



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 ($T_A=25^\circ\text{C}$ 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

	V
	A



Typical Performance Characteristics

Figure 1. Output Characteristics

Figure 2. Transfer Characteristics

Figure 3. Capacitance Characteristics

Figure 4. Gate Charge

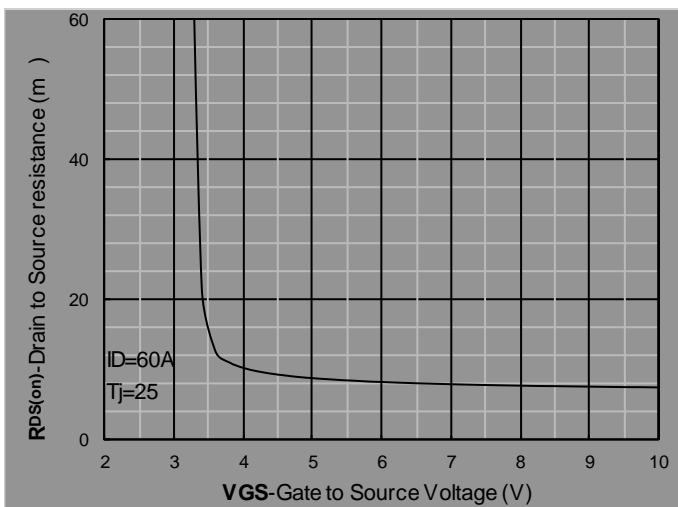


Figure 5.

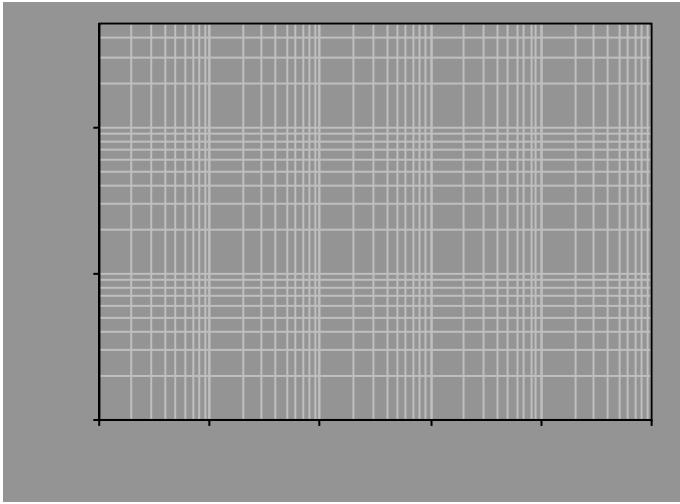


Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area

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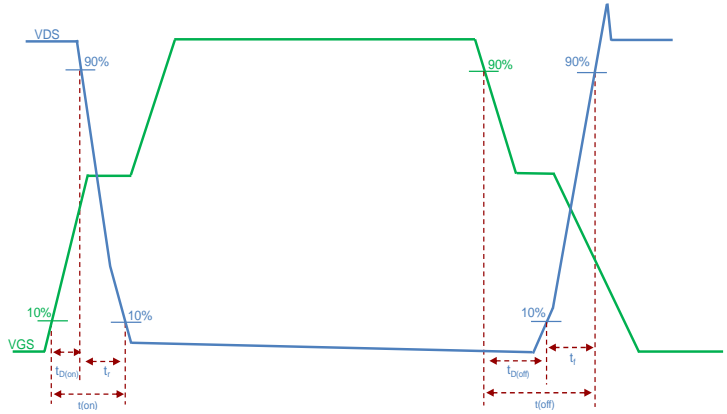
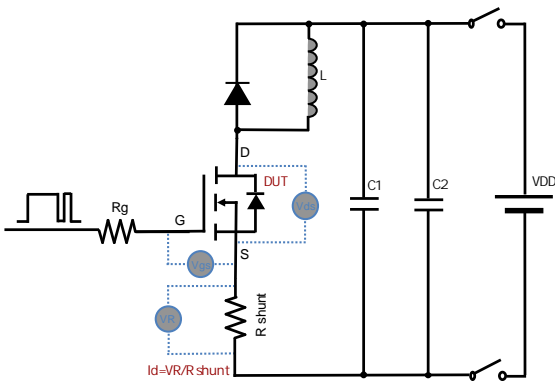


