

2SK3018

S-2SK3018

N-channel MOSFET
100 mA, 30 V

1. FEATURES

- 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.
- Low on-resistance.
- Fast switching speed.
- Easy to parallel.
- ESD>500V
- Low voltage drive (2.5V) makes this device ideal for portable equipment.
- Easily designed drive circuits.

2. DEVICE MARKING AND ORDERING INFORMATION

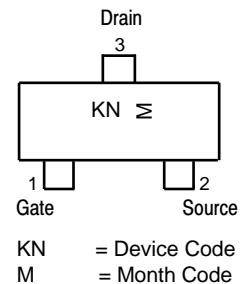
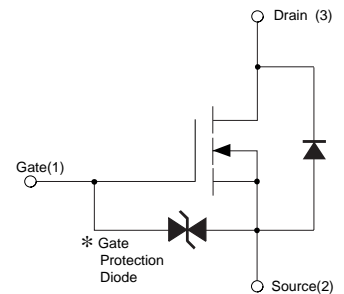
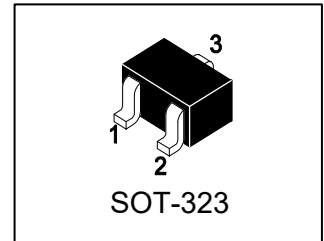
Device	Marking	Shipping
2SK3018	KN	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit	
Drain-Source Voltage	VDSS	30	V	
Gate-Source Voltage	VGS	±20	V	
Drain Current	Continuous	ID	±100	mA
	Pulsed	IDP(Note 1)	±400	
Total power dissipation (TC=25°C)	PD(Note 2)	200	mW	
Channel temperature	Tch	150	°C	
Storage temperature	Tstg	-55~+150	°C	

