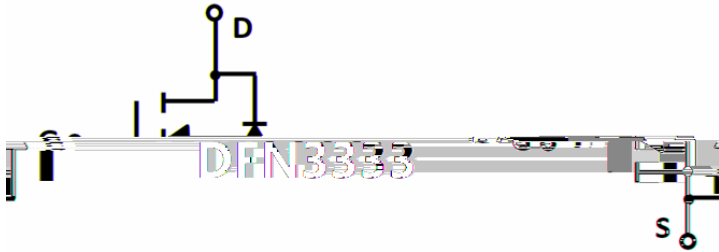
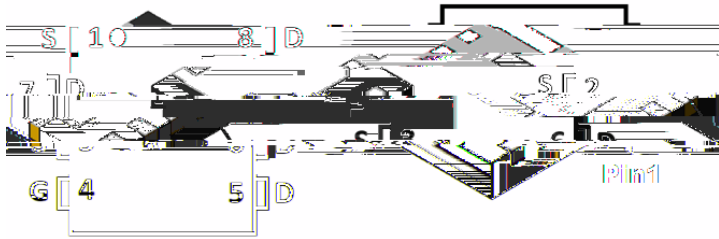




N-Channel Enhancement Mode Field Effect Transistor



Product Summary

V_{DS}	30 V
I_D	60 A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	3.2 mohm
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	4.0 mohm
100% UIS Tested	
100% VDS Tested	

General Description

Trench Power LV MOSFET technology
Excellent package for heat dissipation
High density cell design for low $R_{DS(ON)}$

Applications

DC-DC Converters
Power management functions
Backlighting

Absolute Maximum Ratings ($T_A=25$ unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	30	V
Gate-source Voltage		V_{GS}	± 20	V
Drain Current	$T_C=25$	I_D	60	A
	$T_C=100$		38	
Pulsed Drain Current ^A		I_{DM}	240	A
Total Power Dissipation @ $T_C=25$ ^B		P_D	75	W
Total Power Dissipation @ $T_C=100$ ^B		P_D	30	W
Total Power Dissipation @ $T_A=25$ ^C		P_D	6.2	W
Single Pulse Avalanche Energy ^D		E_{AS}	400	mJ
Thermal Resistance Junction-to-Case		R_{JC}	1.67	/W
Thermal Resistance Junction-to-Ambient		R_{JA}	20	/W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 +150	

Ordering Infor.

M

M

					OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJQ60N03A	F1	Q60N03A	5000	10000	100000	13" reel



YJQ60N03A

Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =250μA	30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{GS} =30V, V _{GS} =0V			1	μA
Gate-Body Leakage Current	I _{GSS}	V _{GS} ± 20V, V _{DS} =0V			± 100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D				



