

Description

This Dual P-Channel MOSFET has been designed using advanced Power Trench process to optimize the RDS(ON). Including two P-ch CJX3139K MOSFET (independently) in a package.

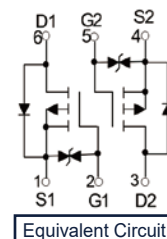
General Features

- High-Side Switching
- Low On-Resistance
- Low Threshold
- Fast Switching Speed



Applications

- Drivers:Relays, Solenoids, Lamps, Hammers, Displays, Memories
- Battery Operated Systems
- Power Supply Converter Circuits
- Load/Power Switching Cell Phones, Pagers



Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
CJX3139K	SOT-563	CJX3139K ↓ 产品名称 product name	39K	3000

Absolute Maximum Ratings (TA=25℃ unless otherwise noted)

Symbol	Parameter	Rating	Units
V _{DSS}	Drain-Source Voltage	-20	V
V _{GS}	Gate-Source Voltage	±12	V
I _D	Continuous drain current	-0.66	A
I _{DM(pulse)}	Drain Current -Pulsed(note1)	-2.64	A
P _D	Power Dissipation(note2)	150	W
R _{θJA}	Thermal Resistance from Junction to Ambient	833	°C/W
T _J	Junction temperature	150	°C
T _{stg}	Storage temperature	-55~+150	°C

Electrical Characteristics (T_A=25℃, unless otherwise noted)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
On/Off States						
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V , I _D =-250μA	-20	---	---	V
V _{GS(th)}	Gate Threshold Voltage (note 3)	V _{GS} =V _{DS} , I _D =-250μA	-0.35	---	-1.1	V
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±10V , V _{DS} =0V	---	---	±20	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =-20V,V _{GS} =0V	---	---	-1	μA
R _{DS(ON)}	Drain-source on-resistance(note 3)	V _{GS} =-4.5V, I _D =-1A	---	430	520	mΩ
		V _{GS} =-2.5V,I _D =-800mA	---	575	700	
		V _{GS} =-1.8V , I _D =-500mA	---	950	---	
g _{fs}	Forward Transconductance	V _{DS} =-10V , I _D =-540mA	0.8	---	---	S
Dynamic Characteristics(note 4)						
C _{iSS}	Input Capacitance	V _{DS} =-16V , V _{GS} =0V , f=1MHz	---	---	170	pF
C _{oSS}	Output Capacitance		---	---	25	
C _{rSS}	Reverse Transfer Capacitance		---	---	15	
Switching Times (note 4)						
T _{d(on)}	Turn-On Delay Time	V _{DD} =-10V,I _D =-200mA, V _{GS} =-4.5V,R _G =10Ω	---	9	---	ns
T _r	Rise Time		---	5.8	---	
T _{d(off)}	Turn-Off Delay Time		---	32.7	---	
T _f	Fall Time		---	20.3	---	
Drain-Source Diode Characteristics						
V _{SD}	Diode Forward Voltage (note 3)	I _S =-0.5A,V _{GS} =0V	---	---	-1.2	V

Notes:

1. Repetitive Rating: Pulse width limited by maximum junction temperature.
2. This test is performed with no heat sink at T_A=25℃.
3. Pulse Test : Pulse Width≤300μs, Duty Cycle≤0.5%.
4. These parameters have no way to verify.



