



# 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		$V_{GS}$	$\pm 20$	V
Drain Current	$T_C=25$	$I_D$	60	A
	$T_C=125$		28	
Pulsed Drain Current <sup>A</sup>		$I_{DM}$	240	A
Avalanche energy <sup>B</sup>		EAS	200	mJ

Total Power Dissipation <sup>C</sup>

x	Units
	V
	$\mu\text{A}$
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

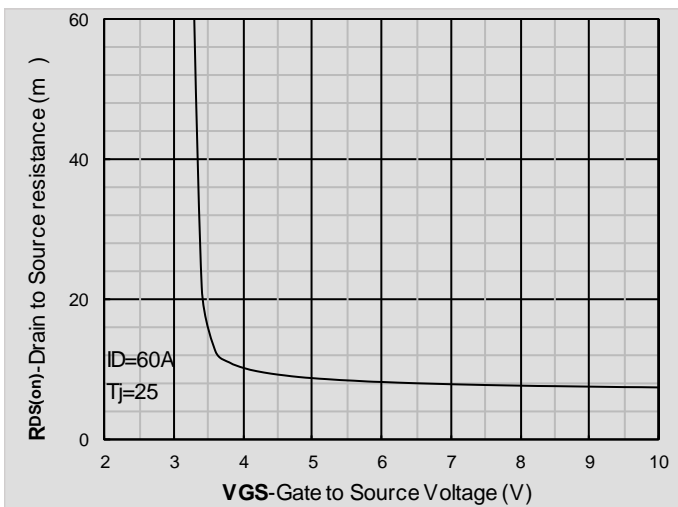


Figure 5.



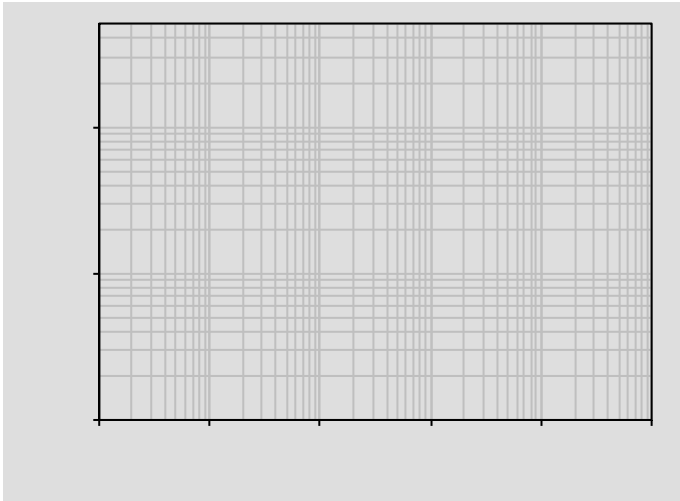


Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area

**YJG60G10BQ**



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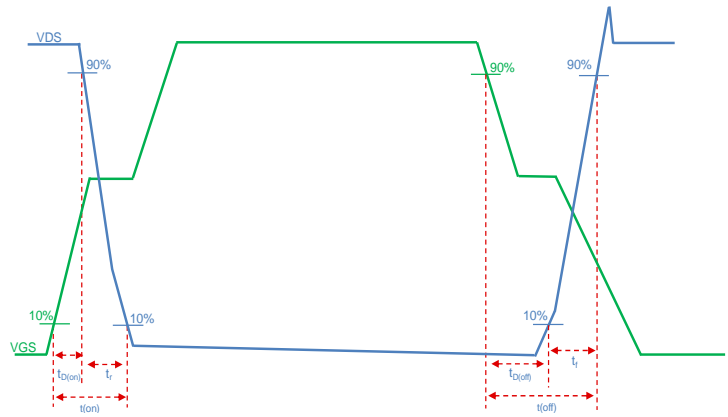
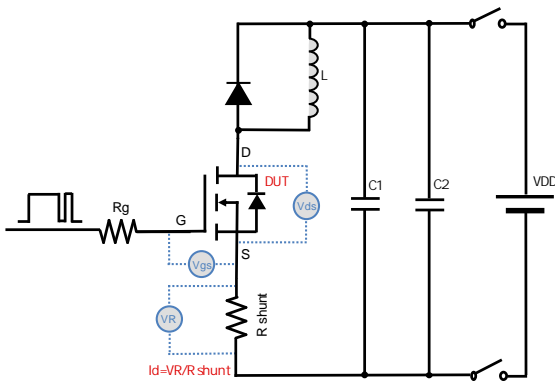


