



# YJGD085P10A

## P-Channel and P-Channel Complementary MOSFET

### Product Summary

$V_{DS}$	-100V
$I_D$	-17A
$R_{DS(ON)}$ ( at $V_{GS}=-10V$ )	85m
$R_{DS(ON)}$ ( at $V_{GS}=-4.5V$ )	105m
100% EAS Tested	
100% $V_{DS}$ Tested	

### General Description

Trench Power 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

Power switching application  
 Uninterruptible power supply  
 DC-DC convertor

### Absolute Maximum Ratings ( $T_J=25$ unless otherwise noted)

Parameter			Symbol	Limit	Unit	
Drain-source Voltage			$V_{DS}$	-100	V	
Gate-source Voltage			$V_{GS}$	$\pm 20$	V	
Continuous Drain Current (Note 1,2)	Steady-State	$T_A=25$ , $V_{GS}=-10V$	$I_D$	-3.4	A	
		$T_A=100$ , $V_{GS}=-10V$		-2.1		
Continuous Drain Current (Note 1,3)	Steady-State	$T_C=25$ , $V_{GS}=-10V$		-17		
		$T_C=100$ , $V_{GS}=-10V$		-10.7		
Pulsed Drain Current	$T_C=25$ , $t_p=100\mu s$		$I_{DM}$	-60	A	
Avalanche energy			$V_{GS}=-10V, R_G$ , $L=0.5mH, I_{AS}=-16A$	EAS	64	mJ
Total Power Dissipation (Note 1,2)	Steady-State	$T_A=25$	$P_D$	2	W	
		$T_A=100$		0.8		
Total Power Dissipation (Note 1,3)	Steady-State	$T_C=25$		59		
		$T_C=100$		23		
Junction and Storage Temperature Range			$T_J, T_{STG}$	-55 +150		

### Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient (Note 2)	Steady-State	R	50	60	/W
Thermal Resistance Junction-to-Case	Steady-State	R	1.7	2.1	

### Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)
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## Electrical Characteristics ( $T_J=25$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=-$	-100	-	-	V





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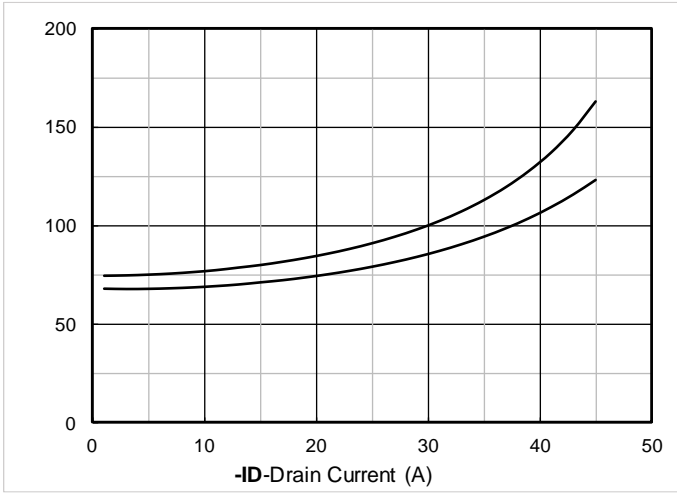


