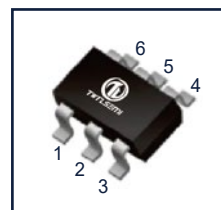


Description

The CJ3134KDW is a dual N-channel enhanced MOS field-effect transistor. Uses advanced trench technology and design to provide excellent $R_{DS(on)}$ with low gate charge. Device is suitable for use in DC-DC conversion, power switch and charging circuit. Standard Product CJ3134K is Pb-free.

General Features

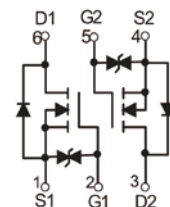
- Lead Free Product is Acquired
- Surface Mount Package
- N-Channel Switch with Low $R_{DS(on)}$
- Operated at Low Logic Level Gate Drive
- Equivalent to Two CJ3134K



SOT-363

Applications

- Load/Power Switching
- Interfacing Switching
- Battery Management for Ultra Small Portable Electronics
- Logic Level Shift



Equivalent Circuit

Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
CJ3134KDW	SOT-363	CJ3134KDW ↓ 产品名称 product name	34K	3000

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Rating	Units
V_{DS}	Drain-Source Voltage	20	V
V_{GS}	Gate-Source Voltage	± 12	V
I_D	Continuous drain current ($t \leq 10s$)	0.75	A
P_D	Power Dissipation	0.15	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^{\circ}\text{C/W}$
T_J	Junction temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-55~+150	$^{\circ}\text{C}$

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

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
STATIC CHARACTERISTICS						
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V , I _D =250μA	20	---	---	V
I _{DSS}	Drain-Source Leakage Current	V _{DS} =20V,V _{GS} =0V	---	---	1	μA
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±10V , V _{DS} =0V	---	---	±20	μA
V _{GS(th)}	Gate Threshold Voltage (note 1)	V _{GS} =V _{DS} , I _D =250μA	0.35	0.54	1.1	V
R _{DS(ON)}	Drain-source on-resistance (note 1)	V _{GS} =4.5V, I _D =0.65A	---	270	380	mΩ
		V _{GS} =2.5V,I _D =0.55A	---	320	450	
		V _{GS} =1.8V , I _D =0.45A	---	390	800	
g _{fs}	Forward Transconductance (note 1)	V _{DS} =10V , I _D =0.8A	---	1.6	---	S
V _{SD}	Diode Forward Voltage (note 1)	I _S =0.15A,V _{GS} =0V	---	---	1.2	V
DYNAMIC CHARACTERISTICS (note 2)						
C _{iss}	Input Capacitance	V _{DS} =16V , V _{GS} =0V , f=1MHz	---	79	120	pF
C _{oss}	Output Capacitance		---	13	20	
C _{rss}	Reverse Transfer Capacitance		---	9	15	
SWITCHING CHARACTERISTICS (note 2)						
T _{d(on)}	Turn-On Delay Time	V _{GS} =4.5V,V _{DS} =10V, I _D =0.5A,R _{GEN} =10Ω	---	6.7	---	ns
T _r	Rise Time		---	4.8	---	
T _{d(off)}	Turn-Off Delay Time		---	17.3	---	
T _f	Fall Time		---	7.4	---	
Q _g	Total Gate Charge	V _{DS} =10V,V _{GS} =4.5V,I _D =0.25A	---	750	---	pC
Q _{gs}	Gate-Source Charge		---	75	---	
Q _{gd}	Gate-Drain Charge		---	225	---	

Notes :

- 1.Pulse Test : Pulse width≤300μs, duty cycle≤0.5%.
- 2.Guaranteed by design, not subject to production testing.