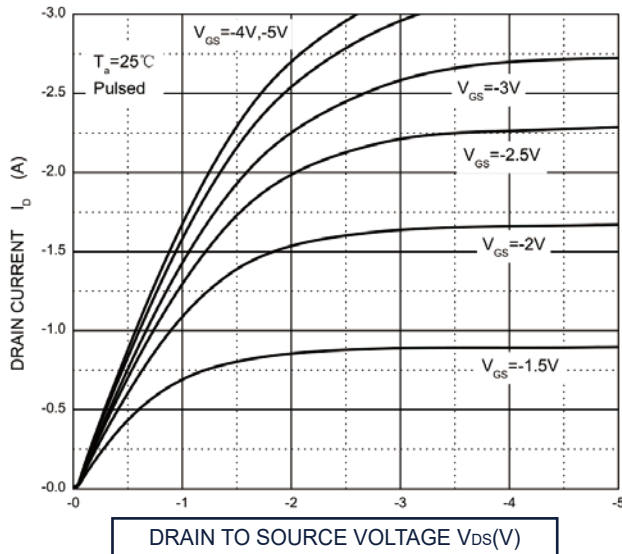
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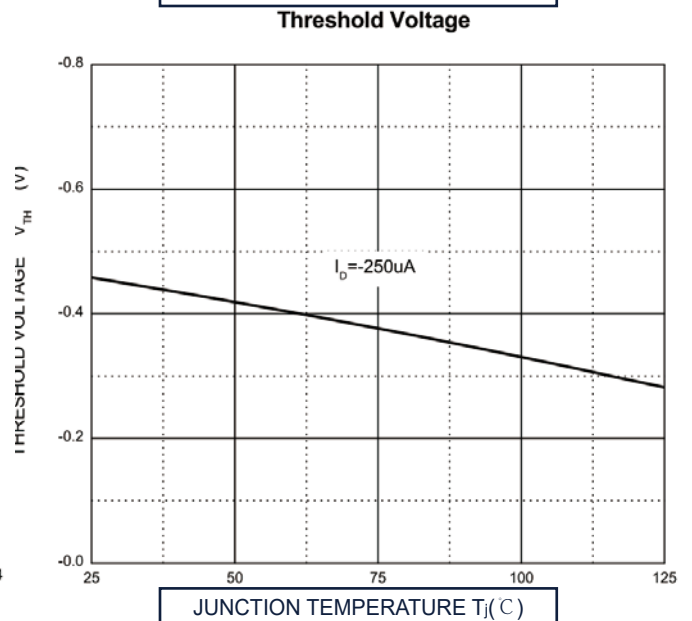
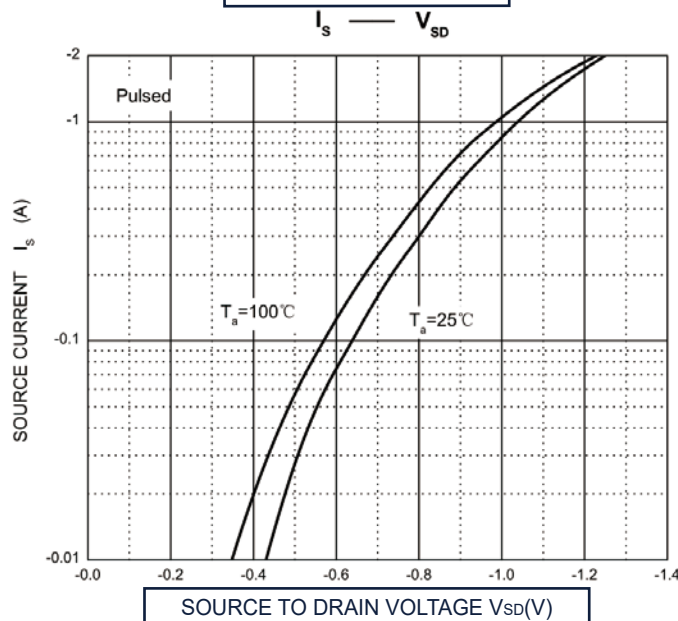
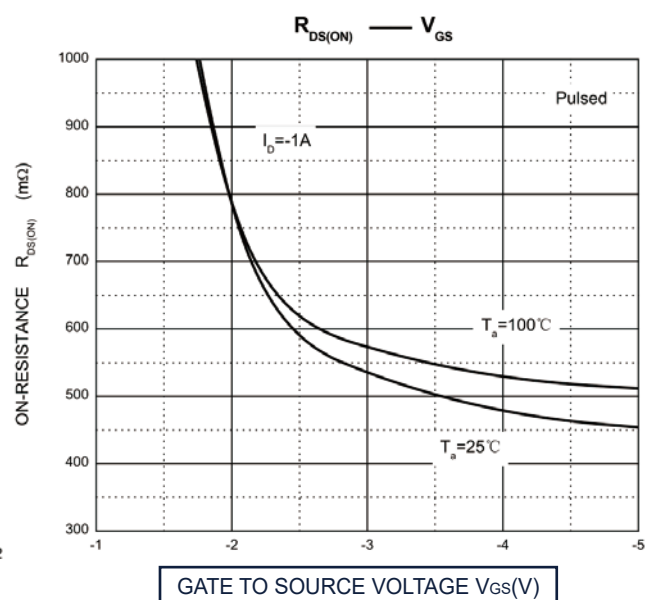
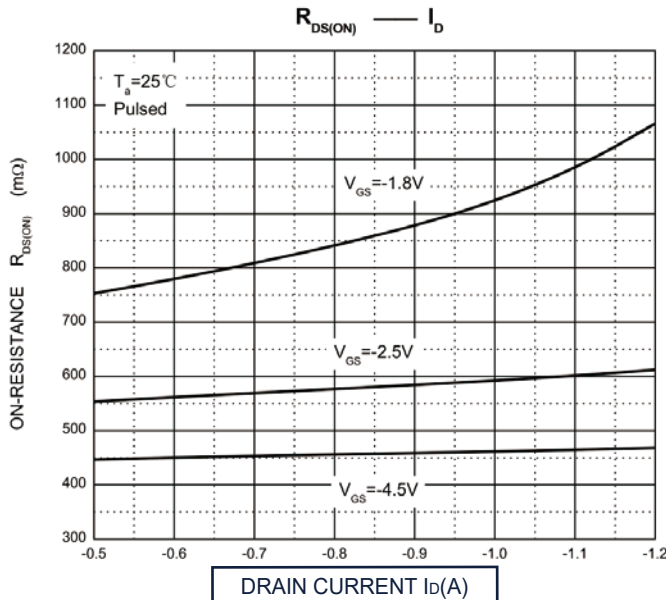
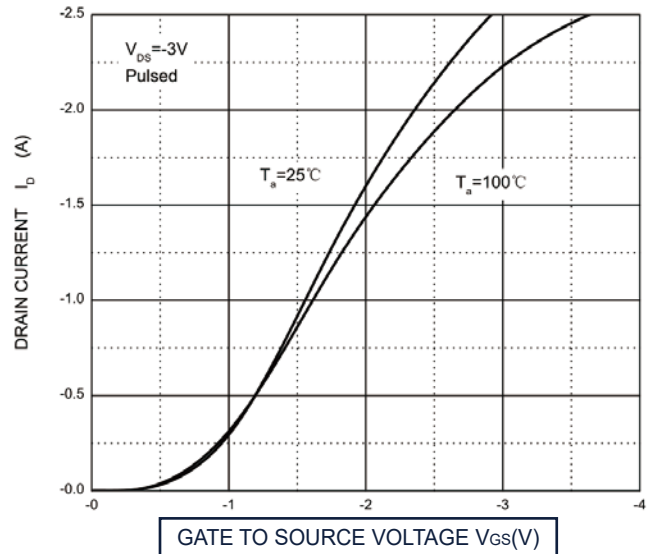
SOT-563 -20V Dual P-Channel Power MOSFET

