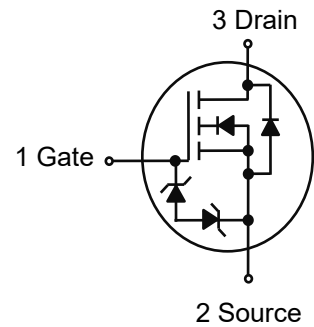
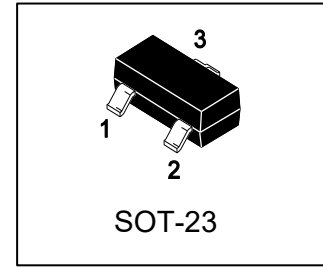


2SK3019L

S-2SK3019L

Silicon N-Channel MOSFET



1. FEATURES

- Low on-resistance
- Fast switching speed
- Low voltage drive(2.5V) makes this ideal for portable equipment
- Drive circuits can be simple
- ESD>500
- Parallel use is easy
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S-prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

2. APPLICATIONS

- Interfacing,switching(30V,100mA)

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
2SK3019L	KN	3000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Drain–Source Voltage	VDSS	30	V
Gate–to–Source Voltage – Continuous	VGS	±20	V
Continuous Drain Current	ID	100	mA
Pulsed Drain Current	IDM	400	mA
Maximum Power Dissipation	PD	225	mW
Junction and Storage temperature	TJ,Tstg	-55~+150	°C

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Junction–to–Ambient(Note 1)	RθJA	417	°C/W
– Steady State			
– t<5s		300	

