





# YJQ15GP10A

## Electrical Characteristics ( $T_J=25$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=-250$	-100			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=-100V, V_{GS}=0V$	$T_J=25$		-1	
			$T_J=55$		-5	
Gate-Body Leakage Current	$I_{GSS}$	$V_{GS}=20V, V_{DS}=0V$			100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250$	-1.0	-1.8	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10V, I_D=-10A$		83	110	m
		$V_{GS}=-4.5V, I_D=-5A$		95	120	
Diode Forward Voltage	$V_{SD}$	$I_S=-15A, V_{GS}=0V$			-1.3	V
Maximum Body-Diode Continuous Current	$I_S$				-15	A
Gate resistance	$R_g$	$f=1MHz$		10		
<b>Dynamic Parameters</b>						
Input Capacitance	$C_{iss}$	$V_{DS}=-50V, V_{GS}=0V, f=1MHz$		1051		pF
Output Capacitance	$C_{oss}$			119		
Reverse Transfer Capacitance	$C_{rss}$			25		
<b>Switching Parameters</b>						
Total Gate Charge	$Q_g(-10V)$					

$V_{GS}=-10V, V$



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## Typical Performance Characteristics

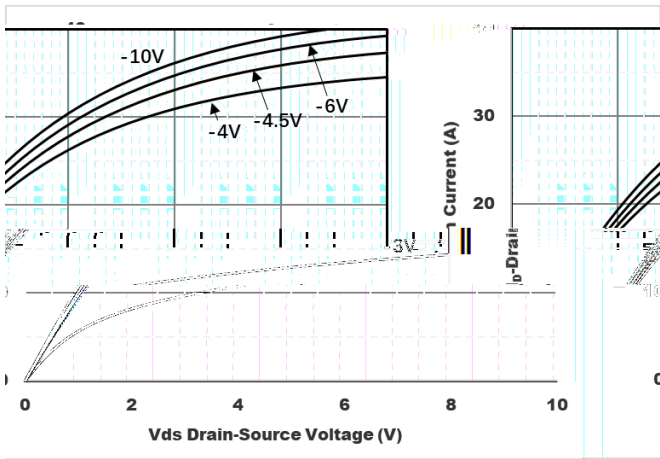


Figure1. Output Characteristics

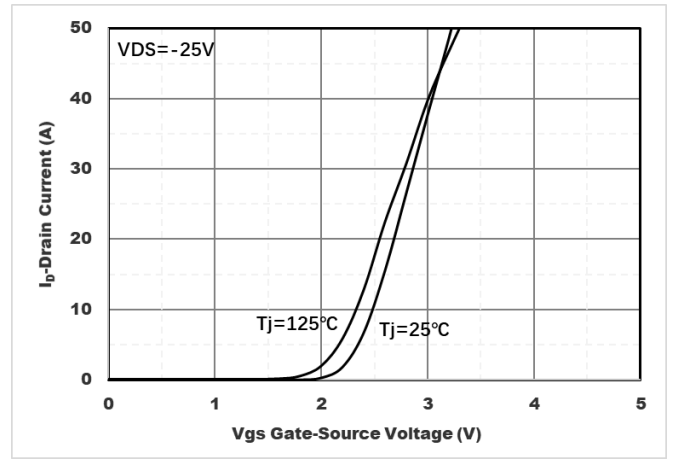


Figure2. Transfer Characteristics

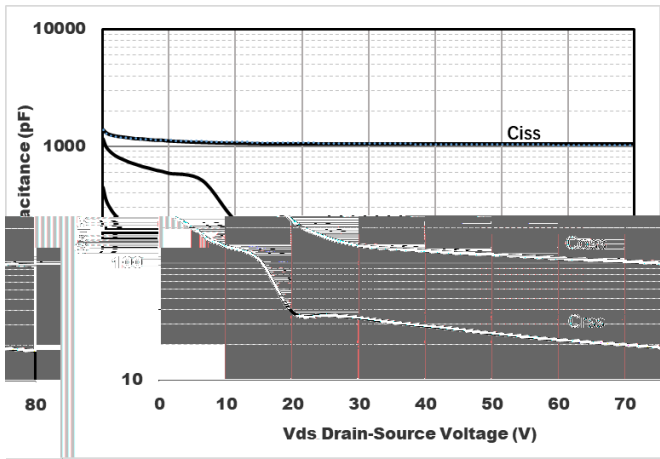


Figure3. Capacitance Characteristics

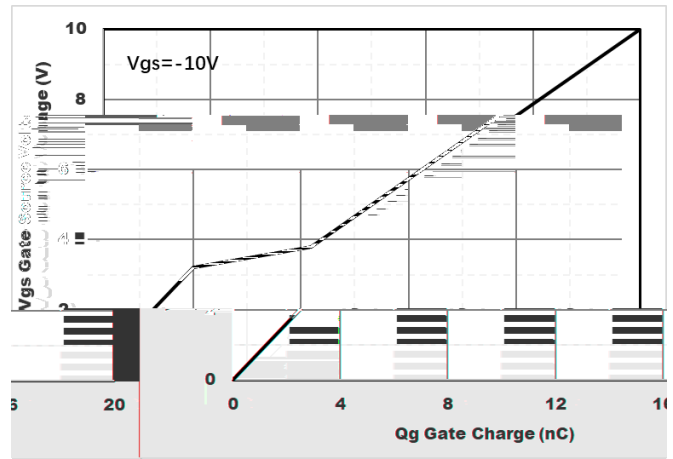


Figure4. Gate Charge

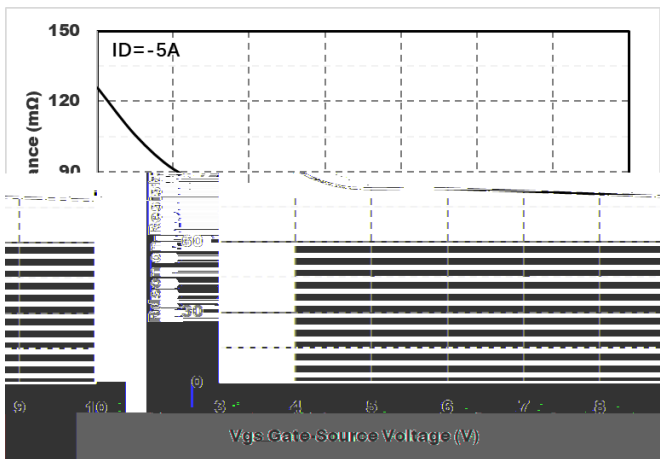


Figure5. : On-Resistance vs. Gate to Source Voltage

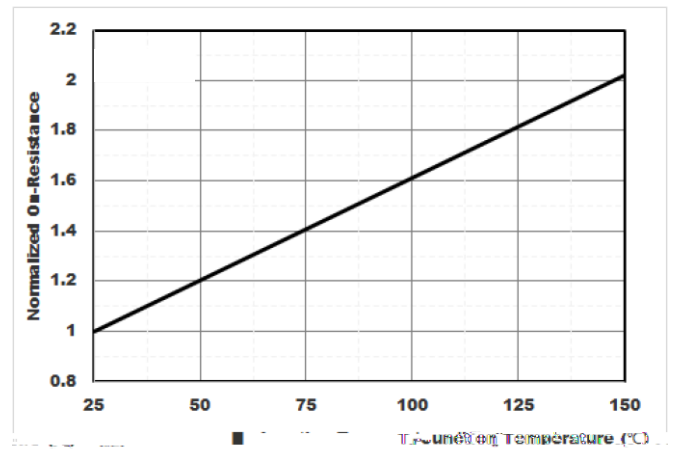


Figure6. Normalized On-Resistance



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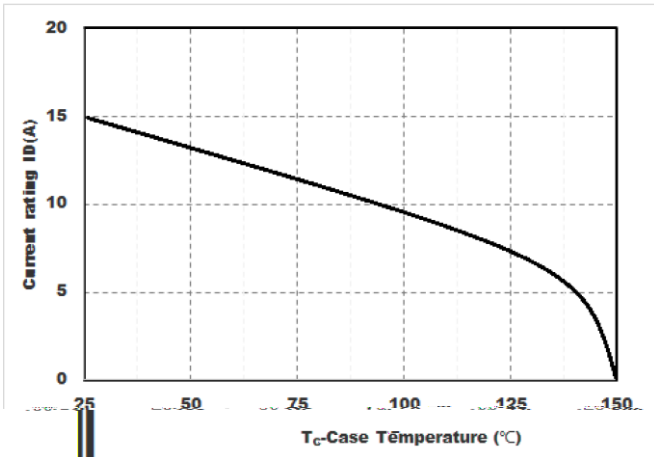


