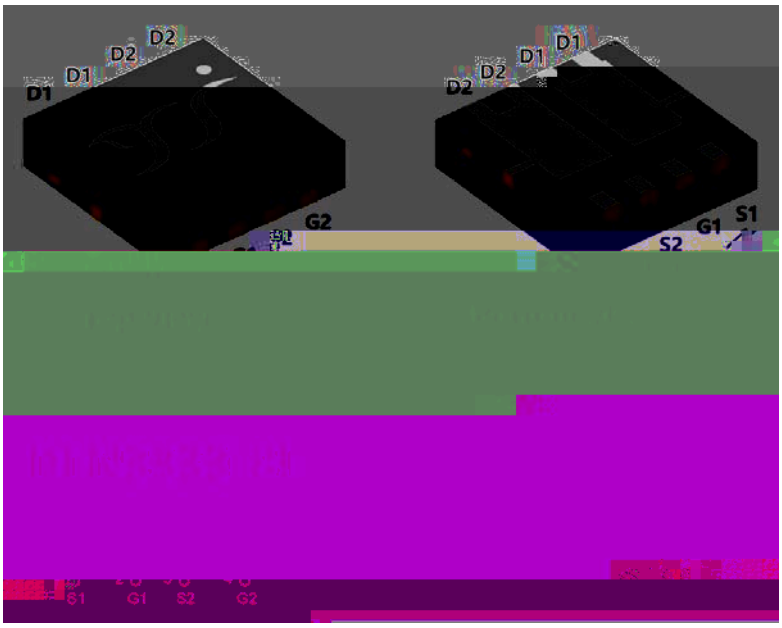
RoHS
COMPLIANT



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- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

- Wireless charger
- Load switching
- Power management

■ (T_A=25 unless otherwise noted)

Drain-source Voltage		V_{DS}	40	-40	V
Gate-source Voltage		V_{GS}	±20	±20	V
Drain Current	T_A=25	I_D	7	-5	A
	T_A=100		4	-3	
	T_C=25		24	-18	
	T_C =100		15	-11	
Pulsed Drain Current [A]		I_{DM}	96	-72	A
Avalanche energy [B]		EAS	6.25	6.25	mJ
Total Power Dissipation [C]	T_A=25	P_D	1.6	1.6	W
	T_A=100		0.6	0.6	
	T_C=25		18.9	19.5	
	T_C =100		7.5	7.8	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	-55 +150	

■

Thermal Resistance Junction-to-Ambient	Steady-State	$R_{\theta JA}$	60	75	60	75	/W
Thermal Resistance Junction-to-Case	Steady-State	$R_{\theta JC}$	5.5	6.6	5.3	6.4	

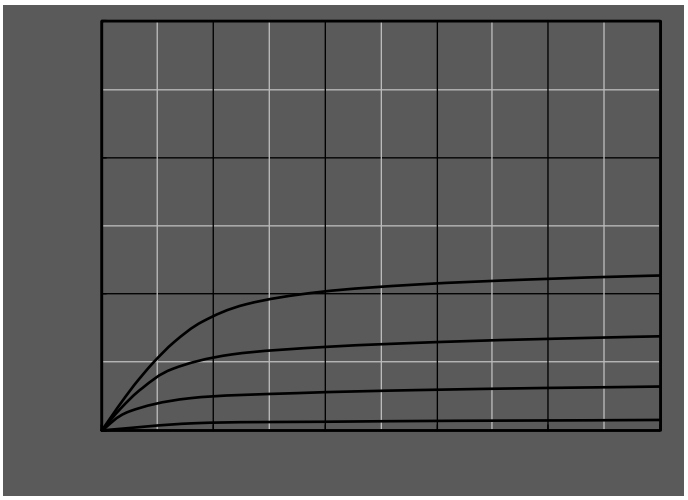
■ (Example)

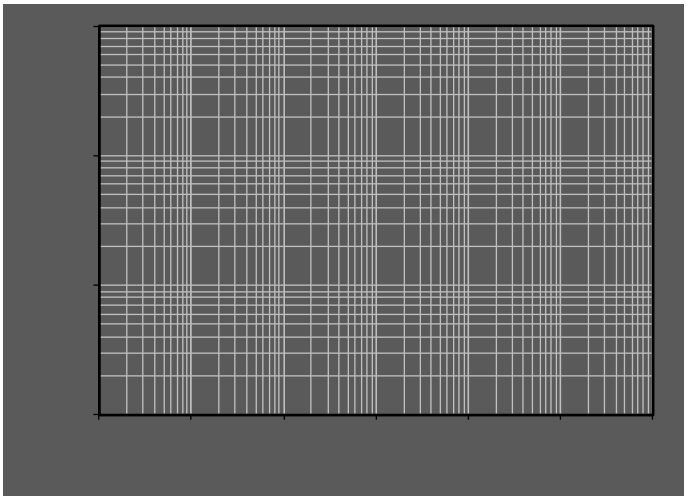
YJQ016NP04A	F1	Q016NP04A	5000	10000	100000	13'' reel

■ (T_J=25 unless otherwise noted)

■ (T_J=25 unless otherwise noted)

Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=-250μA	-40	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-40V, V_{GS}=0V	-	-	-1	μA
		V_{DS}=-40V, V_{GS}=0V, Tj=150	-	-	-100	