Figure 7.  $R_{DS(on)}$  VS Drain Current

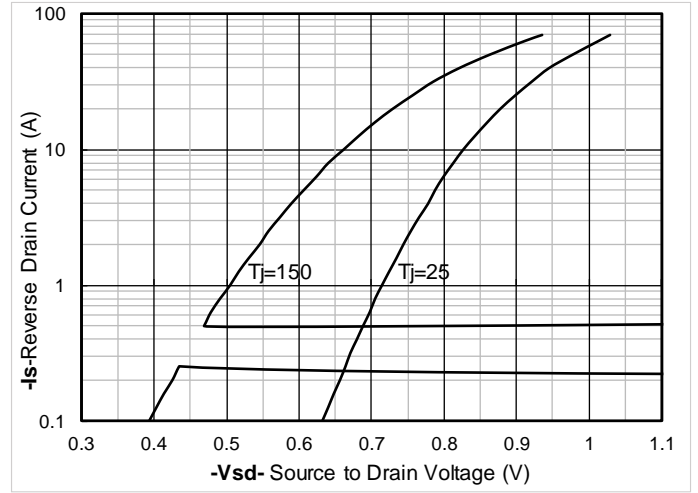


Figure 8. Forward characteristics of reverse diode

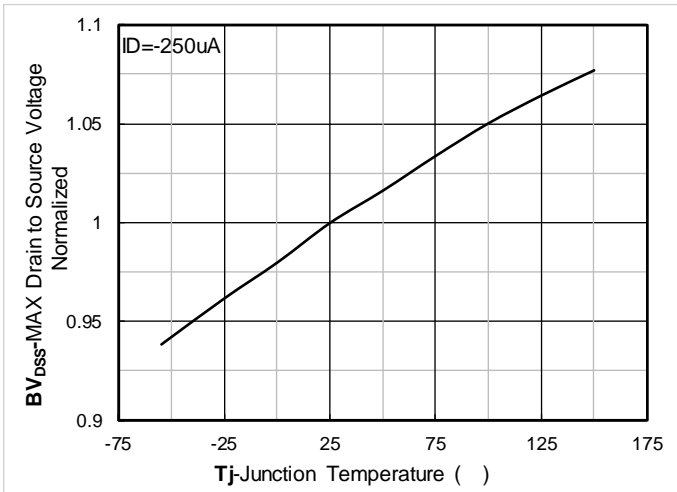


Figure 9. Normalized breakdown voltage

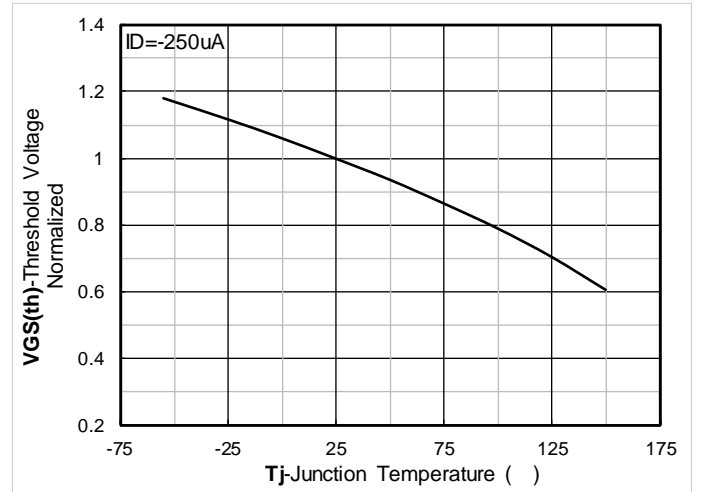


Figure 10. Normalized Threshold voltage

