



Micro Commercial Components



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2SK3019

N-Channel
Plastic-Encapsulate
Transistor

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
Low ON-Resistance
Low voltage drive makes this device ideal for portable equipment
Fast Switching Speed
Easily designed drive circuits
Easy to parallel
Available in Lead Free/RoHS Compliant Version
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Marking:KN
Halogen free available upon request by adding suffix "-HF"

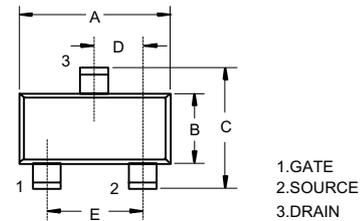
Mechanical Data

- Case: SOT-523, Molded Plastic
Terminal Connections: See Diagram

Maximum Ratings

- Operating Temperature: -55°C to +150°C
Storage Temperature: -55°C to +150°C

Table with 4 columns: Parameter, Symbol, Value, Unit. Rows include Drain-Source-Voltage, Gate-Source-Voltage, Continuous Drain Current, Thermal Resistance, Junction-to-Ambient, and Total Power Dissipation.



1.GATE
2.SOURCE
3.DRAIN

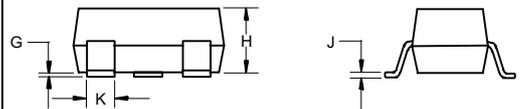
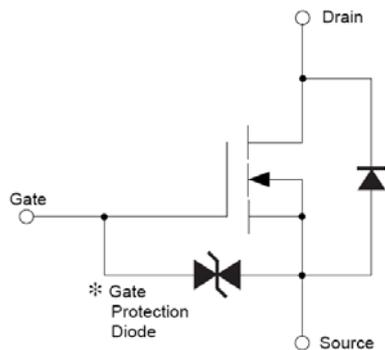


Table with 6 columns: DIM, INCHES (MIN, MAX), MM (MIN, MAX), NOTE. Lists dimensions A through K.

