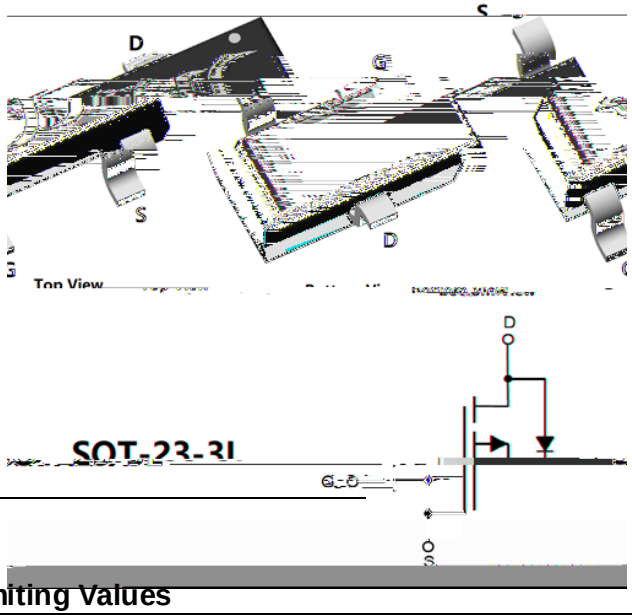
P-Channel Enhancement Mode Field Effect Transistor



Product Summary

- V_{DS} -60V
- I_D -2.8A
- $R_{DS(ON)}$(at V_{GS}=-10V) 72mΩ
- $R_{DS(ON)}$(at V_{GS}=-4.5V) 90mΩ

General Description

- High density cell design for Low RDS(ON)
- High Speed switching
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

Applications

- PWM applications
- Power management
- Load switch

■ Limiting Values

Parameter	Conditions		Symbol	Min	Max	Unit
Drain-source Voltage	T_J ≥25°C;T_J≤150°C		V_{DS}	-	-60	V
Gate-source Voltage	T_J≤150°C;DC		V_{GS}	-20	20	V
Continuous Drain Current (Note 1,2)	Steady-State	T_A=25 ,V_{GS}=-10V	I_D	-	-2.8	A
		T_A=100 ,V_{GS}=-10V		-	-1.8	A
Pulsed Drain Current	T_A=25 ,t 10μs		I_{DM}	-	-22	A
Maximum Body-Diode Continuous Current	T_A=25		I_S		-1.2	A
Total Power Dissipation (Note 1,2)	Steady-State	T_A=25	P_D	-	1.06	W
		T_A=100		-	0.42	W
Junction and Storage Temperature Range			T_J , T_{STG}	-55	150	

■Thermal Resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient (Note 2)	Steady-State	$R_{\theta JA}$	-	117	/W

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJL072P06AL		072AL.	3000	30000	120000	

