



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-363 Plastic-Encapsulate MOSFETS

CJ3134KDW Dual N-Channel MOSFET

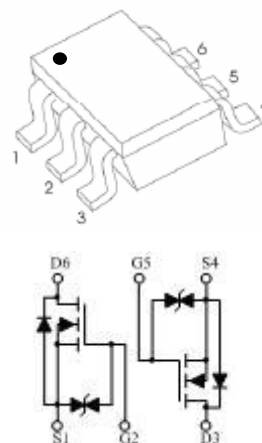
FEATURE

- 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

APPLICATION

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

SOT-363



MARKING: 34K

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	20	V
Gate-source voltage	V_{GS}	± 12	V
Continuous drain current ($t \leq 10\text{s}$)	I_D	0.75	A
Power dissipation*	P_D	0.15	W
Thermal resistance from junction to ambient	$R_{\theta JA}$	833	$^{\circ}\text{C/W}$
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~ +150	$^{\circ}\text{C}$

* Repetitive rating : Pulse width limited by junction temperature.

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
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} =±12V, V _{DS} = 0V			±50	μA
Gate threshold voltage (note 1)	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.35		1	V
Drain-source on-resistance (note 1)	R _{DS(on)}	V _{GS} =4.5V, I _D =0.65A			380	mΩ
		V _{GS} =2.5V, I _D =0.55A			450	mΩ
		V _{GS} =1.8V, I _D =0.45A			800	mΩ
Forward tranconductance (note 1)	g _{FS}	V _{DS} =10V, I _D =0.8A		1.6		S
Diode forward voltage(note 1)	V _{SD}	I _S =0.15A, V _{GS} = 0V			1.2	V
DYNAMIC PARAMETERS (note 2)						
Input Capacitance	C _{iss}	V _{DS} =16V, V _{GS} =0V, f =1MHz		79	120	pF
Output Capacitance	C _{oss}			13	20	pF
Reverse Transfer Capacitance	C _{rss}			9	15	pF
SWITCHING PARAMETERS(note 2)						
Turn-on delay time	t _{d(on)}	V _{GS} =4.5V, V _{DS} =10V, I _D =0.5A, R _{GEN} =10Ω		6.7		ns
Turn-on rise time	t _r			4.8		ns
Turn-off delay time	t _{d(off)}			17.3		ns
Turn-off fall time	t _f			7.4		ns
Total Gate Charge	Q _g	V _{DS} =10V, V _{GS} =4.5V, I _D =7A		20		nC
Gate-Source Charge	Q _{gs}			1		nC
Gate-Drain Charge	Q _{gd}			4		nC

Notes :

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

Typical Characteristics

CJ3134KDW