1. Pw ≤ 10μs, Duty cycle ≤ 1%

2 With each pin mounted on the recommended lands.

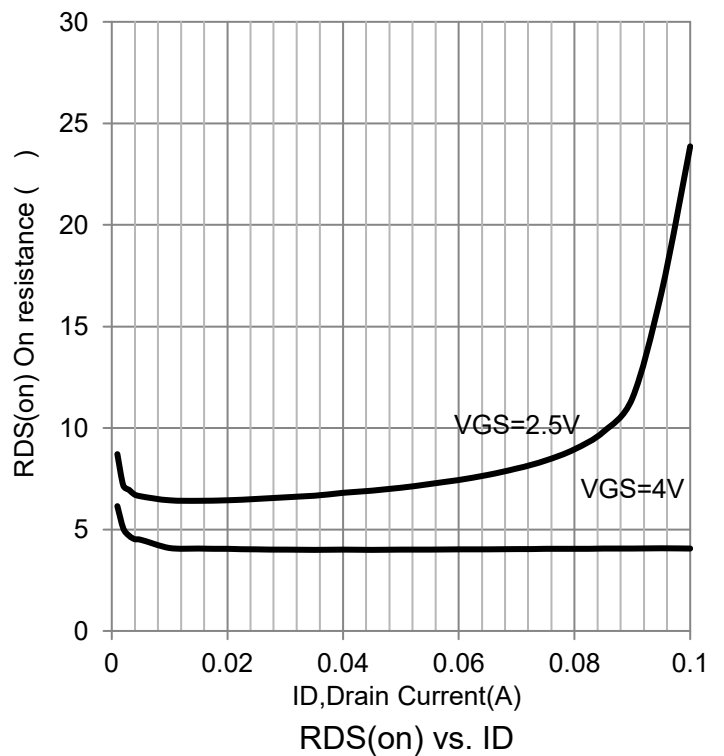
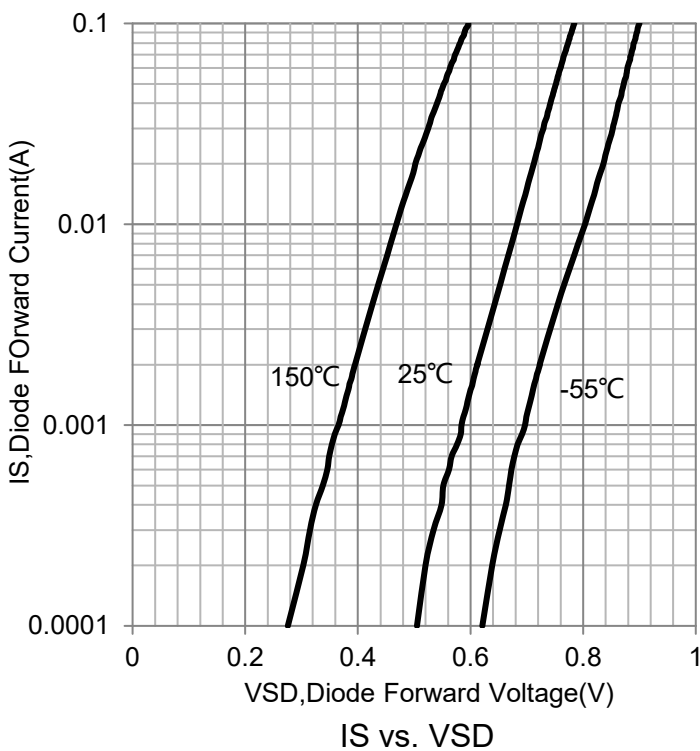
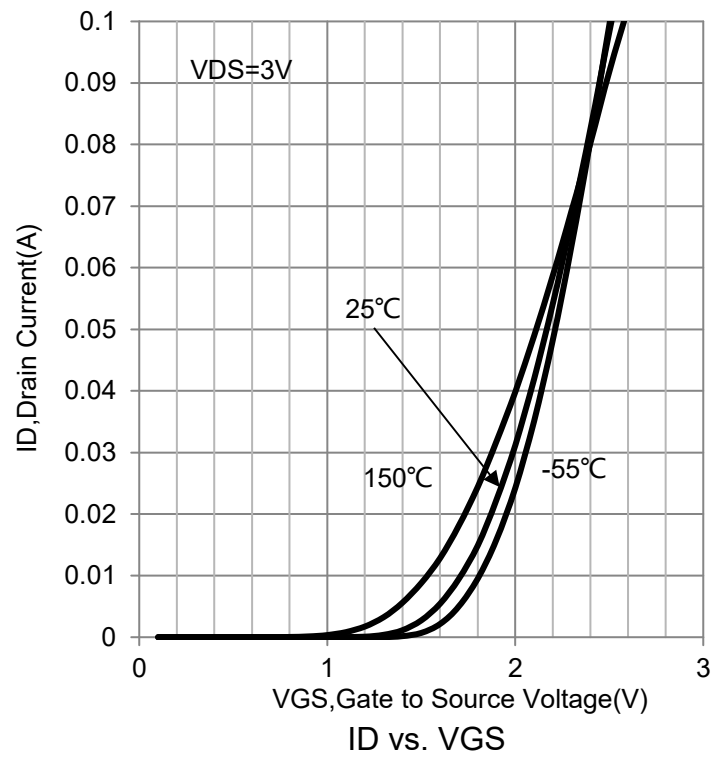
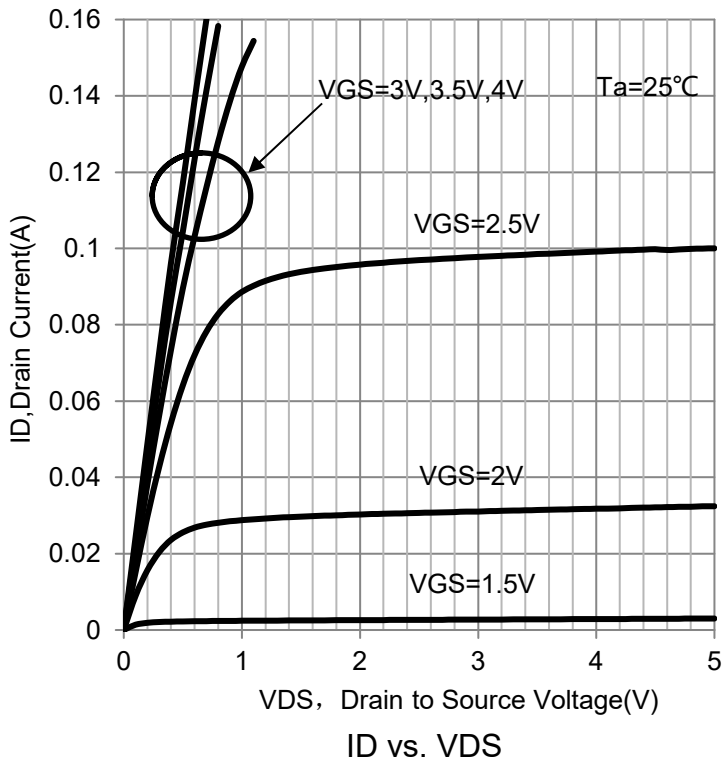


