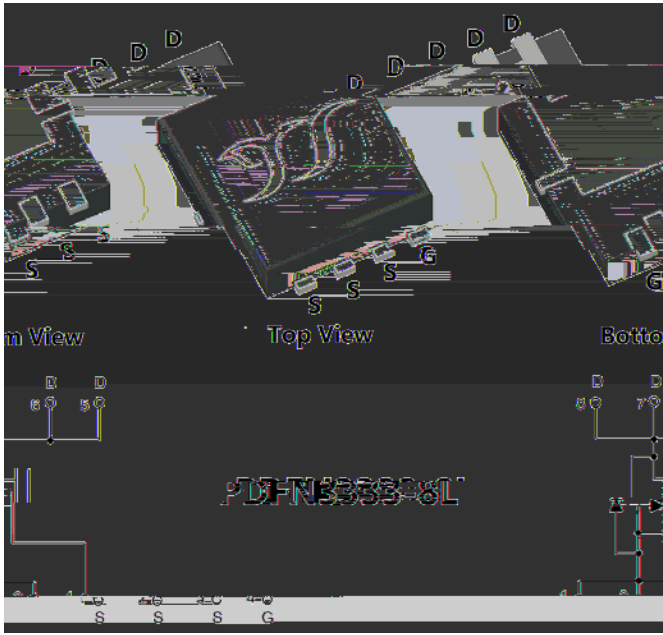




%00 I V



ds Tested

General Description
Excellent package fo

				Unit	
Drain-source Voltage			V_{DS}	40 V	
Gate-source Voltage			V_{GS}	±20 V	
Continuous Drain Current (Note 1,2)	Steady-State	$T_A=25^\circ\text{C}, V_{GS}=10\text{V}$	I_D	16.9	A
		$T_A=100^\circ\text{C}, V_{GS}=10\text{V}$		11.9	
Continuous Drain Current (Note 1,3)	Steady-State	$T_C=25^\circ\text{C}, V_{GS}=10\text{V}$		75	
		$T_C=100^\circ\text{C}, V_{GS}=10\text{V}$		53	
Pulsed Drain Current	$T_C=25^\circ\text{C}, t=100\mu\text{s}$		I_{DM}	250 A	
Avalanche energy	$V_G=10\text{V}, R_G=25^\circ, L=0.5\text{mH}, I_{AS}=14.7\text{A}$		EAS	54 mJ	
Total Power Dissipation (Note 1,2)	Steady-State	$T_A=25^\circ\text{C}$	P_D	2.3	W
		$T_A=100^\circ\text{C}$		1.1	

	J, T_{STG}	-55 +175	
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Thermal resistance

Parameter	Symbol	Typ
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			MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJQ4D8G04HQ	F1	Q4D8G04	5000	10000	100000	13" reel