Figure C. Resistive Switching Test Circuit & Waveform

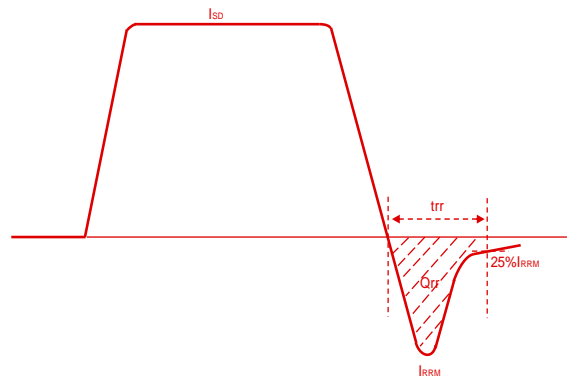
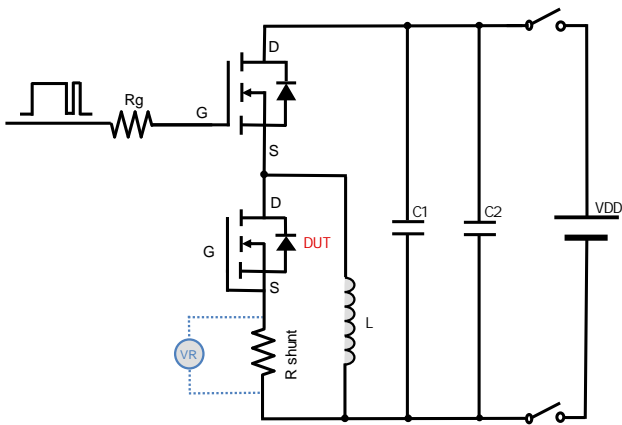
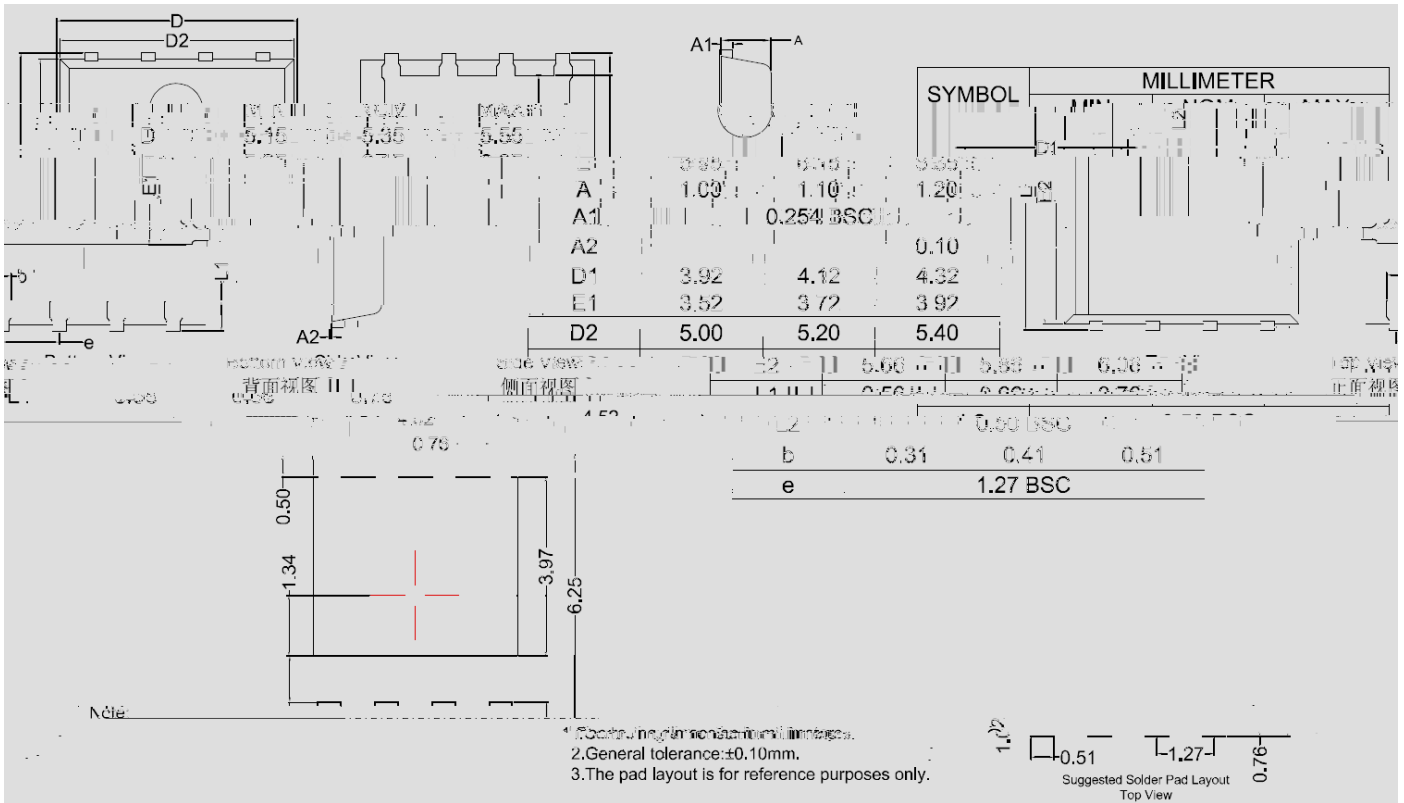


Figure D. Diode Recovery Test Circuit & Waveform



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## PDFN5060 Package information





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