4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

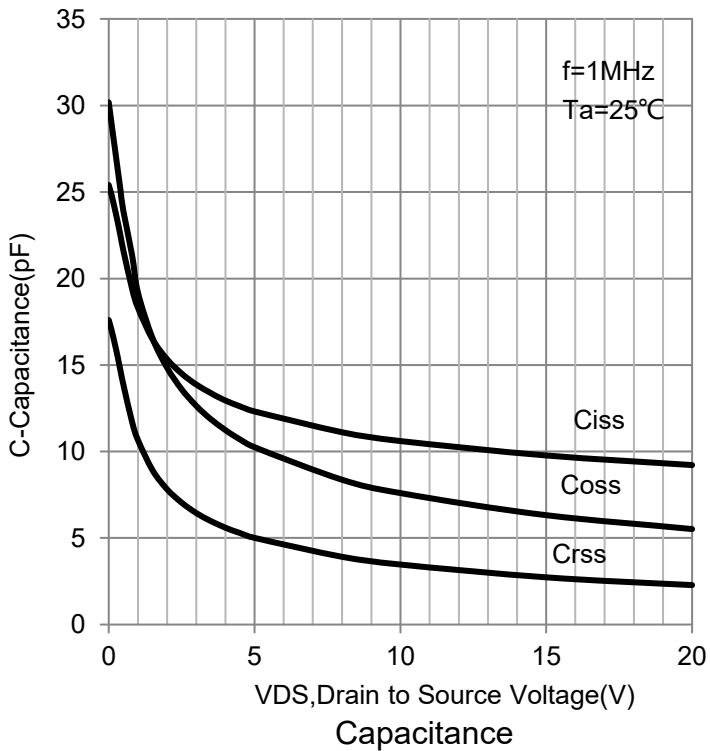
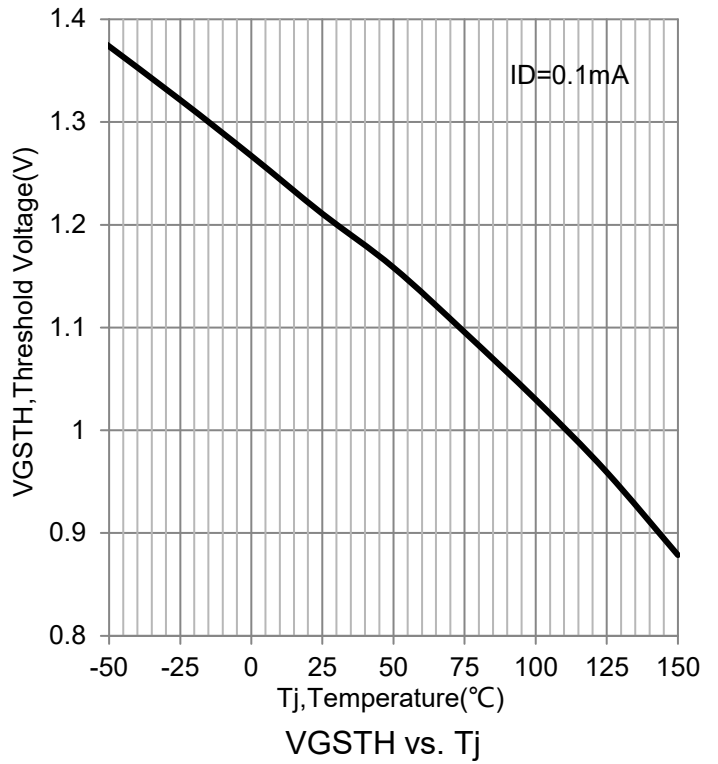
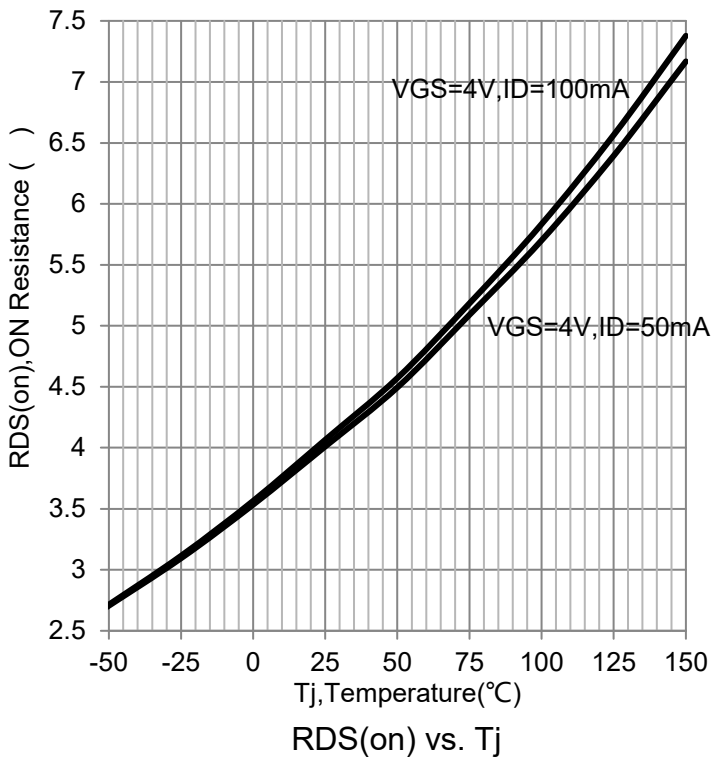
Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Gate-source leakage (VGS = ±20V, VDS = 0V)	IGSS	-	-	±1	μA	
Drain-Source Breakdown Voltage (VGS = 0, ID = 10μA)	VBRDSS	30	-	-	V	
Zero Gate Voltage Drain Current (VGS = 0, VDS = 30 V)	IDSS			1	μA	
Gate Threshold Voltage (VDS = 3V, ID = 100μA)	VGS(th)	0.8	-	1.5	V	
Static Drain-Source On-State Resistance (ID = 10mA, VGS = 4V) (ID = 1mA, VGS = 2.5V)	RDS(on)	- -	5 7	8 13	Ω	
Forward transfer admittance (VDS = 3V, ID = 10mA)	Yfs	20	-	-	mS	
Input Capacitance (VDS = 5 V, VGS = 0, f = 1.0 MHz)	Ciss	-	13	-	pF	
Output Capacitance (VDS = 5 V, VGS = 0, f = 1.0 MHz)	Coss	-	9	-	pF	
Reverse Transfer Capacitance (VDS = 5 V, VGS = 0, f = 1.0 MHz)	Crss	-	4	-	pF	
Turn-On Delay Time	(VDD =5 V, 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	-	



