JMSL0609AK

60V 7.4mΩ N-Ch Power MOSFET

Features

- Low $R_{DS(ON)}$
- Low Gate Charge
- 100% UIS Tested, 100% R_g Tested
- Pb-free Lead Plating
- Halogen-free and RoHS-compliant

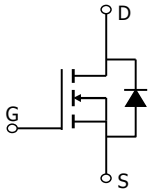
Product Summary

Parameter	Value	Unit
V_{DS}	60	V
$V_{GS(th)\_Typ}$	1.6	V
I_D (@ V_{GS} = 10V) (1)	56	A
$R_{DS(ON)\_Typ}$ (@ V_{GS} = 10V)	7.4	mΩ
$R_{DS(ON)\_Typ}$ (@ V_{GS} = 4.5V)	9.5	mΩ

Applications

- Power Managerment in Telecom., Industrial Automation, CE
- Motor Driving in Power Tool, E-vehicle, Robotics
- Current Switching in DC/DC & AC/DC (SR) Sub-systems

TO-252-3L Top View



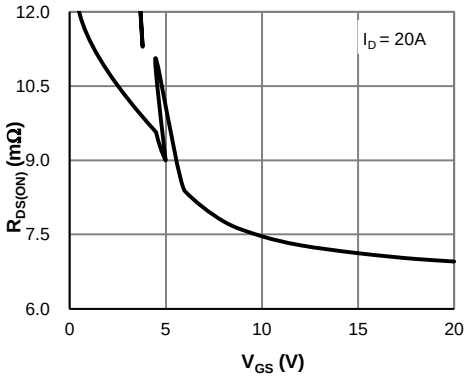
Ordering Information

Device	Package	# of Pins	Marking	MSL	T_J (°C)	Media	Quantity (pcs)
JMSL0609AK-13	TO-252-3L	3	SL0609A	1	-55 to 150	13-inch Reel	2500

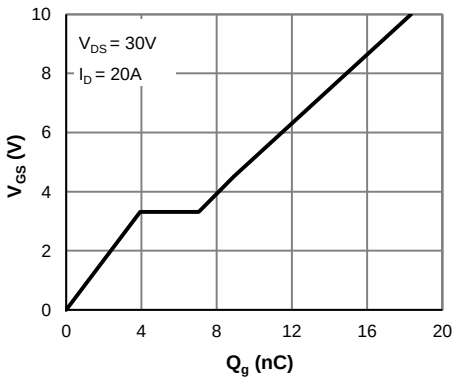
Absolute Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
	V_{DS}		V
	V_{GS}		V
Pulsed Drain Current (2)	I_{DM}		A
	E_{AS}		mJ
	T_J, T_{STG}		°C