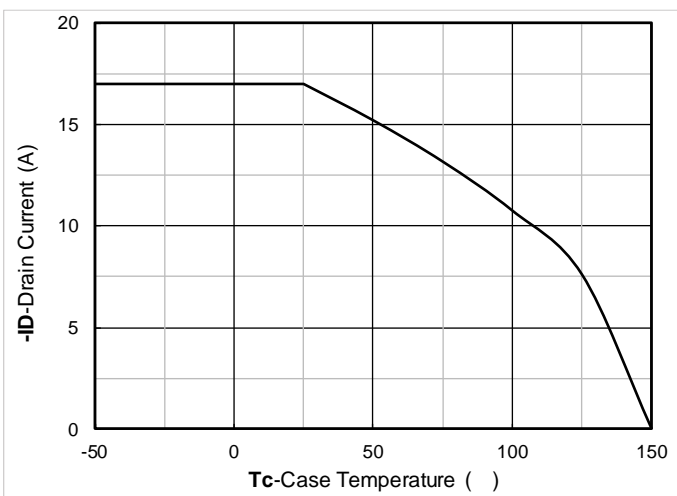


Figure 11. Current dissipation

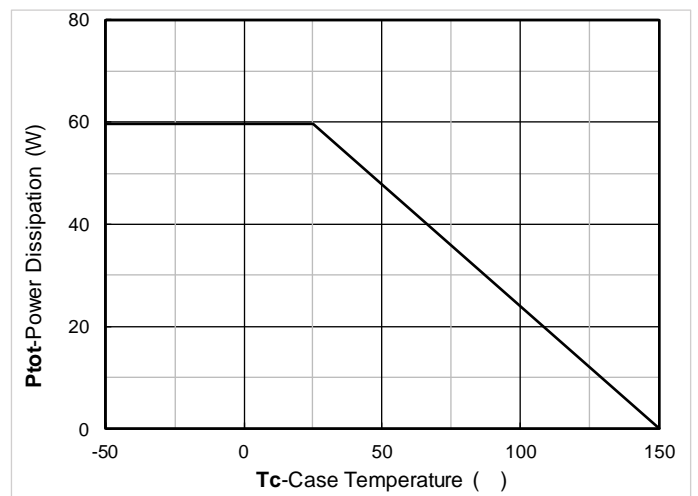


Figure 12. Power dissipation

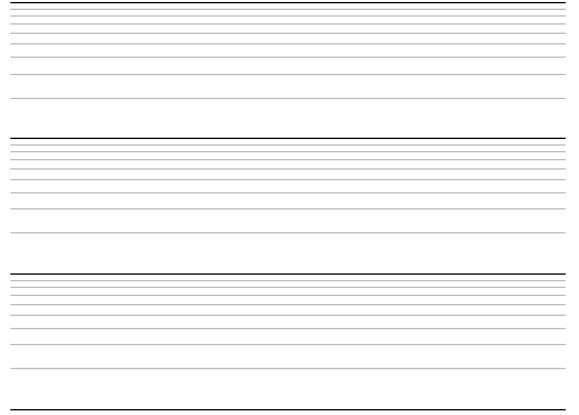
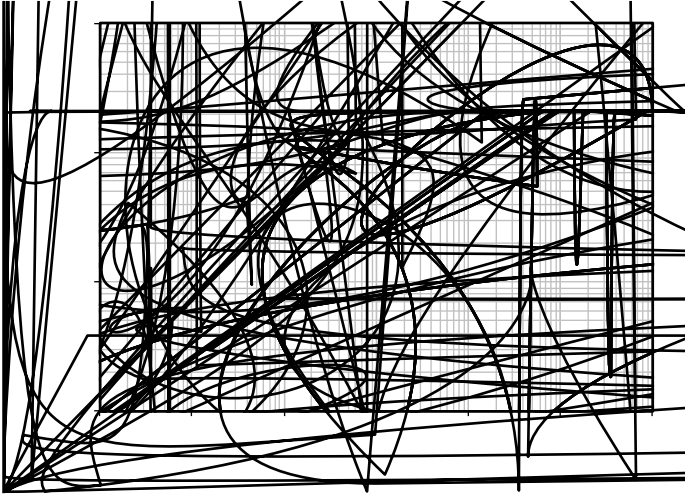
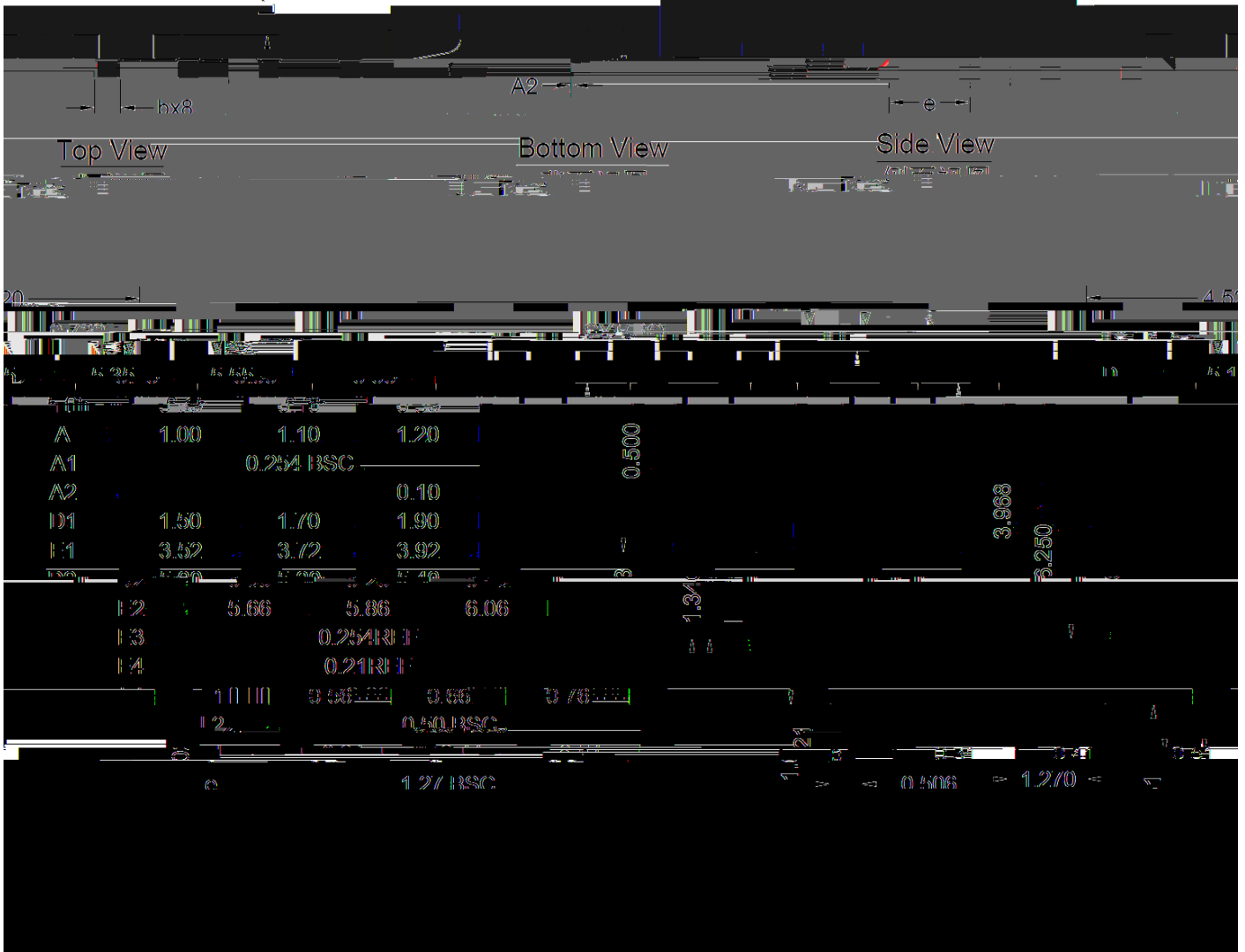
