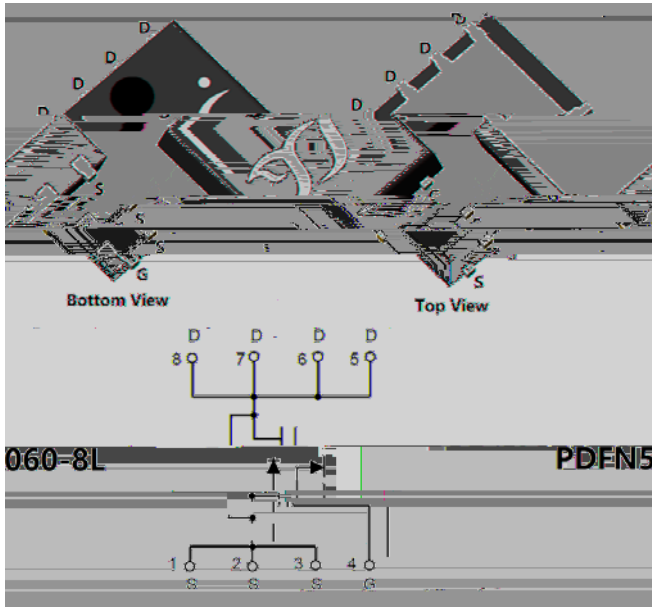


N-Channel Enhancement Mode Field Effect Transistor



Product Summary

V_{DS}	100V
I_D	58A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	12m
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	17m
100% EAS Tested	
100% V_{DS} Tested	

General Description

Excellent package for heat dissipation

< high density cell design for low $R_{DS(ON)}$

Moisture Sensitivity Level 1

Epoxy Meets UL - 0 Flammability Rating

Part no. with suffix \bar{I} means AEC-Q101 qualified

Applications

Power switching application

Uninterruptible power supply

DC-DC convertor

12V,24V and 48V Automotive system

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		58		
	$T_C=100$		41	
Pulsed Drain Current ^A	I_{DM}	180	A	
Avalanche energy ^B	EAS	81	mJ	
Total Power Dissipation ^C	$T_A=25$		2.7	
	$T_A=100$		1.8	
	$T_C=25$	P_D		100
	$T_C=100$			50
Junction and Storage Temperature Range	T_J, T_{STG}	-55 +175		