Typical Electrical and Thermal Characteristics Diagrams

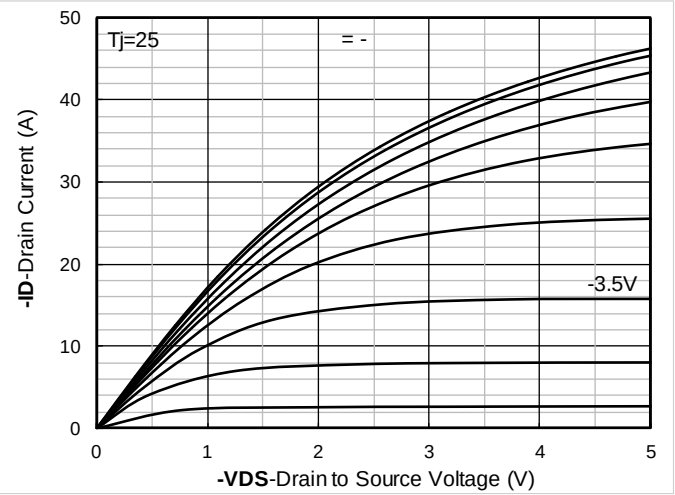


Figure 1. Output Characteristics; typical values

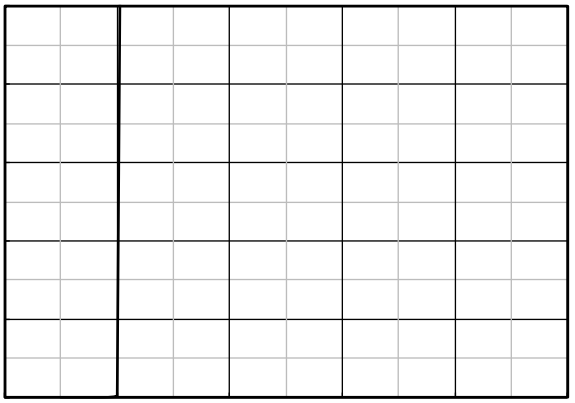


Figure 2. Transfer Characteristics; typical values

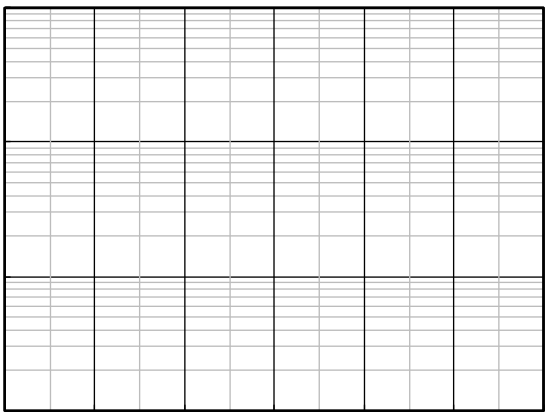


Figure 3. Capacitance Characteristics; typical values

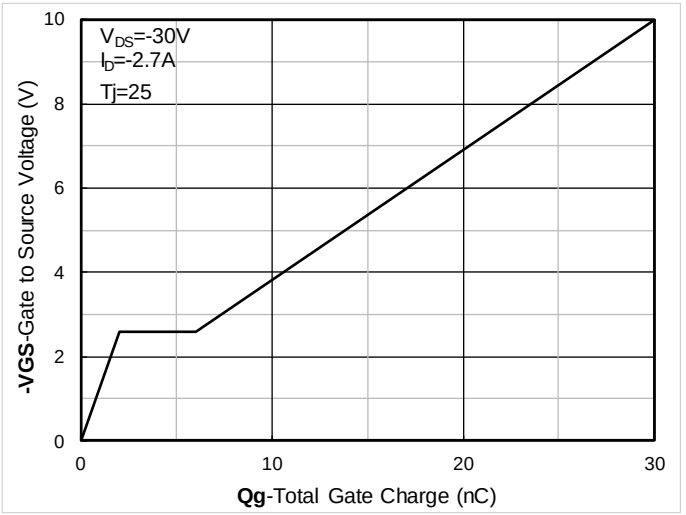


Figure 4. Gate Charge; typical values

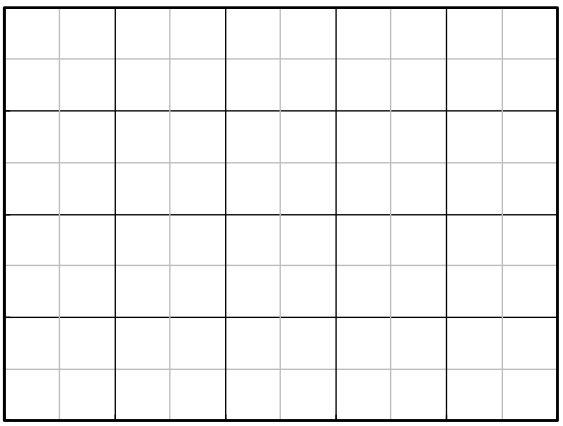
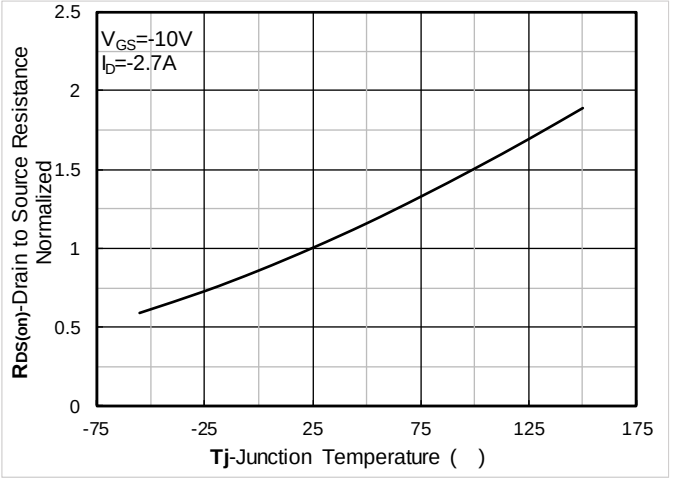


