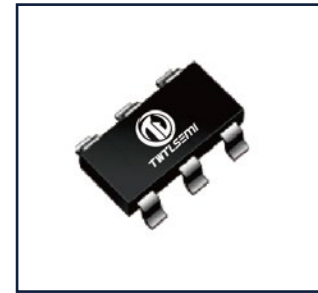


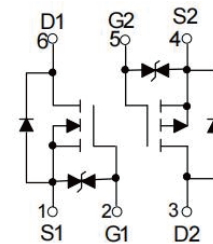
MOSFET Product Summary		
V _{DS}	I _D	R _{DS(on)}
20V	0.75A	<260mΩ@4.5V
		<280mΩ@2.5V
-20V	-0.66A	<430mΩ@-4.5V
		<600mΩ@-2.5V



SOT-363

Features

- Lead Free Product is Acquired
- Surface Mount Package
- Operated at Low Logic Level Gate Drive



Equivalent Circuit

Applications

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

Ordering information

Product ID	Pack	Naming rule	Marking	Qty(Pcs)
CJ3439KDW	SOT-363	CJ3439KDW 产品名称 product name	49K	3000

Maximum Ratings(T_A= 25 °C, unless otherwise specified)

Parameter	Symbol	Value	Unit
N-Channel MOSFET			
Drain-Source Voltage	V _{DS}	20	V
Gate-Source Voltage	V _{GS}	±10	V
Continuous Drain Current (note1)	I _D	0.75	A
Pulsed Drain Current (tp=10us)	I _{DM}	1.8	A

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

Parameter	Symbol	Value	Unit
P-Channel MOSFET			
Drain-Source Voltage	V_{DS}	-20	V
Gate-Source Voltage	V_{GS}	± 10	V
Continuous Drain Current ^(note1)	I_D	-0.66	A
Pulsed Drain Current ($t_p=10\mu\text{s}$)	I_{DM}	-1.2	A
Temperature and Thermal Resistance			
Thermal Resistance from Junction to Ambient ^(note1)	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-50 to +150	$^\circ\text{C}$
Lead Temperature for Soldering Purposes ($1/8''$ from case for 10 s)	T_L	260	$^\circ\text{C}$

N-CH MOSFET Electrical Characteristics

($T_A = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
STATIC CHARACTERISTICE						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =250μA	20			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =20V,V _{GS} = 0V			1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±10V, V _{DS} = 0V			±10	μA
Gate threshold voltage ⁽²⁾	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.45	0.7	1.1	V
Drain-source on-resistance ⁽²⁾	R _{DS(on)}	V _{GS} =4.5V, I _D =0.5A		0.26	0.35	Ω
		V _{GS} =2.5V, I _D =0.5A		0.28	0.42	Ω
Forward tranconductance	g _{FS}	V _{DS} =5.0V, I _D =0.5A		1.6		S
Diode forward voltage	V _{SD}	I _S =0.8A, V _{GS} =0V			1.0	V
DYNAMIC CHARACTERISTICS ⁽⁴⁾						
Input capacitance	C _{iSS}	V _{DS} =10V,V _{GS} =0V, f =1MHz		43.6		pF
Output capacitance	C _{oSS}			6.8		pF
Reverse transfer capacitance	C _{rSS}			4.6		pF
SWITCHING CHARACTERISTICS ⁽⁴⁾						
Turn-on delay time ⁽³⁾	t _{d(on)}	V _{GS} =4.5V,V _{DS} =10V, R _L =20Ω		1.4		nS
Turn-on rise time ⁽³⁾	t _r			27.8		nS
Turn-off delay time ⁽³⁾	t _{d(off)}			54.6		nS
Turn-off fall time ⁽³⁾	t _f			25.6		nS

P-CH MOSFET Electrical Characteristics

(T_A = 25 °C, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
STATIC CHARACTERISTICE						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = -250μA	-20			V
Zero gate voltage drain current	I _{DSS}	V _{DS} = -20V, V _{GS} = 0V			-1	μA
Gate-body leakage current	I _{GSS}	V _{GS} = ±8V, V _{DS} = 0V			±10	μA
Gate threshold voltage ⁽²⁾	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250μA	-0.4	-0.7	-1.0	V
Drain-source on-resistance ⁽²⁾	R _{DS(on)}	V _{GS} = -4.5V, I _D = -0.5A		0.43	0.52	Ω
		V _{GS} = -2.5V, I _D = -0.2A		0.60	0.70	Ω
Forward tranconductance	g _{FS}	V _{DS} = -5.0V, I _D = -0.5A		1.2		S
Diode forward voltage	V _{SD}	I _S = -0.5A, V _{GS} = 0V			1.0	V
DYNAMIC CHARACTERISTICS ⁽⁴⁾						
Input capacitance	C _{iss}	V _{DS} = -10V, V _{GS} = 0V, f = 1MHz		33.8		pF
Output capacitance	C _{oss}			9.0		pF
Reverse transfer capacitance	C _{rss}			3.3		pF
SWITCHING CHARACTERISTICS ⁽⁴⁾						
Turn-on delay time ⁽³⁾	t _{d(on)}	V _{GS} = -4.5V, V _{DS} = -10V, R _L = 20Ω		7.0		nS
Turn-on rise time ⁽³⁾	t _r			83.6		nS
Turn-off delay time ⁽³⁾	t _{d(off)}			840		nS
Turn-off fall time ⁽³⁾	t _f			640		nS

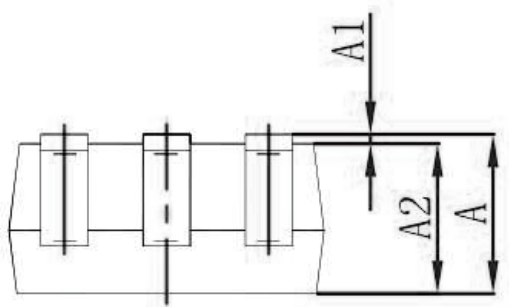
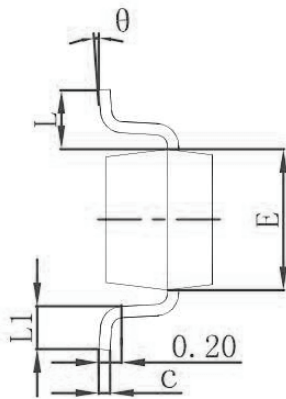
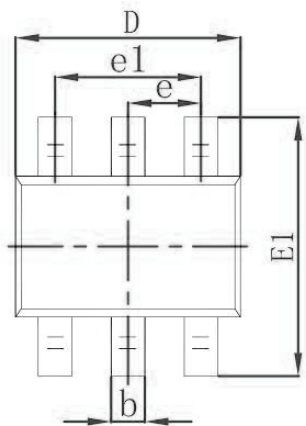
Notes:

1. Surface mounted on FR4 board using the minimum recommended pad size.
2. Pulse Test : Pulse Width=300μs, Duty Cycle=2%.
3. Switching characteristics are independent of operating junction temperatures.
4. Guaranteed by design, not subject to producing.



Package Outline Dimensions

SOT-363



Symbol	Dimensions (mm)	
	Min	Max
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.08	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.41
e	0.650TYP	
e1	1.20	1.40
L	0.26	0.46
L1	0.525REF	
o	0°	8°