YJQ4D8G04HQ



YJQ4D8G04HQ

Typical Electrical and Thermal Characteristics Diagrams

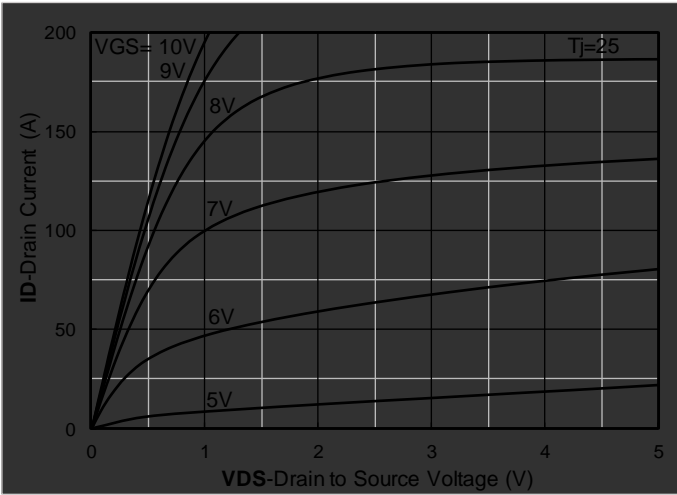


Figure 1. Output Characteristics

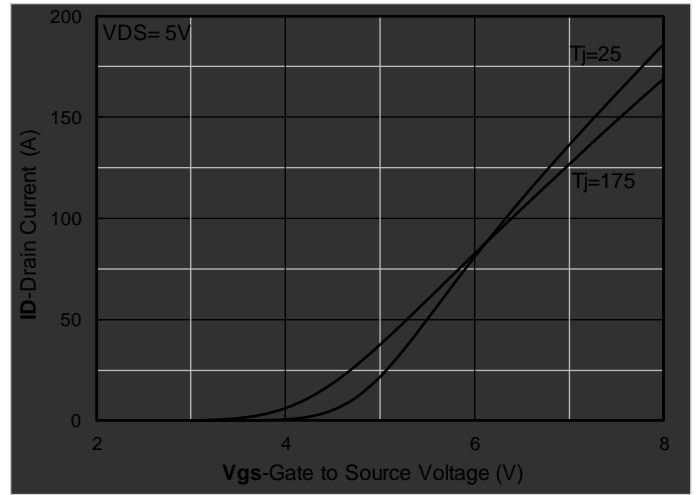


Figure 2. Transfer Characteristics

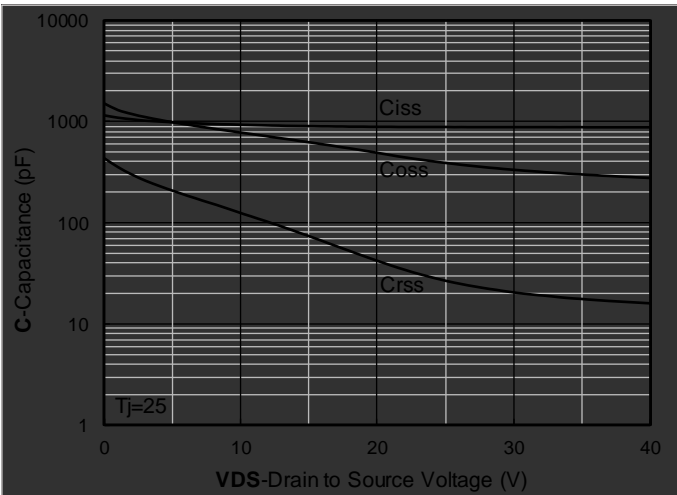


Figure 3. Capacitance Characteristics

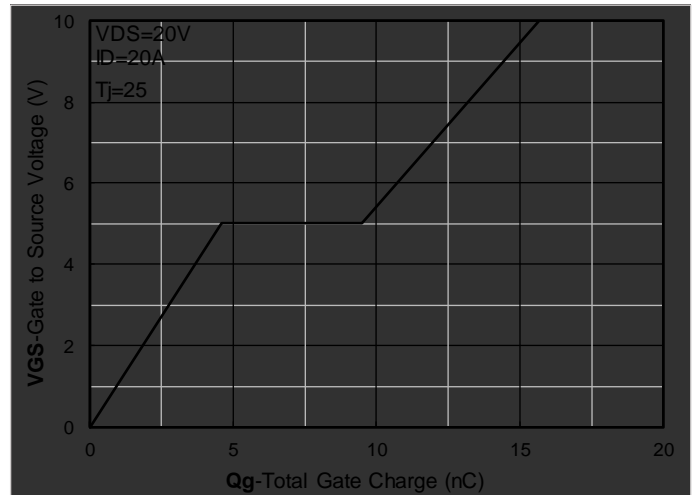


Figure 4. Gate Charge

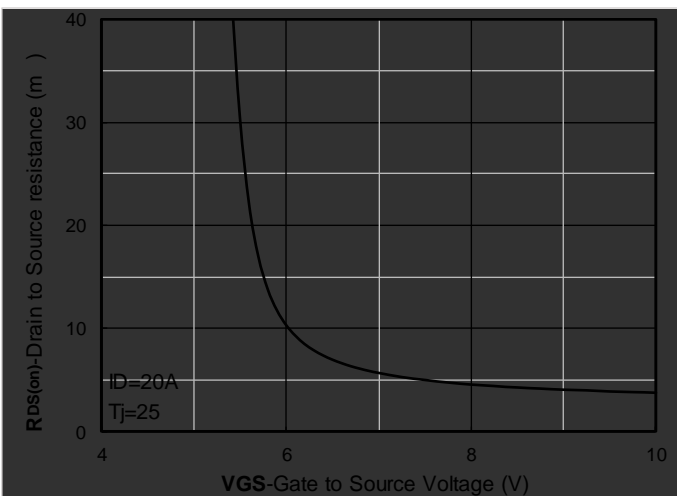


Figure 5. On-Resistance vs Gate to Source Voltage