1. FR-5 = 1.0×0.75×0.062 in.



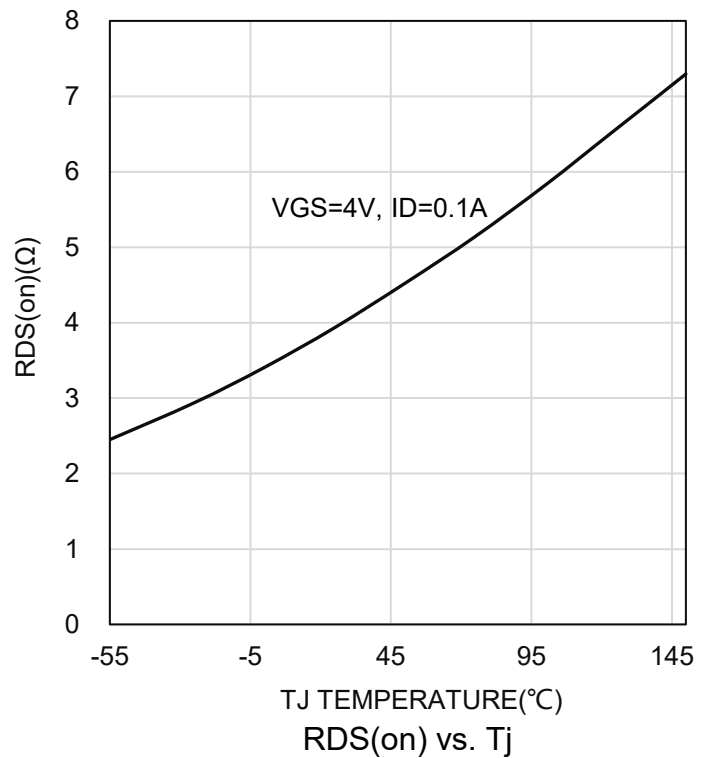
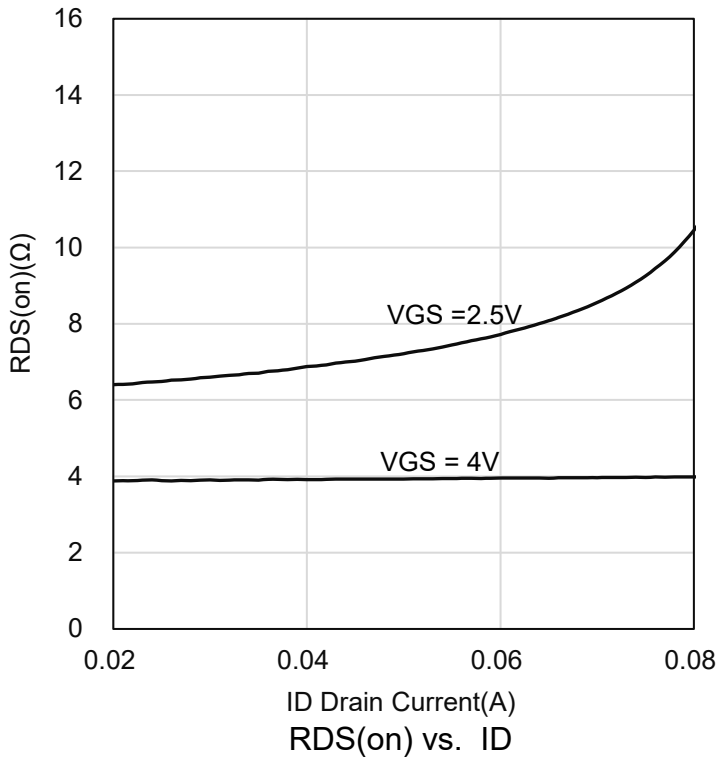
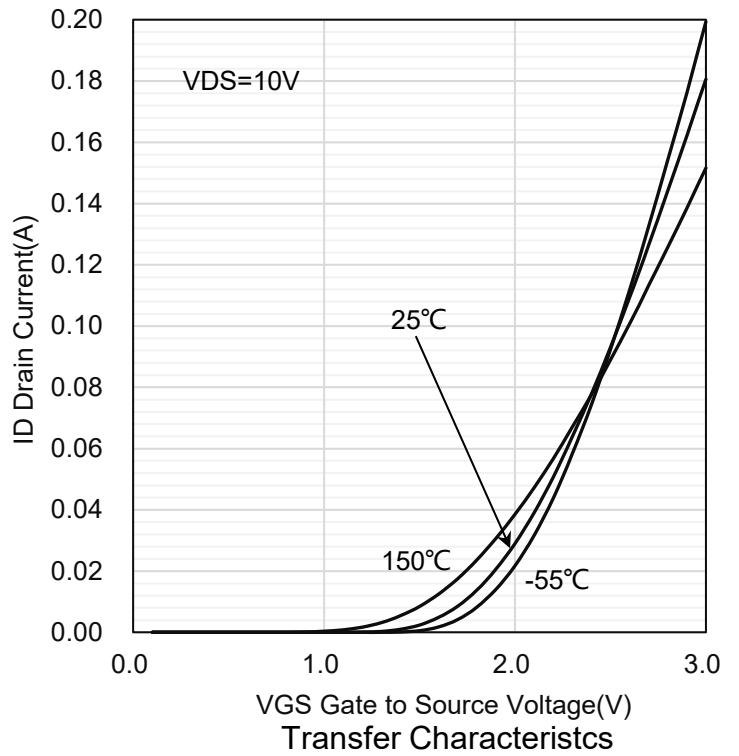
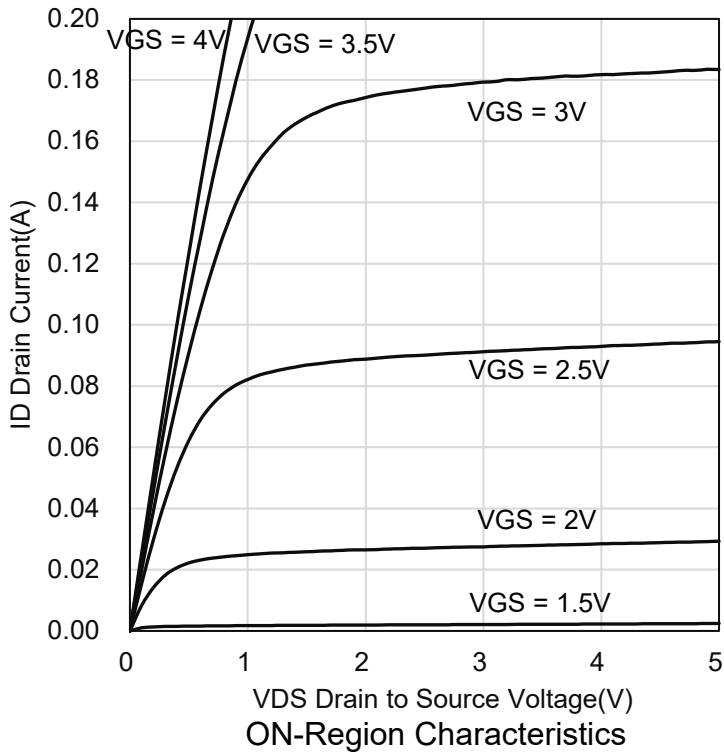
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Drain–Source Breakdown Voltage (VGS = 0, ID = 10μA)	V(BR)DSS	30	-	-	V	
Gate Threshold Voltage (VDS = 3V, ID = 100μA)	VGS(th)	0.8	-	1.5	V	
Zero Gate Voltage Drain Current (VDS=30V, VGS=0V)	IDSS	-	-	1	μA	
Gate–Body Leakage Current (VDS = 0 V, VGS = ±20 V)	IGSS	-	-	±1	μA	
Static Drain–Source On–State Resistance (ID = 10mA, VGS = 4V) (ID = 1mA, VGS = 2.5V)	RDS(on)	- -	5 7	8 13	mΩ	
Forward transfer admittance (ID = 10mA, VDS = 3V)	Yfs	20	-	-	ms	
Input Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 5 V)	Ciss	-	13	-	pF	
Output Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 5 V)	Coss	-	9	-	pF	
Reverse Transfer Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 5 V)	Crss	-	4	-	pF	
Turn-On Delay Time	(VDD = 5V, ID=10mA, VGS = 5V, RL = 500 Ω , RG = 10 Ω)	td(on)	-	15	-	ns
Rise Time		tr	-	35	-	
Turn-Off Delay Time		td(off)	-	80	-	
Fall Time		tf	-	80	-	