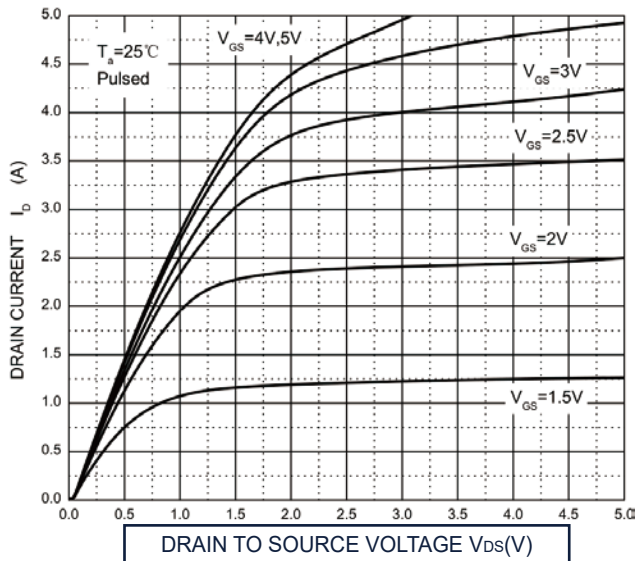
TWTLSEMI

TL-CJ3134KDW

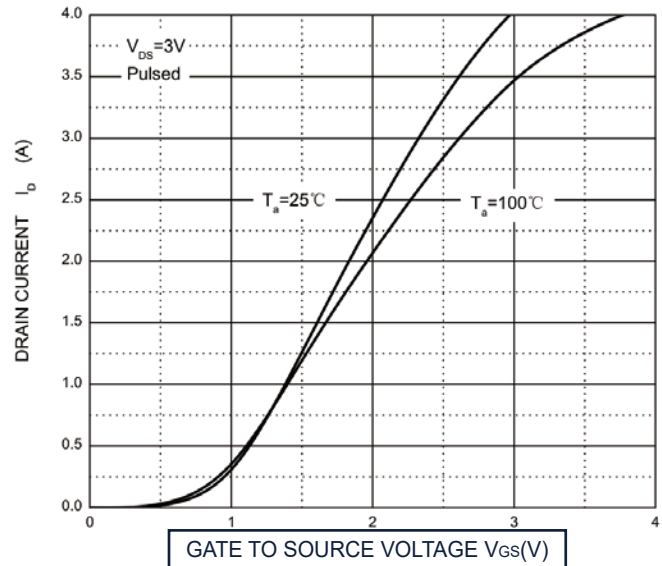
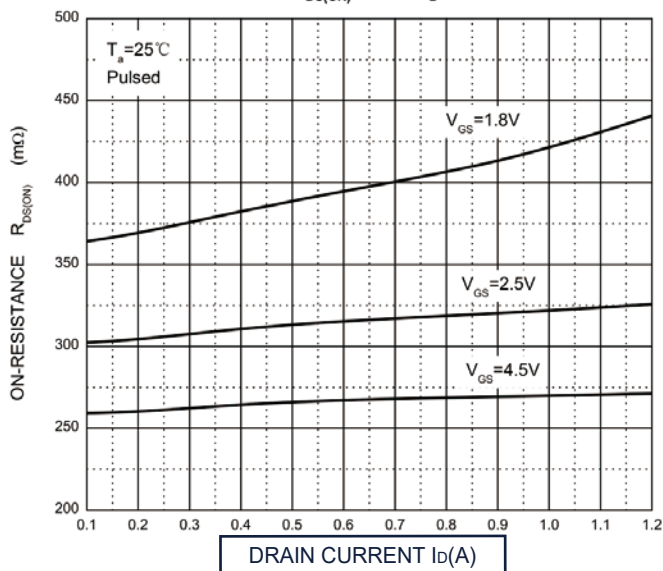
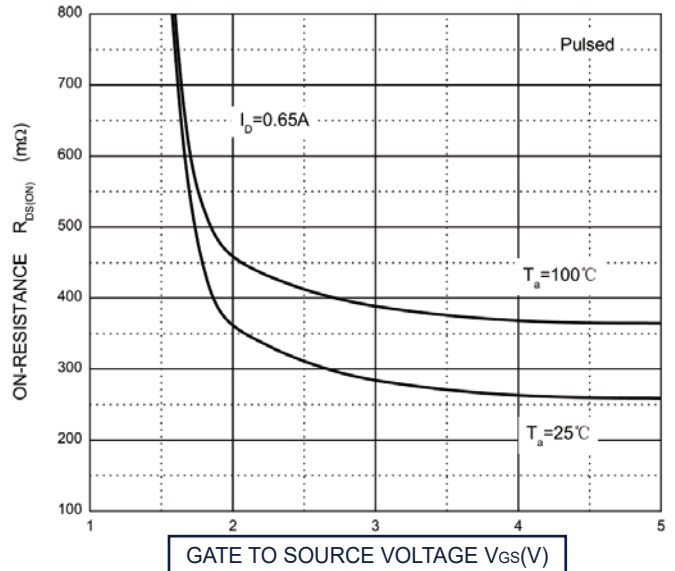
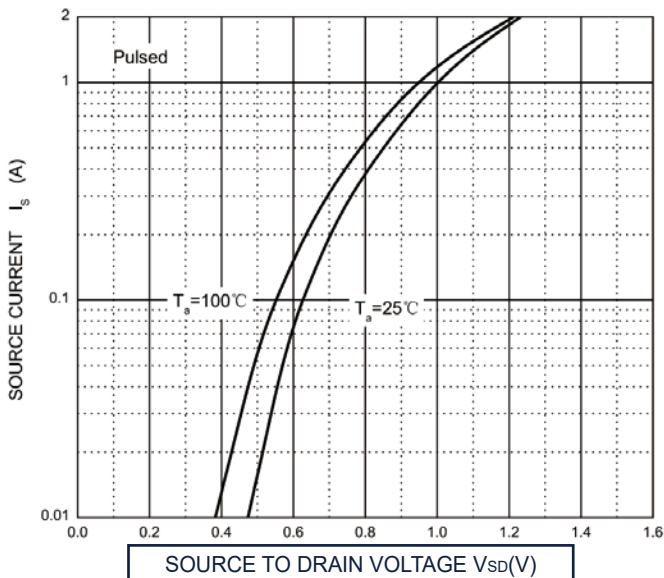
SOT-363 20V Dual N-Channel MOSFET

