





# YJL3404AL

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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D$	30	-	-	V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=30V, V_{GS}=0V$	-	-	1	
		$V_{DS}=30V, V_{GS}=0V, T_J=150$	-	-	100	
Gate-Body Leakage Current	$I_{GSS}$	$V_{GS}= \pm 20V, V_{DS}=0V$	-	-	$\pm 100$	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}= V_{GS}, I_D$	1.0	1.4	2.2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=6A$	-	18	24	
		$V_{GS}=4.5V, I_D=5A$	-	26	34	
Diode Forward Voltage	$V_{SD}$	$I_S=6A, V_{GS}=0V$	-	0.9	1.2	V
Gate resistance	$R_G$	$f=1MHz, \text{Open drain}$	-	2	-	
Maximum Body-Diode Continuous Current	$I_S$		-	-	6	A
<b>Dynamic Parameters</b>						

Input Capacitance

$C_{iss}$



Typical Electrical and Thermal Characteristics Diagrams

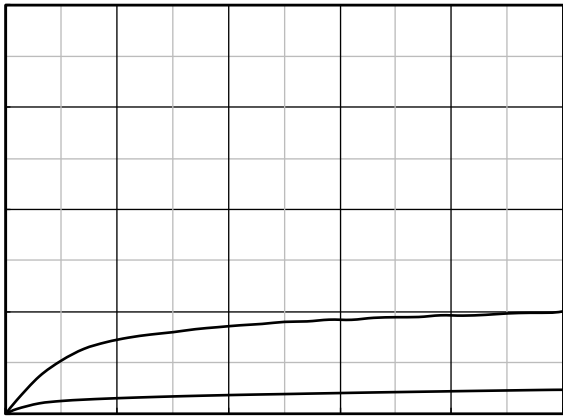


Figure 1. Output Characteristics

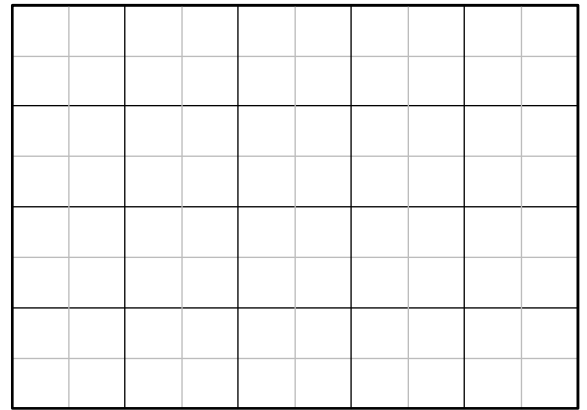


Figure 2. Transfer Characteristics

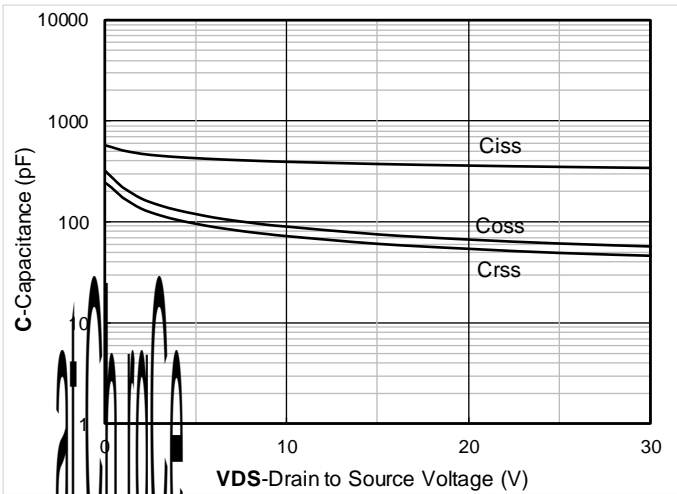