Typical Characteristics

Output Characteristics

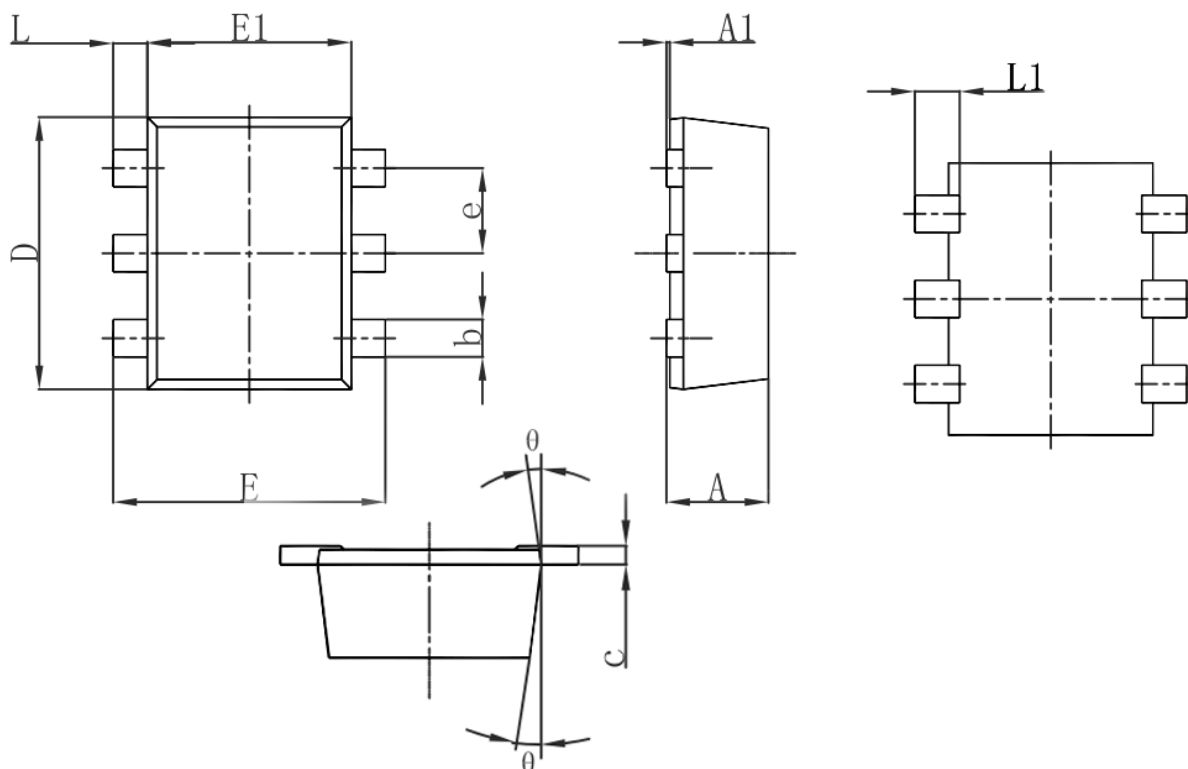


Transfer Characteristics





SOT-563 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.06
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	10° REF.		10° REF.	