Typical Characteristics

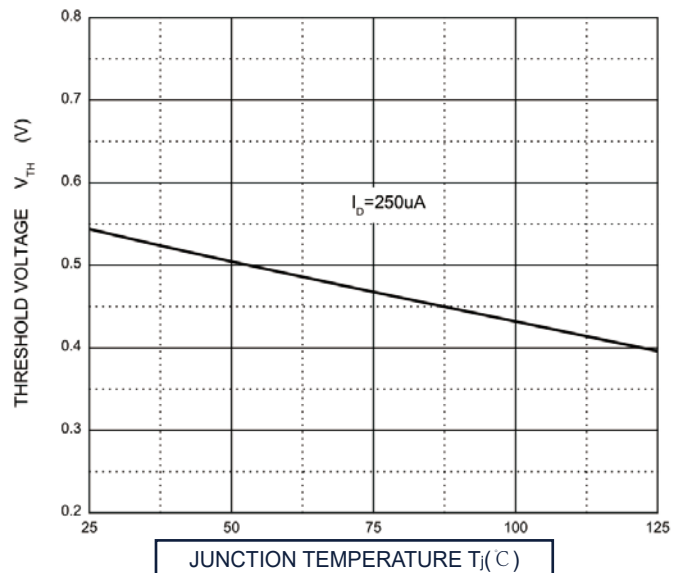
Output Characteristics



Transfer Characteristics

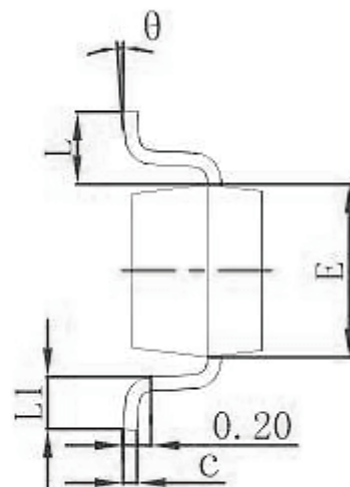
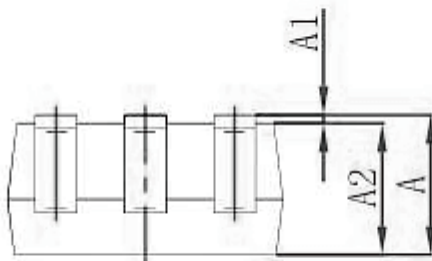
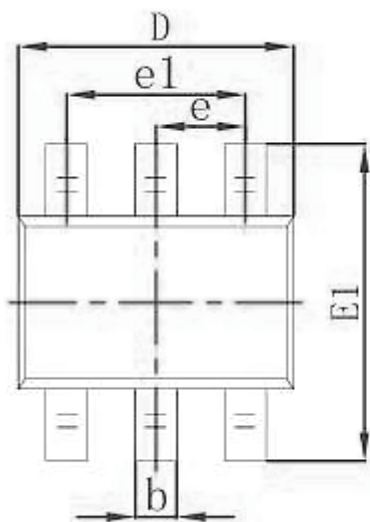
 $R_{DS(ON)}$ — I_D  $R_{DS(ON)}$ — V_{GS}  I_S — V_{SD} 

Threshold Voltage





SOT-363 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°