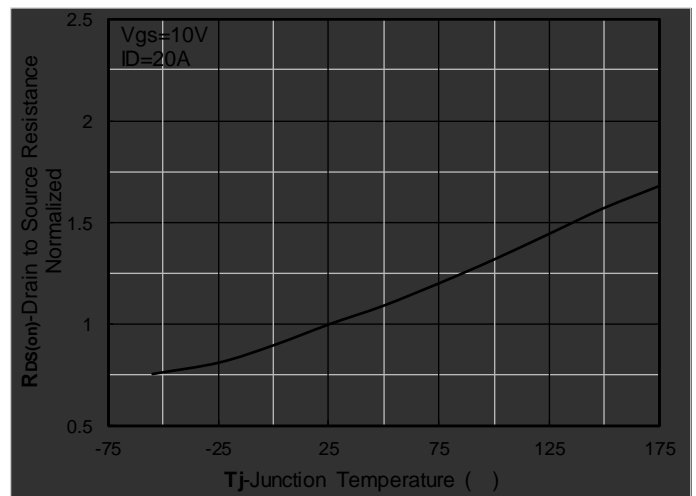


Figure 6. Normalized On-Resistance



YJQ4D8G04HQ

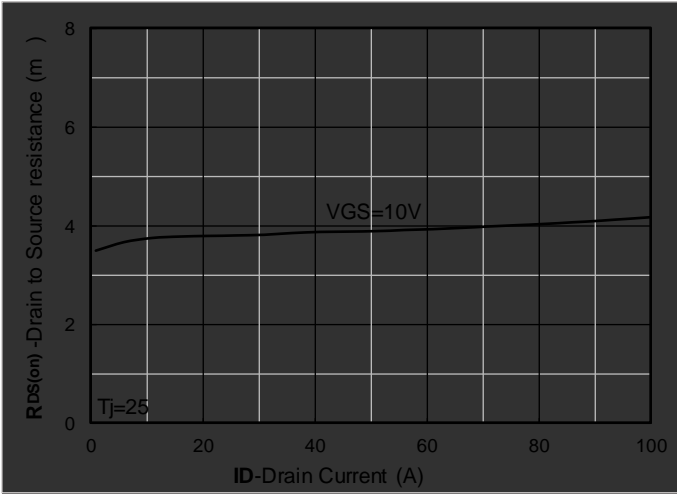


Figure 7. RDS(on) VS Drain Current

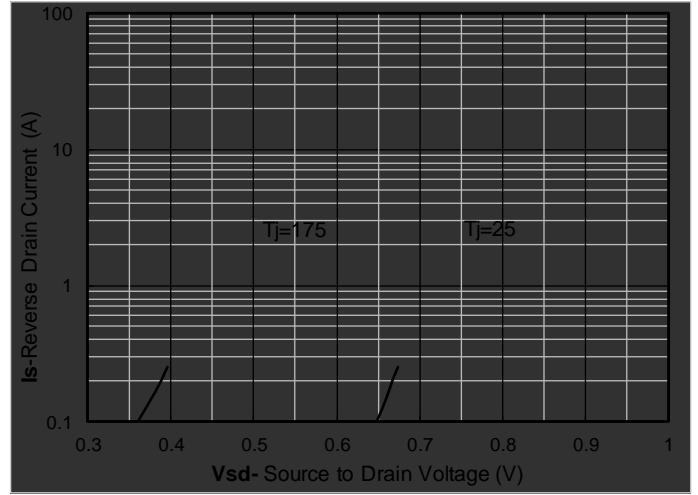


Figure 8. Forward characteristics of reverse diode

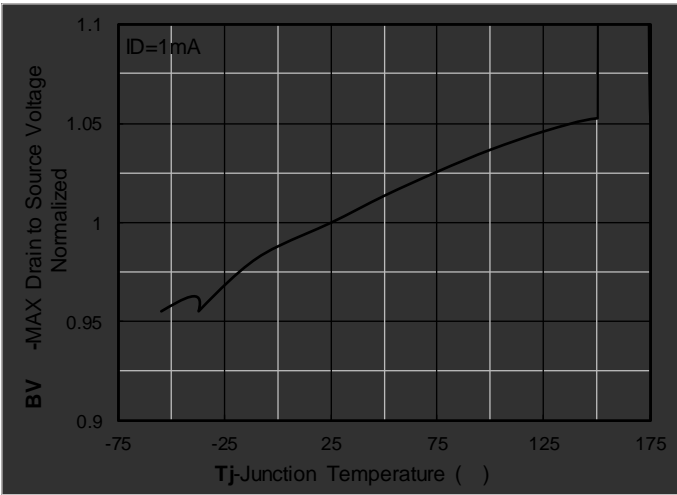


Figure 9. Normalized breakdown voltage

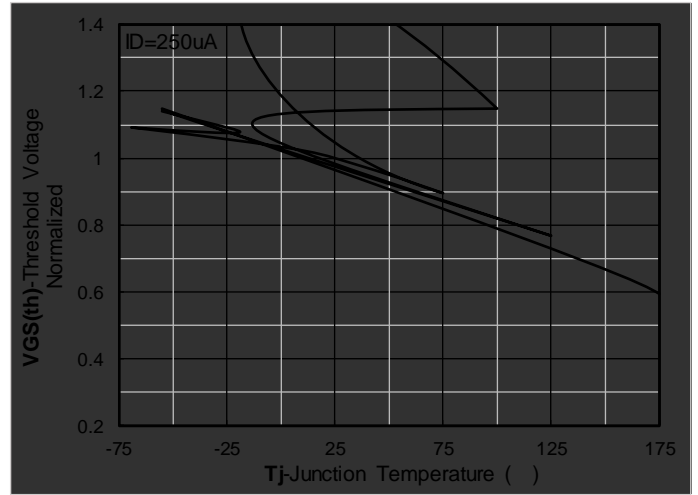


Figure 10. Normalized Threshold voltage