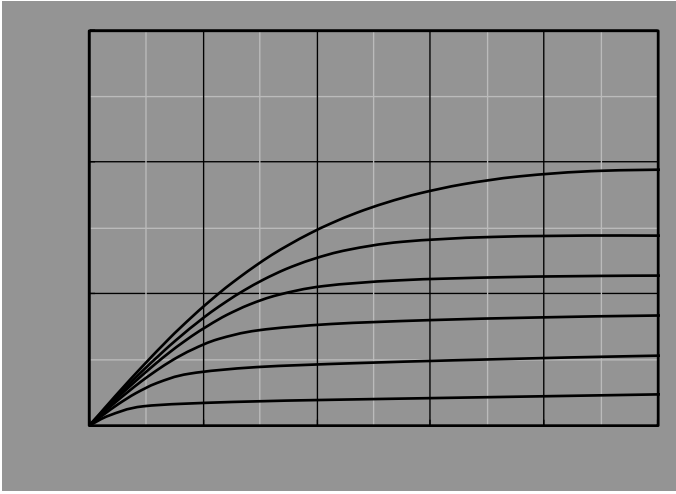


Thermal resistance



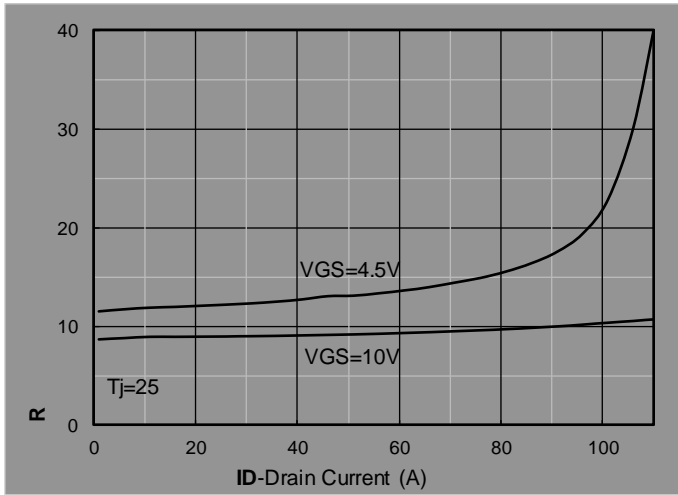


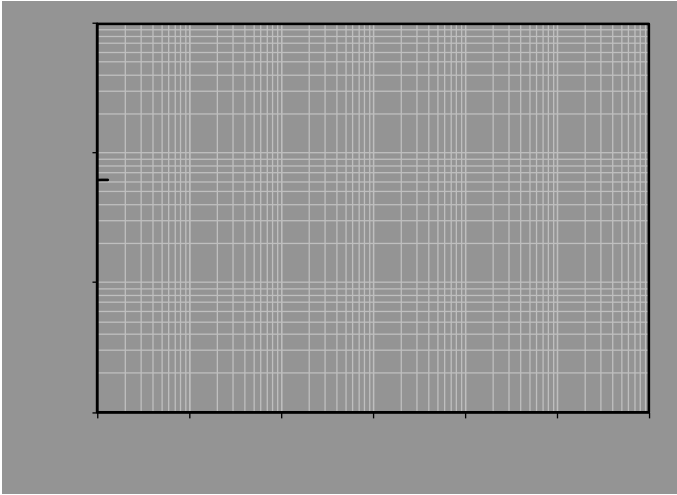
Typical Electrical and Thermal Characteristics Diagrams





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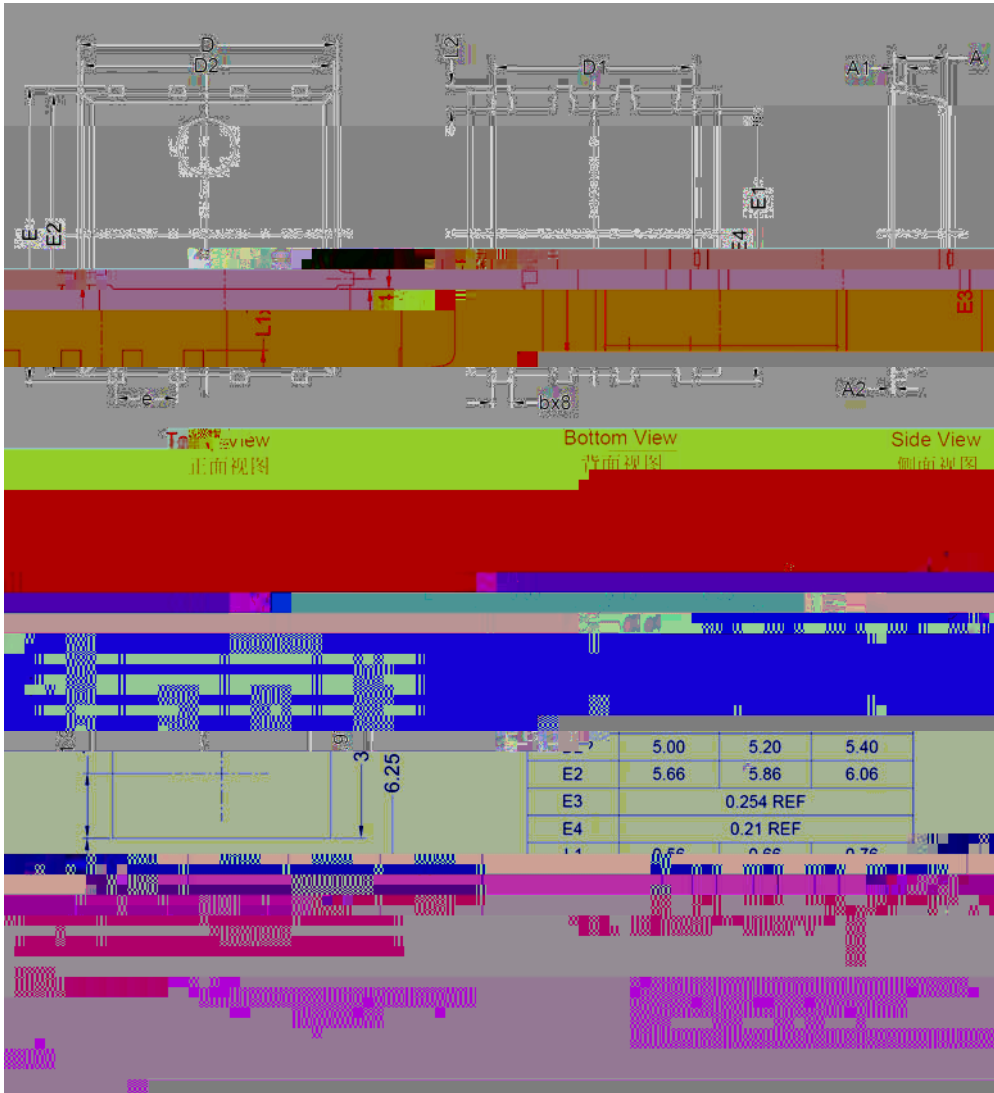






YJG58G10BQ

PDFN5060-8L-B-1.1MM Package information





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Disclaimer

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The product listed herein is designed to be used with automotive electronics