Figure 3. Capacitance Characteristics

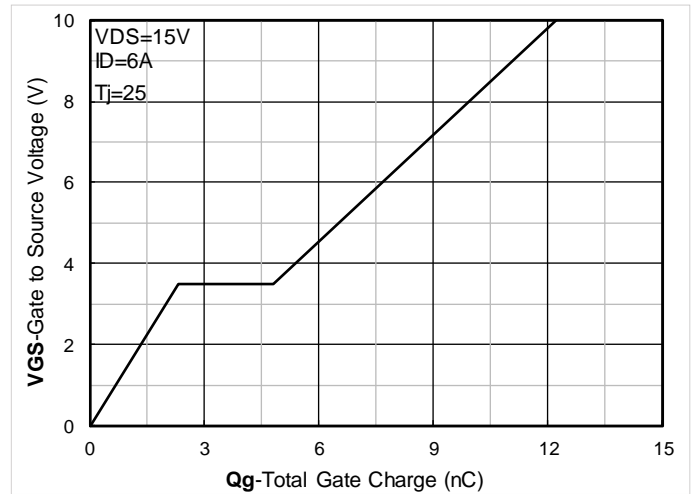


Figure 4. Gate Charge Characteristics



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

Figure 8. Forward characteristics of reverse diode

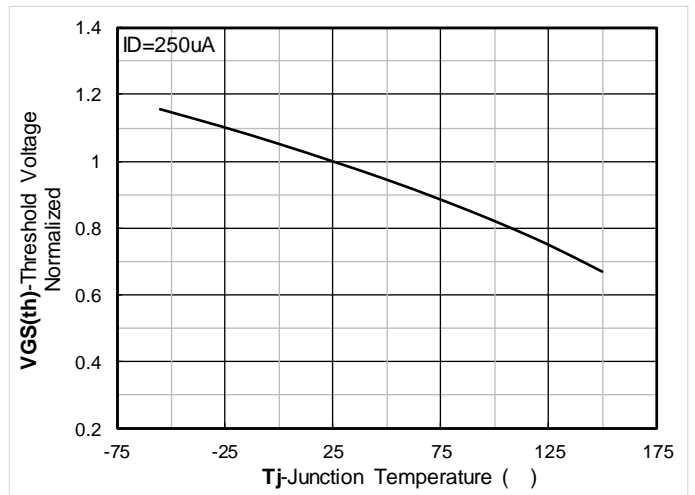


Figure 9. Normalized breakdown voltage

Figure 10. Normalized Threshold voltage

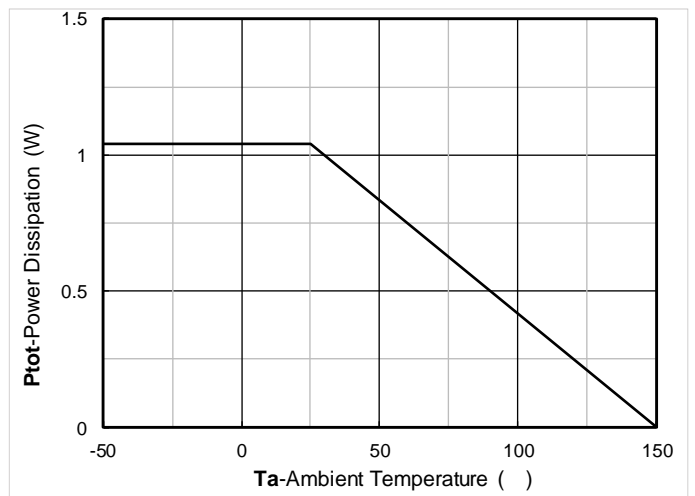
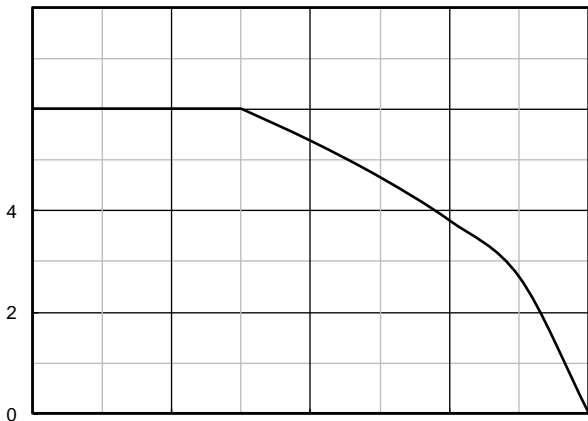


Figure 11. Current dissipation

Figure 12. Power dissipation



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Figure 13. Maximum Transient Thermal Impedance

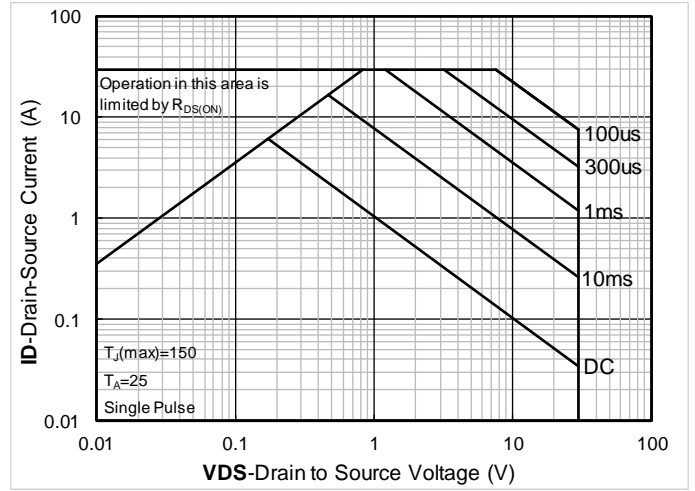
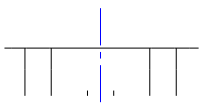
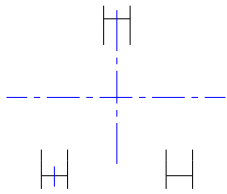


Figure 14. Safe Operation Area



SOT-23-3L Package information



UNIT mm



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## Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high reliability, t683(n)-3(g)-3dJETQq0.000008882 0 596.04 842.04 reW\*nBT/F5 9 Tf1 0 0 1 32.639 551.9