Figure C. Resistive Switching Test Circuit & Waveform

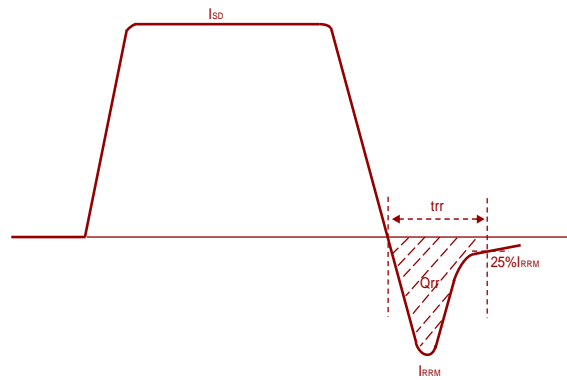
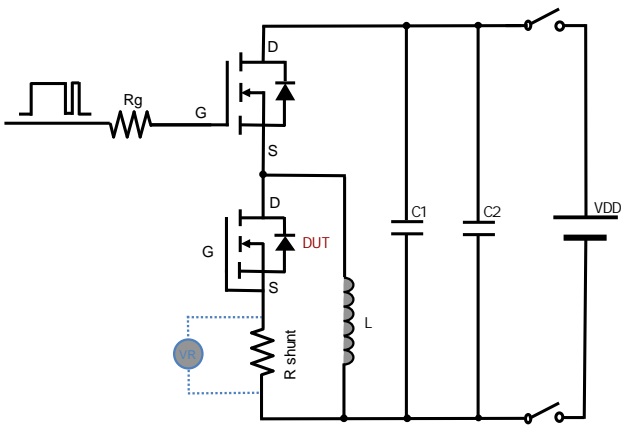
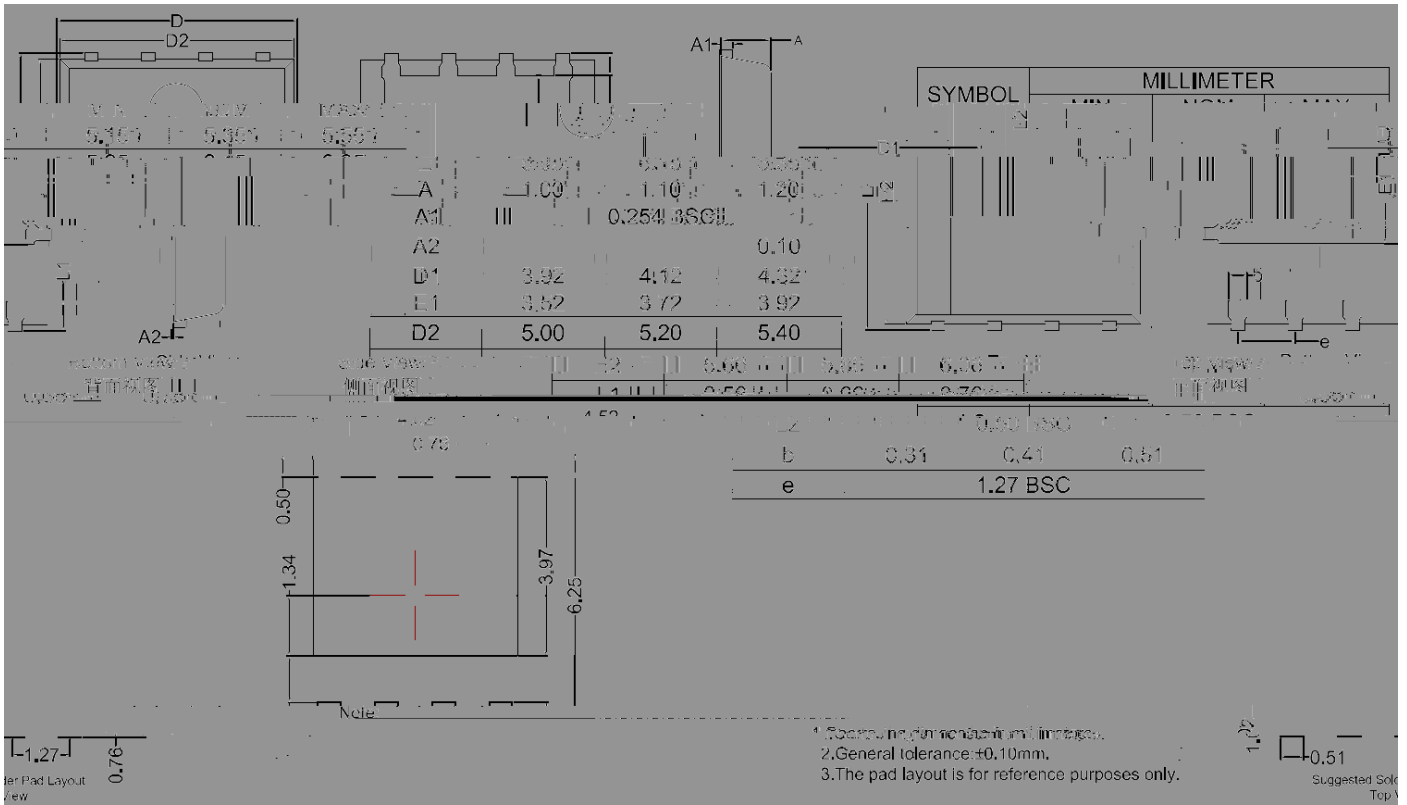


Figure D. Diode Recovery Test Circuit & Waveform



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PDFN5060 Package information





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