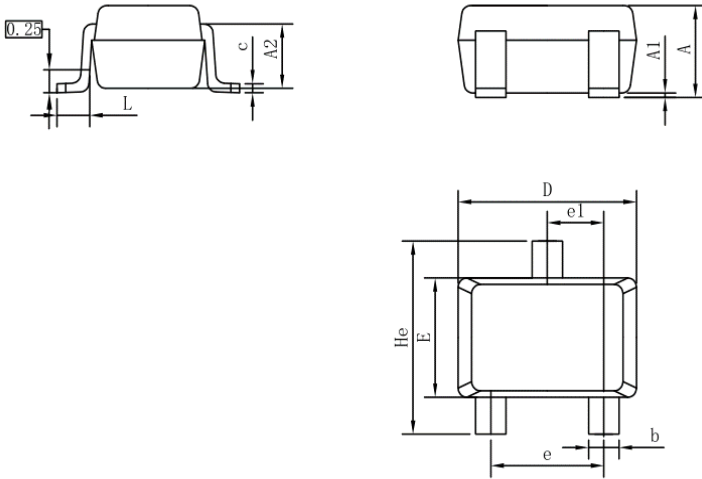
5.ELECTRICAL CHARACTERISTICS CURVES



5.ELECTRICAL CHARACTERISTICS CURVES(Con.)

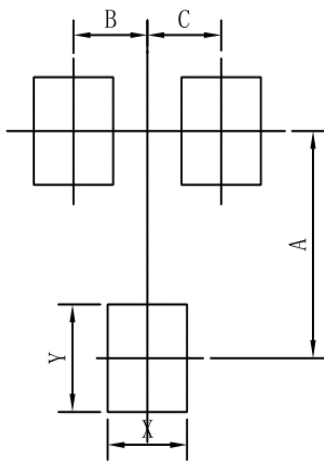


6. OUTLINE AND DIMENSIONS



SOT-323			
DIM	MIN	NOR	MAX
A	0.80	0.95	1.00
A1	0.00	0.05	0.10
A2	0.7 REF		
b	0.30	0.35	0.40
c	0.10	0.15	0.25
D	1.80	2.05	2.20
E	1.15	1.30	1.35
e	1.20	1.30	1.40
e1	0.65 BSC		
L	0.20	0.35	0.56
He	2.00	2.10	2.40
ALL Dimension in mm			

7. SOLDERING FOOTPRINT



SOT-323	
DIM	MIN
A	1.90
B	0.65
C	0.65
X	0.70
Y	0.90