Figure7. Drain current

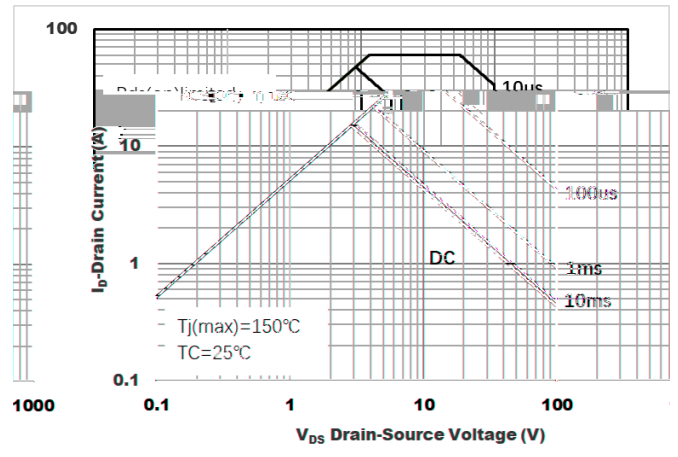


Figure8.Safe Operation Area

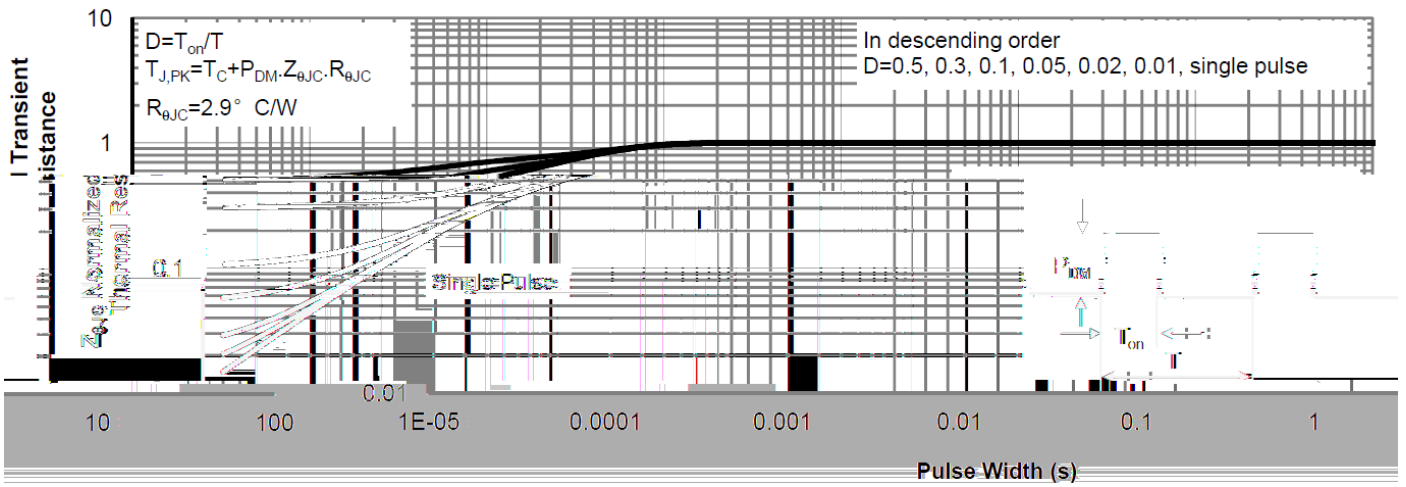


Figure9.Normalized Maximum Transient thermal impedance

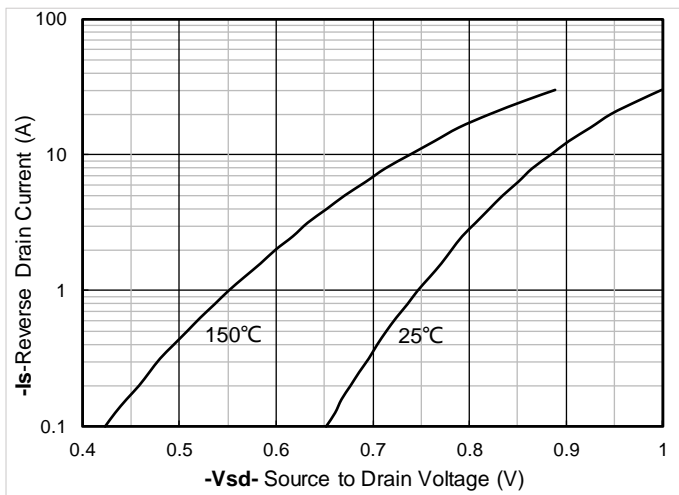
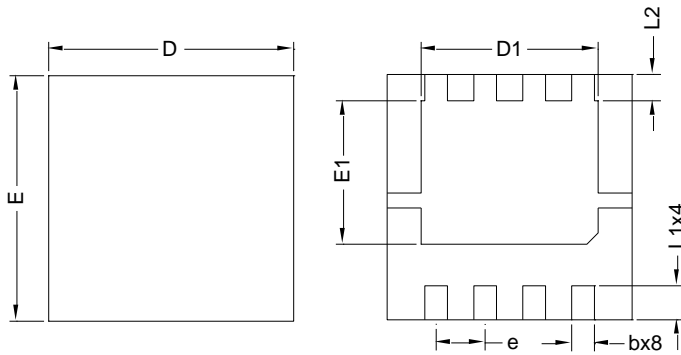


Figure 10. Forward characteristics of reverse diode



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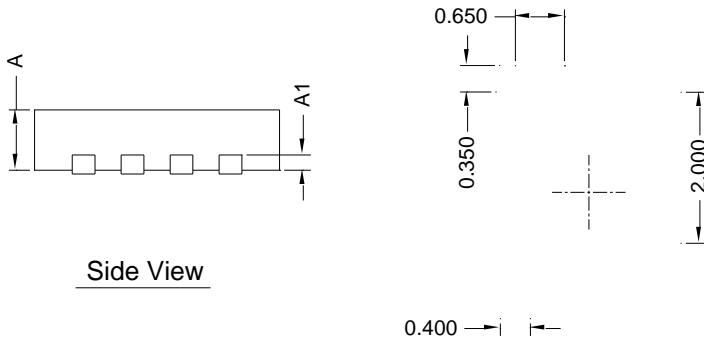
## DFN3333-8L-A-0.8MM Package Information



Top View

Bottom View

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	3.15	3.25	3.35
E	3.15	3.25	3.35
A	0.70	0.80	0.90
A1	0.20 BSC		



Side View

Suggested Solder Pad Layout  
Top View

- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.10\text{mm}$ .
  3. The pad layout is for reference purposes only.



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