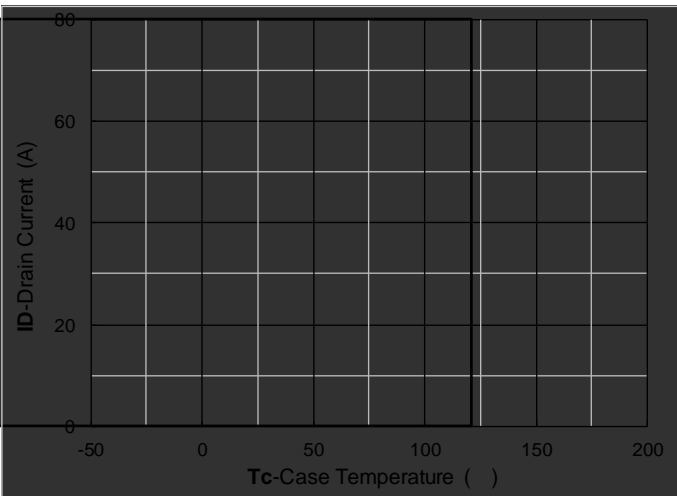


Figure 11. Current dissipation

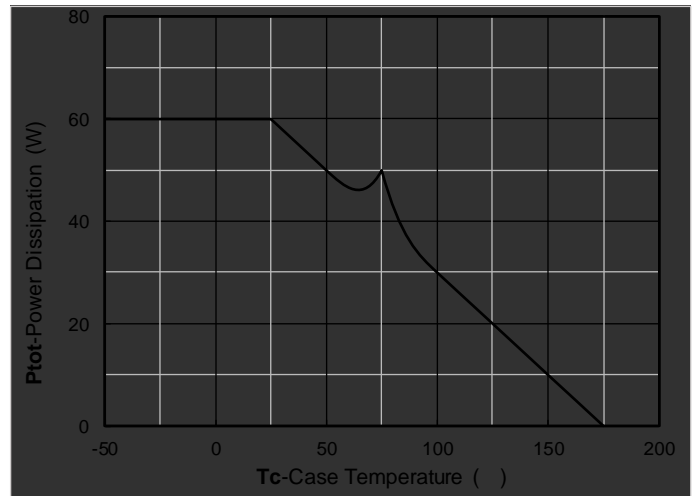


Figure 12. Power dissipation

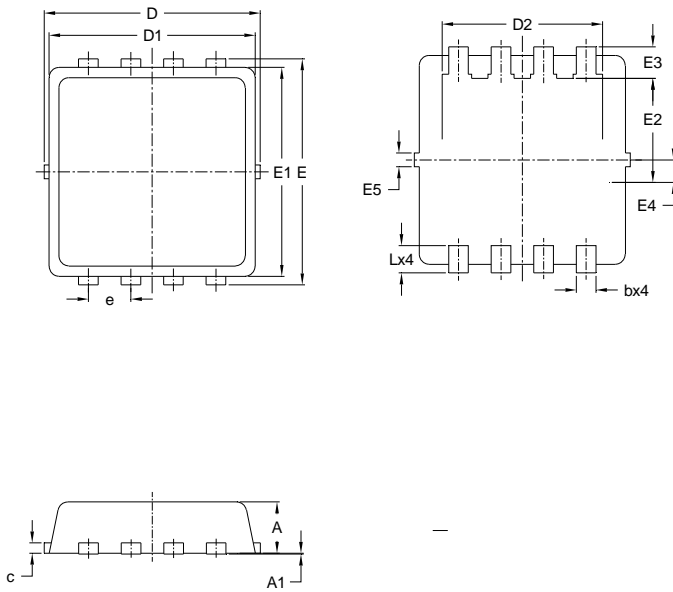


quare



YJQ4D8G04HQ

PDFN3333-8L-B-0.75MM Package information



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.028	0.033	0.700	0.850
A1	0.000	0.002	0.000	0.050
b	0.008	0.016	0.200	0.400
c	0.004	0.010	0.100	0.250
D	0.124	0.136	3.150	3.450
D1	0.118	0.130	3.000	3.300
D2	0.089	0.104	2.250	2.650
E	0.124	0.136	3.150	3.450
E1	0.114	0.126	2.900	3.200
E2	0.052	0.068	1.320	1.720
E3	0.011	0.026	0.280	0.650
E4	0.013 REF		0.330 REF	
E5	0.008 REF		0.200 REF	
e	0.026 BSC		0.650 BSC	
L	0.012	0.020	0.300	0.500

NOTE:

1. PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
2. TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
3. THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

UNIT mm

< - 4 ' * + 4

<DQJJKRX <DQJMLH (OHFWURQL