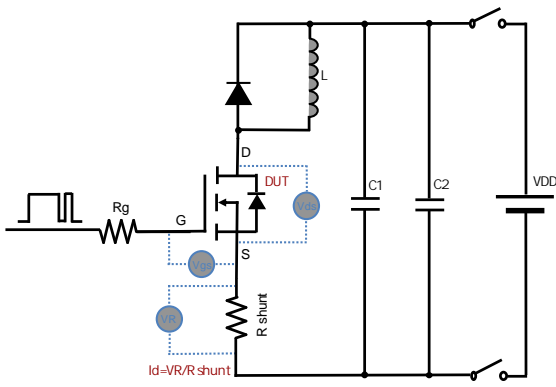


Figure C. Resistive Switching Test Circuit & Waveform

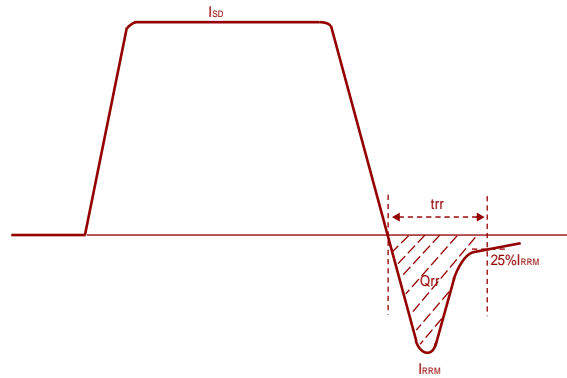
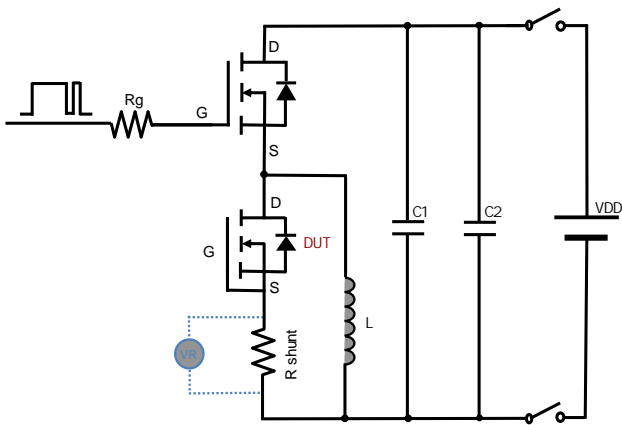
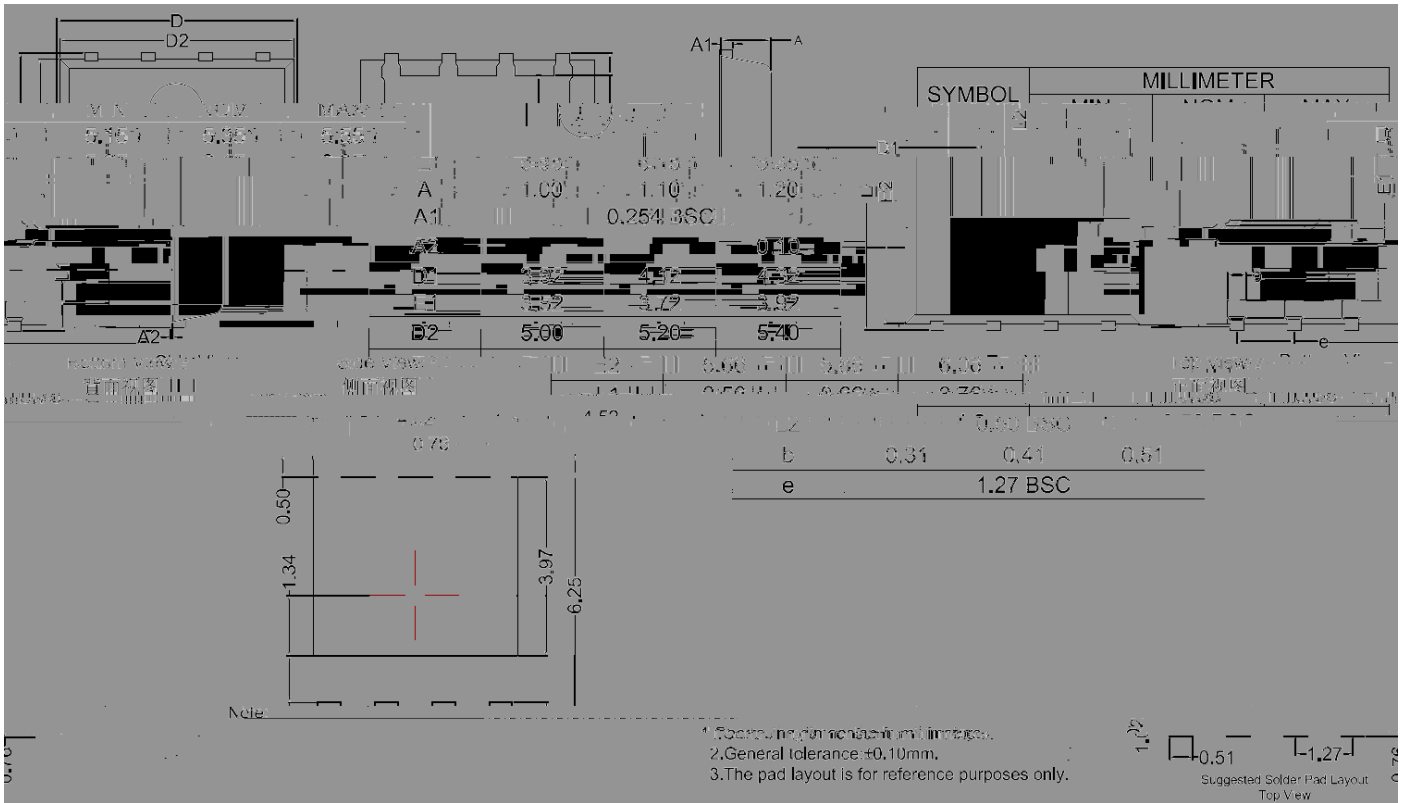


Figure D. Diode Recovery Test Circuit & Waveform



YJG60G10BQ

PDFN5060 Package information





YJG60G10BQ

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics are not designed for use in medical, life-saving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.