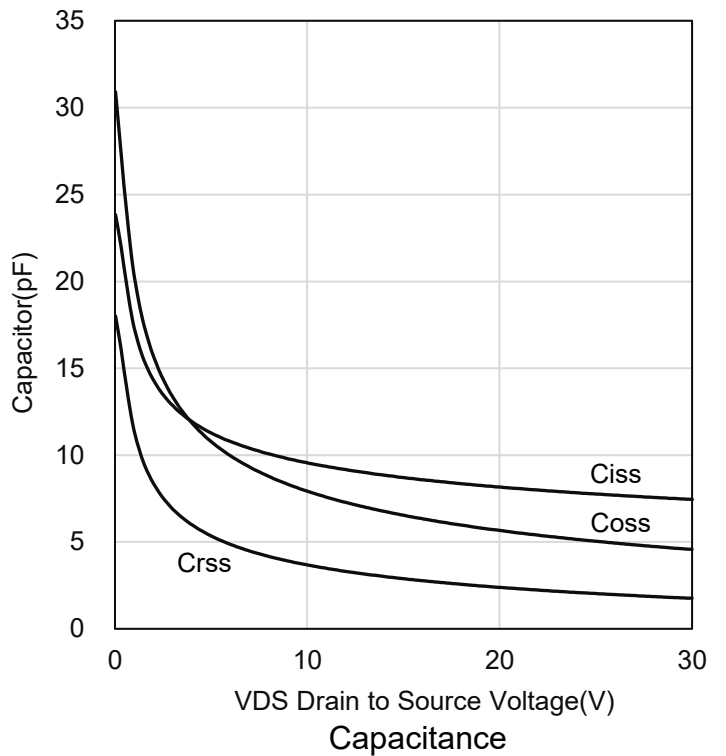
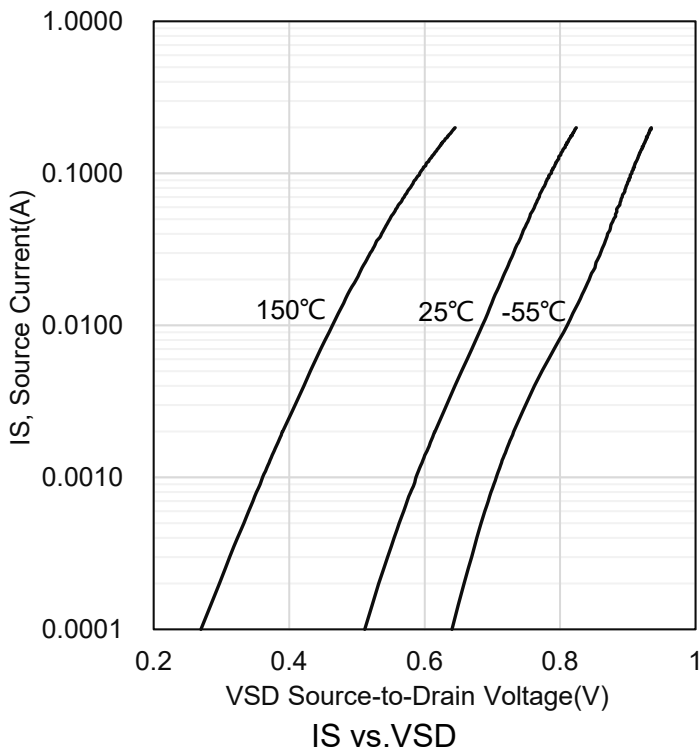
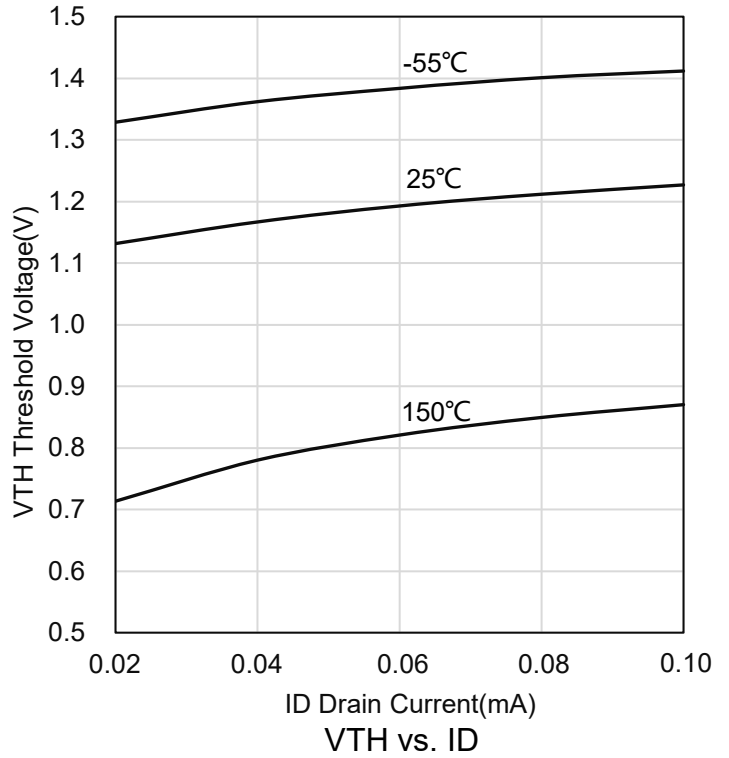
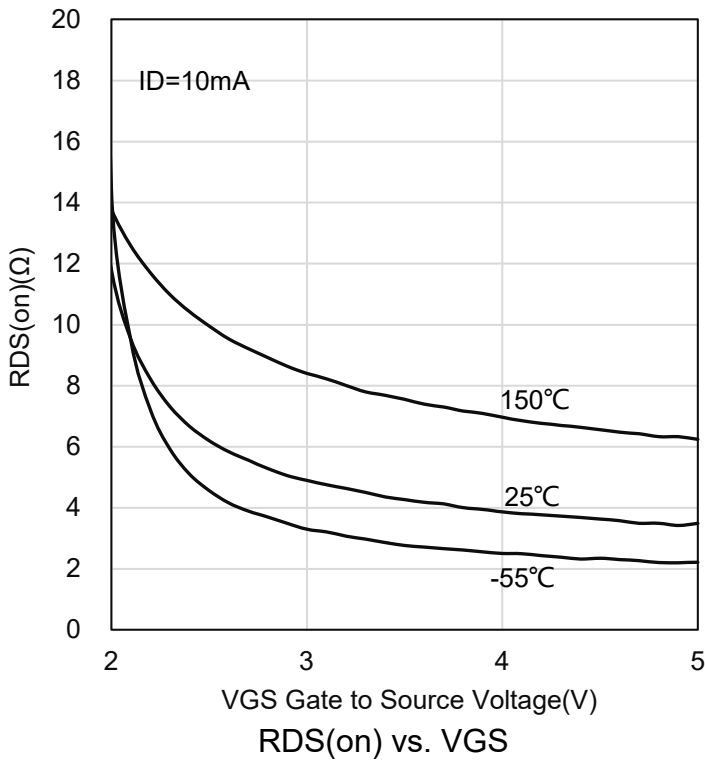
2. Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2.0%.