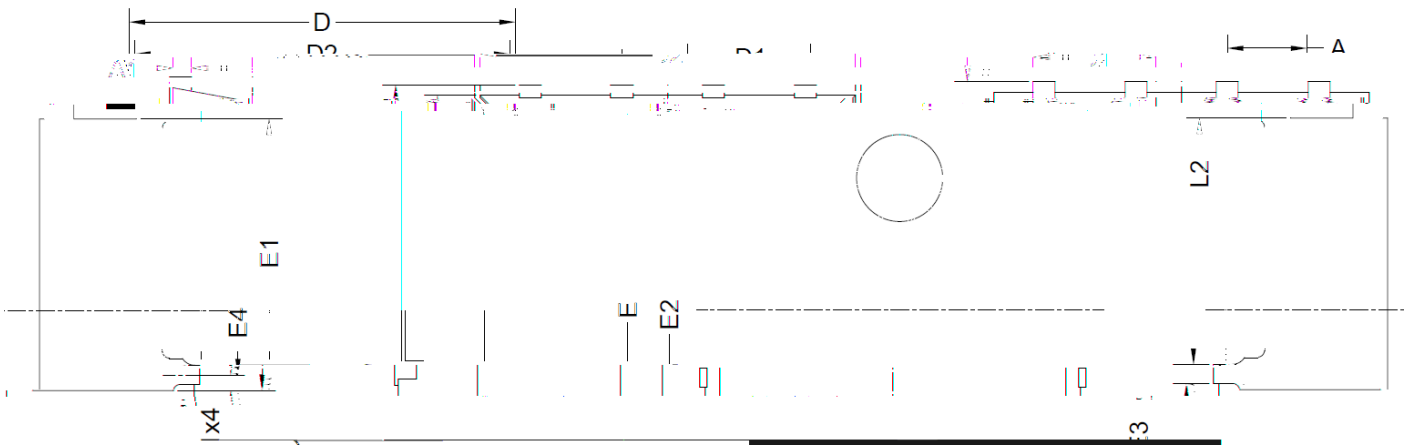


Figure 13.



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## PDFN5060-8L-E-1.1mm Package information





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## 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, cation of the products d/F5 1