Equivalent circuit

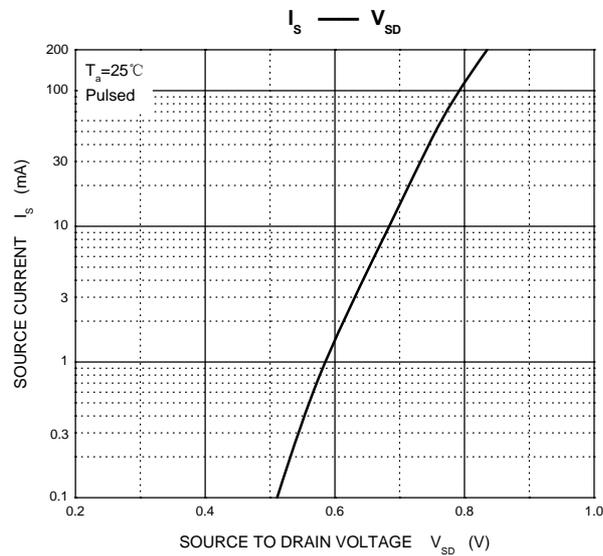
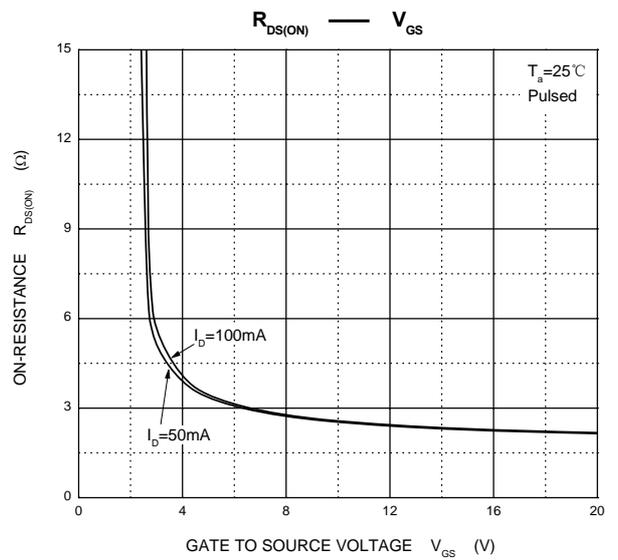
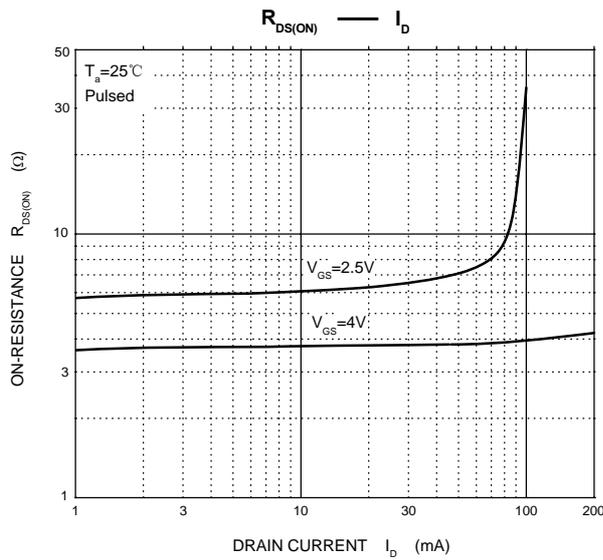
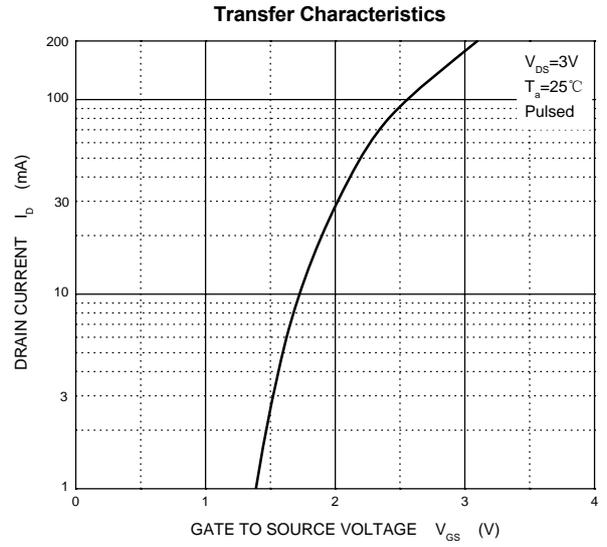
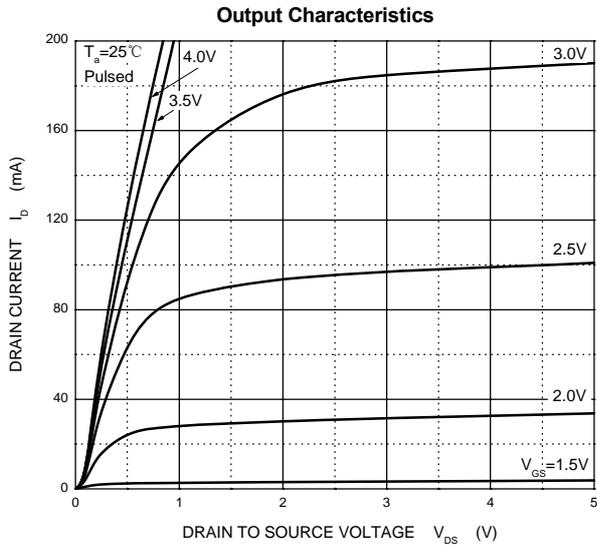


MOSFET ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Off Characteristics						
Drain-Source Breakdown Voltage	V _{DS}	V _{GS} = 0V, I _D = 10μA	30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 30V, V _{GS} = 0V			1	μA
Gate –Source leakage current	I _{GSS}	V _{GS} = ±20V, V _{DS} = 0V			±2	μA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = 3V, I _D = 100μA	0.8		1.5	V
Drain-Source On-Resistance	R _{DS(on)}	V _{GS} = 4V, I _D = 10mA			8	Ω
		V _{GS} = 2.5V, I _D = 1mA			13	Ω
Forward Transconductance	g _{FS}	V _{DS} = 3V, I _D = 10mA	20			mS
Dynamic Characteristics*						
Input Capacitance	C _{iss}	V _{DS} = 5V, V _{GS} = 0V, f = 1MHz		13		pF
Output Capacitance	C _{oss}			9		pF
Reverse Transfer Capacitance	C _{rss}			4		pF
Switching Characteristics*						
Turn-On Delay Time	t _{d(on)}	V _{GS} = 5V, V _{DD} = 5V, I _D = 10mA, R _g = 10Ω, R _L = 500Ω,		15		ns
Rise Time	t _r			35		ns
Turn-Off Delay Time	t _{d(off)}			80		ns
Fall Time	t _f			80		ns

* These parameters have no way to verify.

2SK3019





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Ordering Information :

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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