



SOT-23 Plastic-Encapsulate MOSFETS

2SK3018

N-Channel 30-V(D-S) MOSFET

V(BR)DSS	RDS(on)MAX	ID
30 V	8Ω@4.5V	100mA
	13Ω@2.5V	

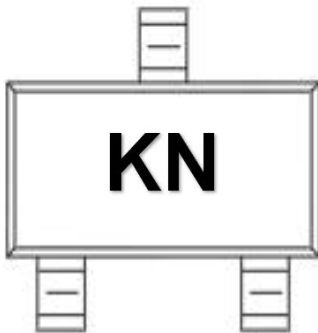
FEATURE:

- Low on-resistance
- Fast switching speed
- Low voltage drive makes this device ideal for Portable equipment
- Easily designed drive circuits
- Easy to parallel

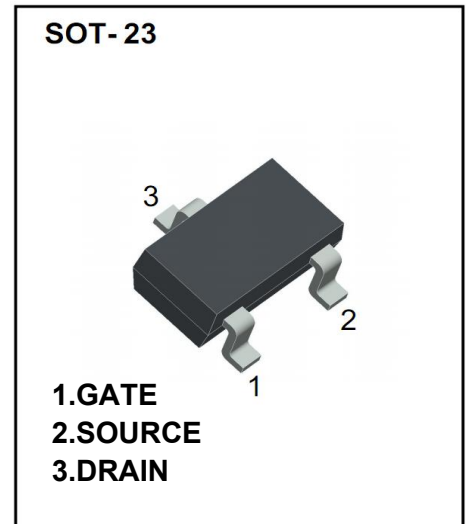
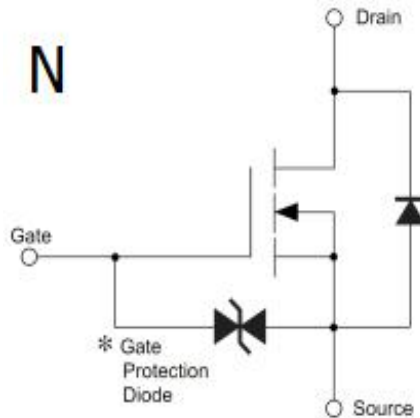
APPLICATION:

※ Interfacing , Switching

MARKING:



Equivalent Circuit:



Mosfet Maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	30	V
Gate-Source Voltage	VGS	±20	
Continuous Drain Current	ID	0.1	A
Power Dissipation	PD	0.35	W
Thermal Resistance from Junction to Ambient	RθJA	357	°C/W
Junction Temperature	TJ	150	°C
Storage Temperature	TSTG	-55~+150	°C



MOSFET ELECTRICAL CHARACTERISTICS

unless otherwise specified Ta = 25 °C

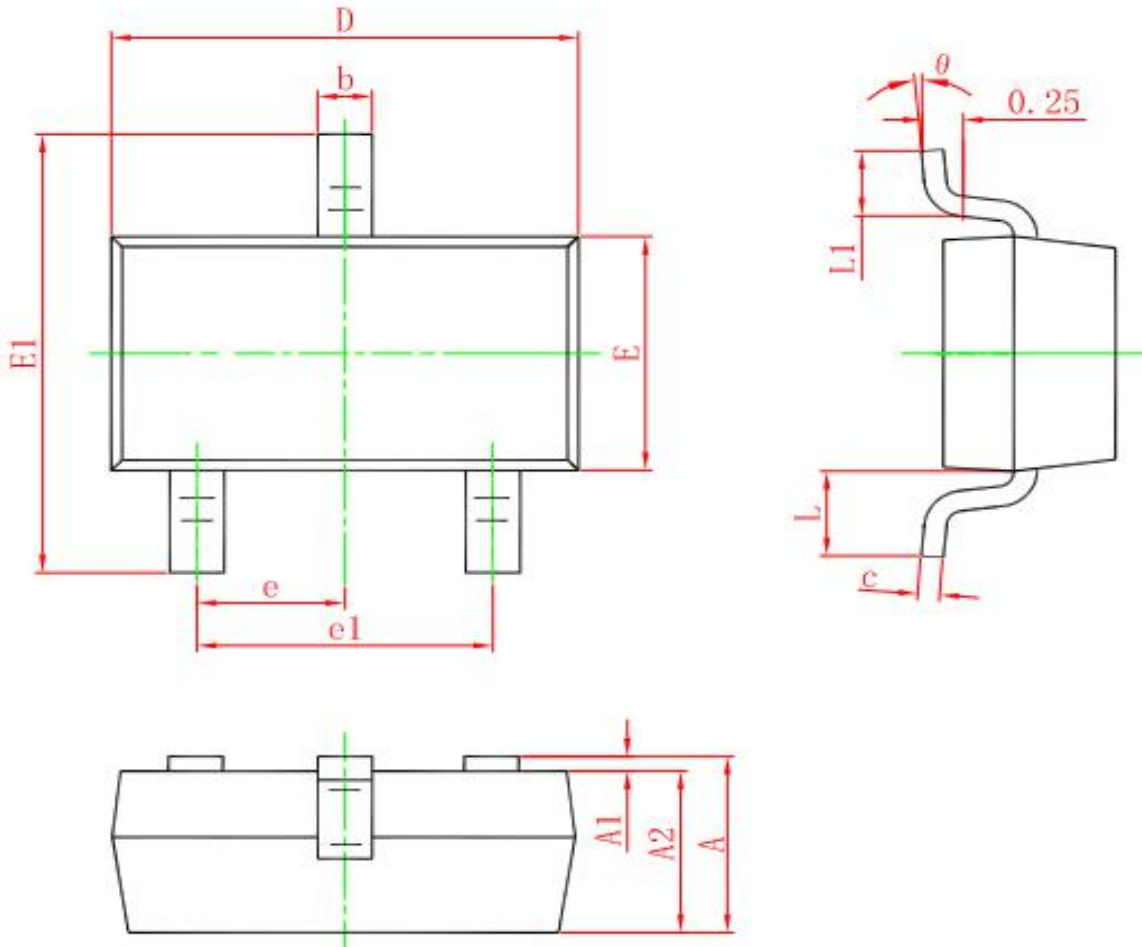
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Off Characteristics						
Drain-source breakdown voltage	V(BR)DSS	VGS = 0V, ID =10μA	30			V
Gate-threshold voltage	VGS(th)	VDS =3V, ID =100μA	0.8		1.5	V
Gate-body leakage	IGSS	VDS =0V, VGS =±20V			±2	μA
Zero gate voltage drain current	IDSS	VDS =30V, VGS =0V			0.2	μA
Drain-source on-resistancea	RDS(on)	VGS =4.5V, ID = 10mA			8	Ω
		VGS =2.5V, ID =1mA			13	Ω
Forward transconductancea	gfs	VDS =3V, ID =10mA	20			S
Diode forward voltage	VSD	IS=10mA,VGS=0V		0.75	1.2	V
Dynamic Characteristics						
Input capacitance	Ciss	VDS =5V, VGS =0V, f=1MHz		13		pF
Output capacitance	Coss			9		pF
Reverse transfer capacitanceb	Crss			4		pF
Switchingb Characteristics						
Turn-on delay time	td(on)	VDD=5V Rg=10Ω, ID =10mA, VGEN=4.5V,RL=500Ω		15		ns
Rise time	tr			35		ns
Turn-off delay time	td(off)			80		ns
Fall time	tf			80		ns

Note :

1. These parameters have no way to verify.



SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°