7. ELECTRICAL CHARACTERISTICS CURVES



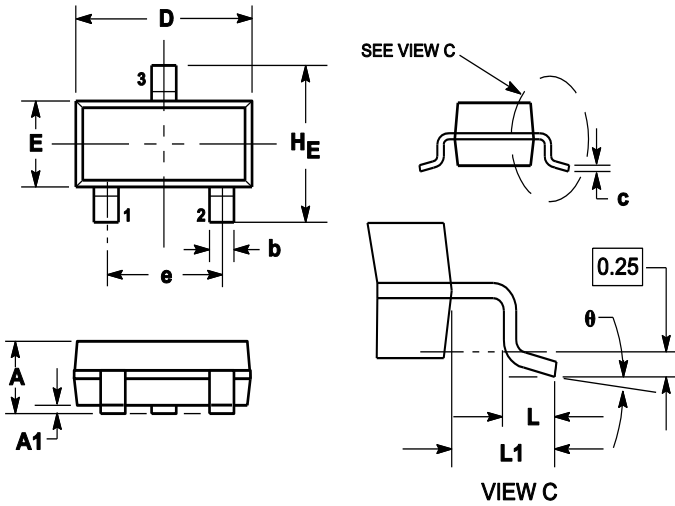
7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



8. OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

9. SOLDERING FOOTPRINT