$R_{DS(ON)}$ vs. V_{GS}



Gate Charge



Typical Electrical & Thermal Characteristics

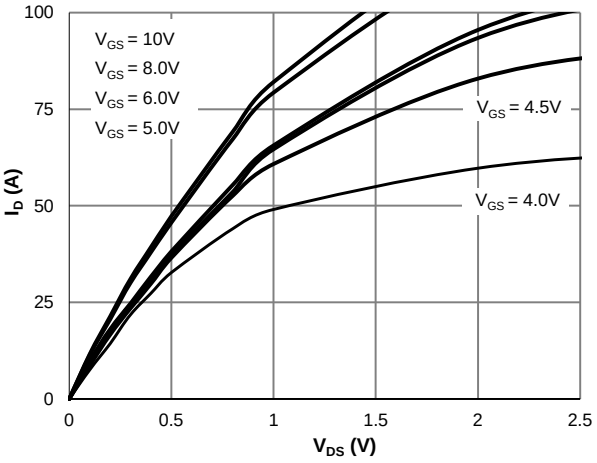


Figure 1: Saturation Characteristics

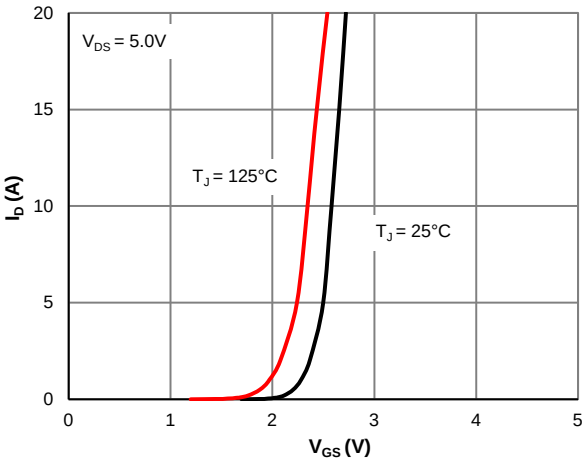


Figure 2: Transfer Characteristics

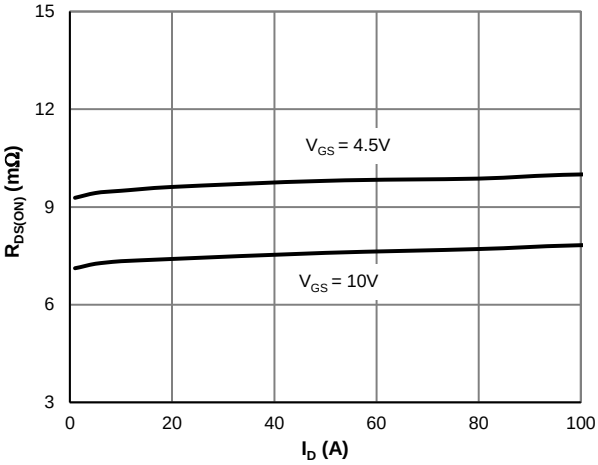


Figure 3: $R_{DS(ON)}$ vs. Drain Current

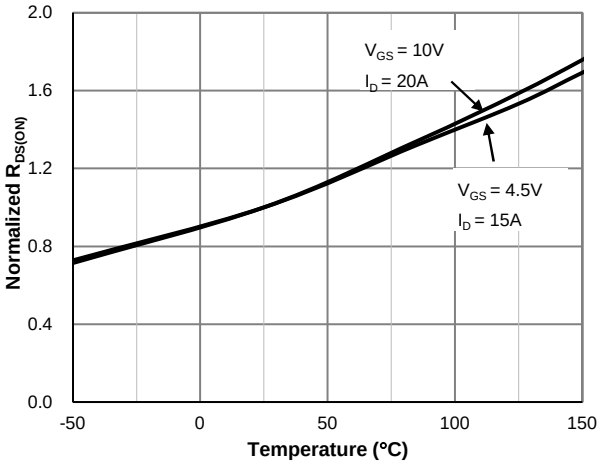


Figure 4: $R_{DS(ON)}$ vs. Junction Temperature

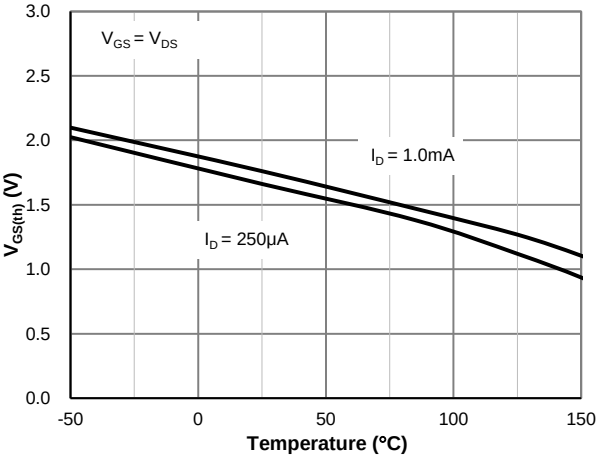


Figure 5: VGS(th) vs. Junction Temperature

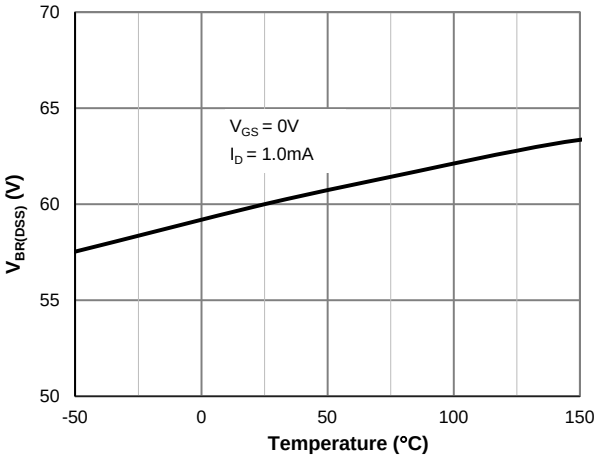
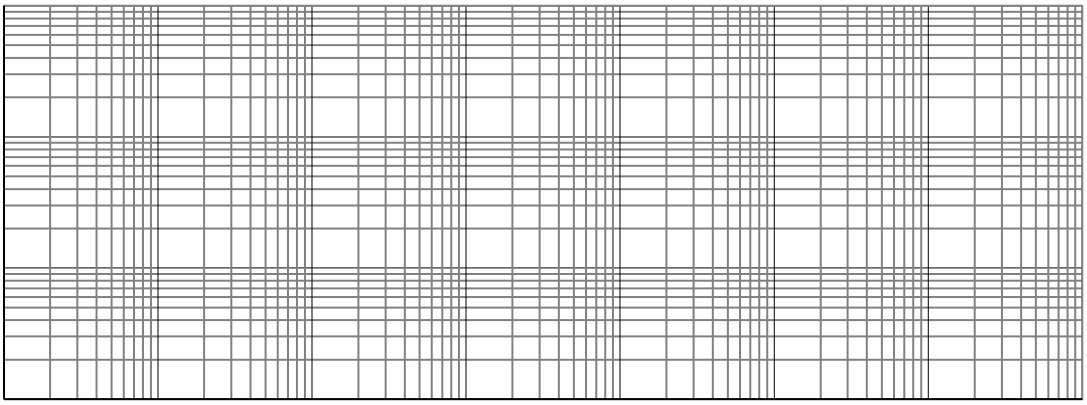


Figure 6: $V_{BR(DSS)}$ vs. Junction Temperature

Typical Electrical & Thermal Characteristics



TO-252-3L Package Information