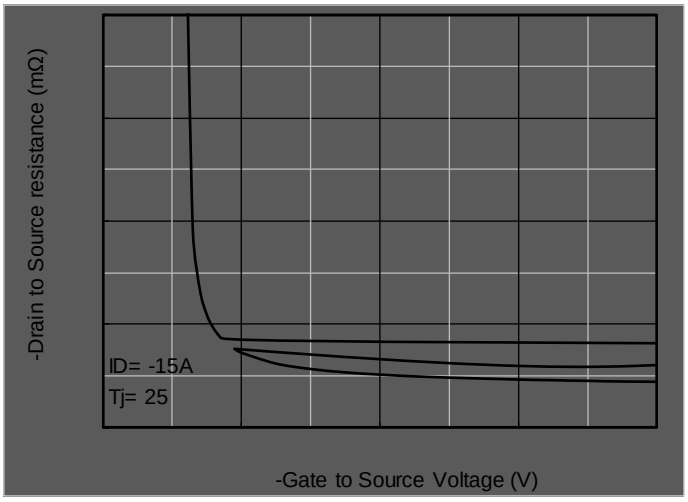


Figure 5. On-Resistance vs Gate to Source Voltage

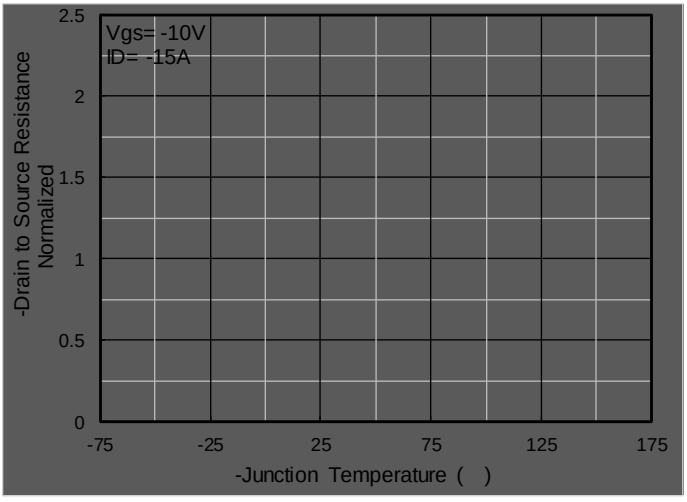
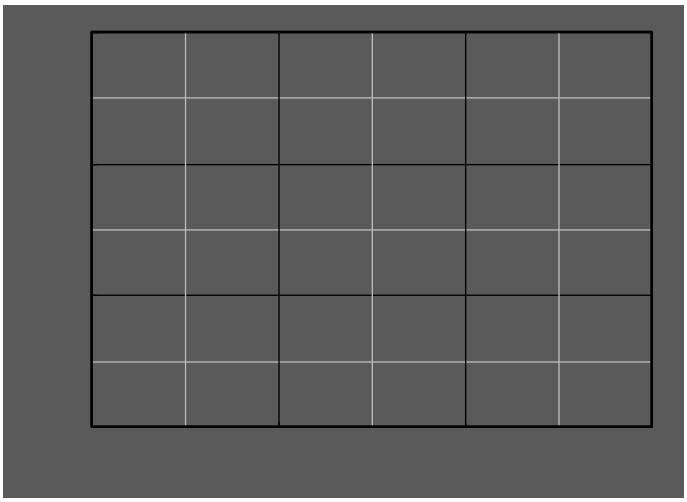
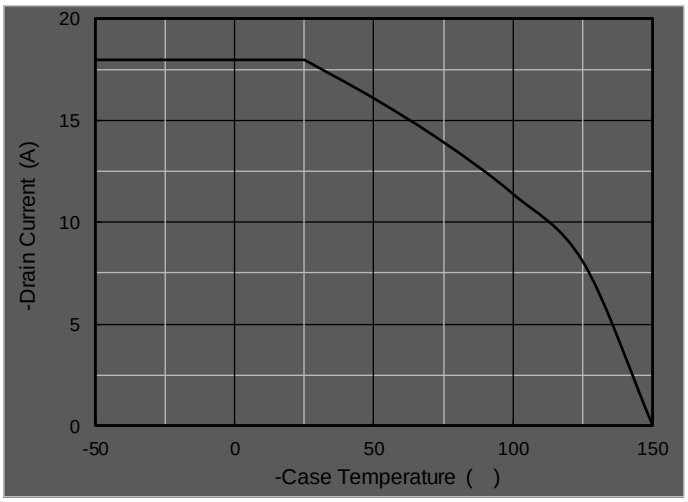
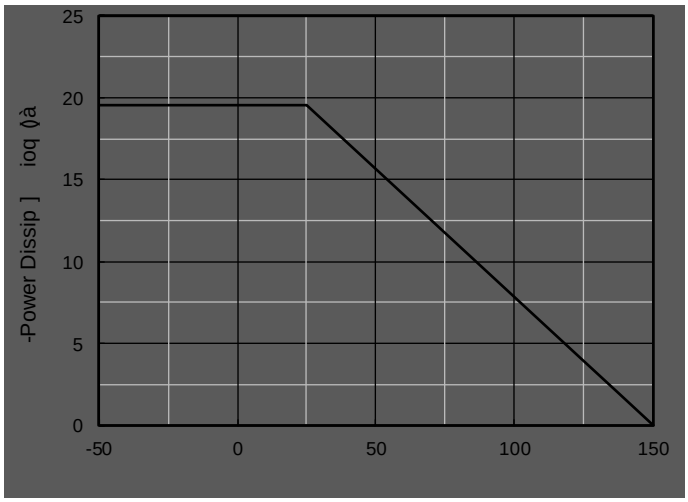


Figure 6. Normalized On-Resistance




20
15
10
5
0
-Drain Current (A)
-50
0
50
100
150
-Case Temperature ( )


25
20
15
10
5
0
-Power Dissip] ioq ()à
-50
0
50
100
150

■

Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.10mm.
3.The pad layout is for reference purposes only.

Suggested Solder Pad Layout

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 or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with