Figure 5. On-



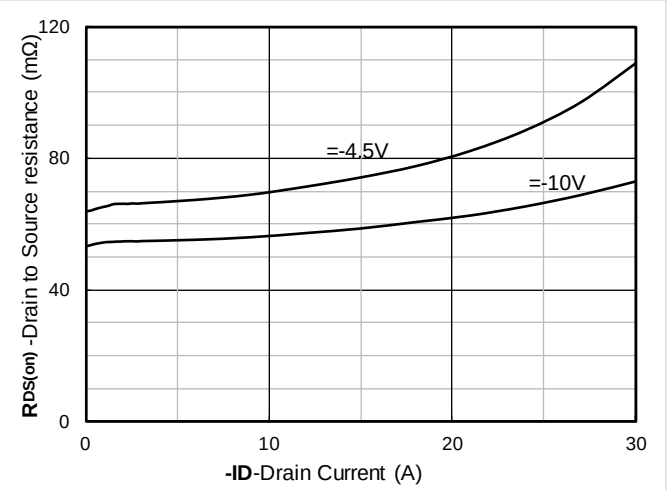


Figure 7. $R_{DS(on)}$ vs. Drain Current; typical values

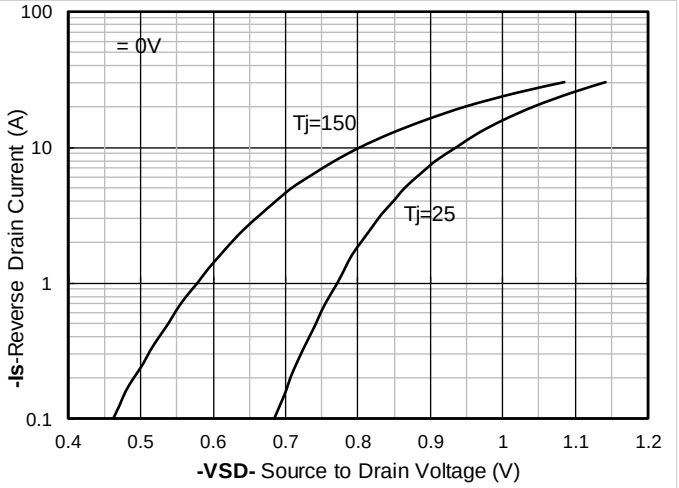


Figure 8. Forward characteristics of reverse diode; typical values

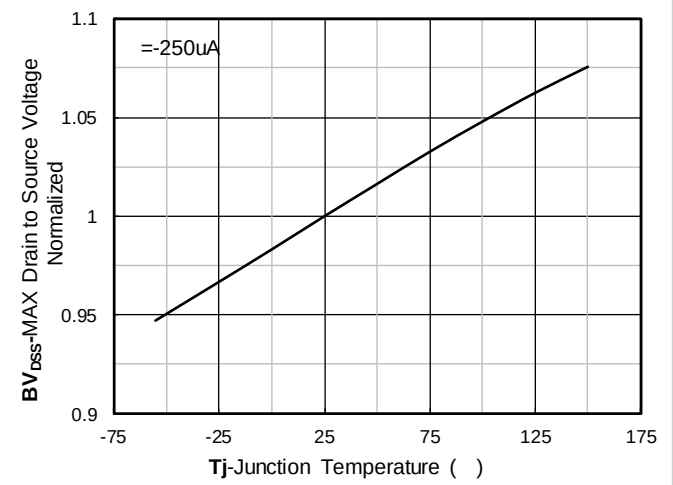


Figure 9. Normalized breakdown voltage

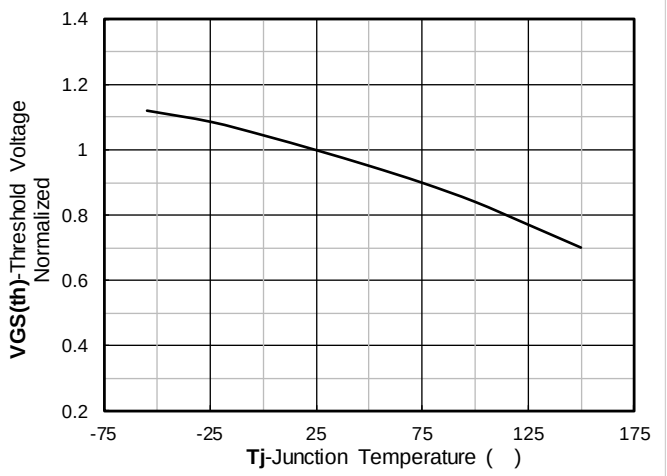


Figure 10. Normalized

■ SOT-23-3L Package Information

UNIT mm

Marking