Typical Performance Characteristics

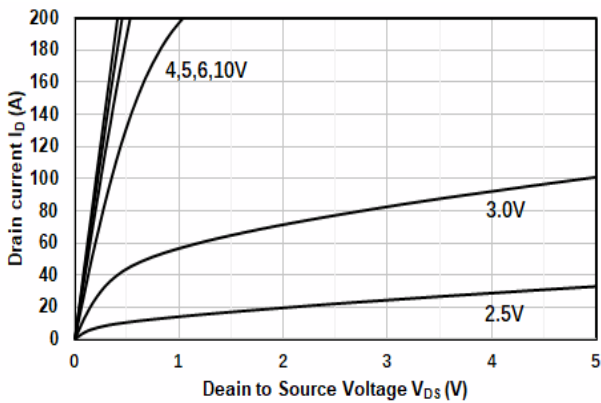


Figure1. Output Characteristics

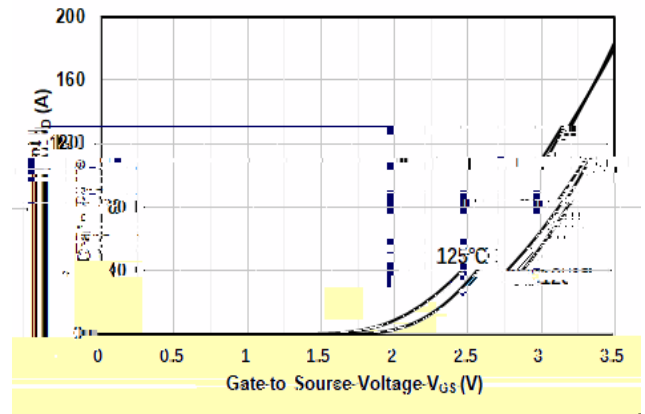


Figure2. Transfer Characteristics

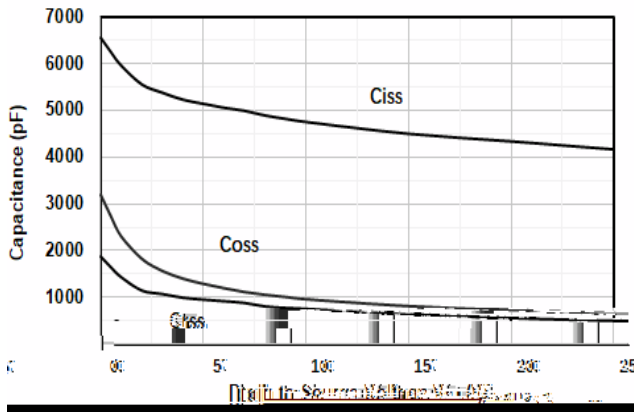


Figure3. Capacitance Characteristics

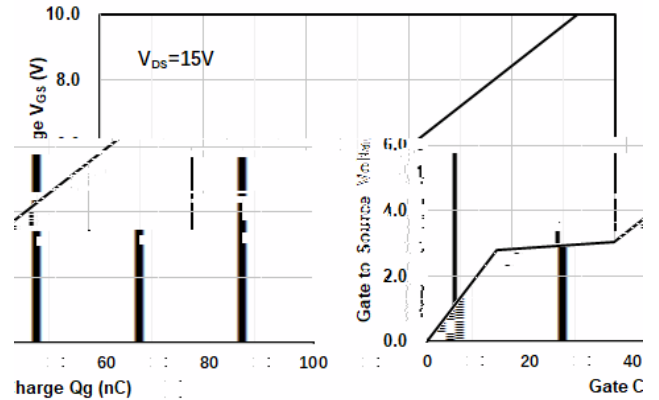


Figure4. Gate Charge

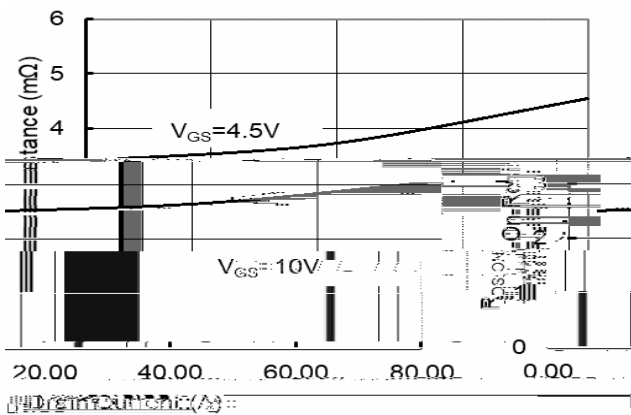


Figure5. Drain-Source on Resistance

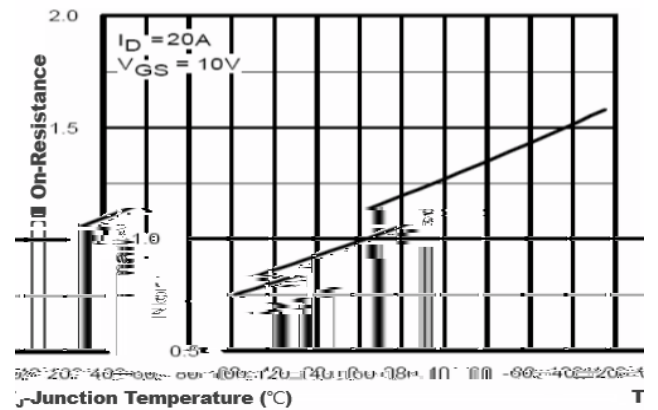


Figure6. Drain-Source on Resistance

u Ô ‡ W \$ 4 y



YJQ60N03A

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

T to e w