

SOT-363 Plastic-Encapsulate MOSFET

型号：3134KDW

V(BR)DSS	RDS(on)MAX	I _D
20 V	380mΩ@4.5V	0.75A
	450mΩ@2.5V	
	800mΩ@V1.8v	

主要特性/Features

表面贴装组件 Surface Mount Package

N沟道低RDS(on)开关管 N-Channel Switch with Low RDS(on)

在低逻辑电平门驱动下运行 Operated at Low Logic Level Gate Drive

应用/Application

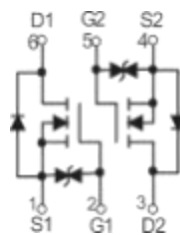
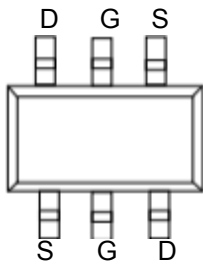
负载/电源切换 Load/Power Switching

接口交换 Interfacing Switching

超小型便携式电子设备的电池管理 Battery Management for Ultra Small Portable Electronics

逻辑电平变换 Logic Level Shift

印字/MARKING 等效电路/Equivalent Circuit



SOT-363 Plastic-Encapsulate MOSFET

极限参数/Absolute Maximum Ratings(TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-source voltage	V _{DS}	20	V
Typical Gate-source voltage	V _{GS}	±12	V
Continuous drain current (t ≤10s)	I _D	0.75	A
Power dissipation*	P _D	0.15	W
Thermal resistance from junction to	R _{θJA}	833	°C
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55~ +150	°C

* Repetitive rating : Pulse width limited by junction temperature.

SOT-363 Plastic-Encapsulate MOSFET

电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted)

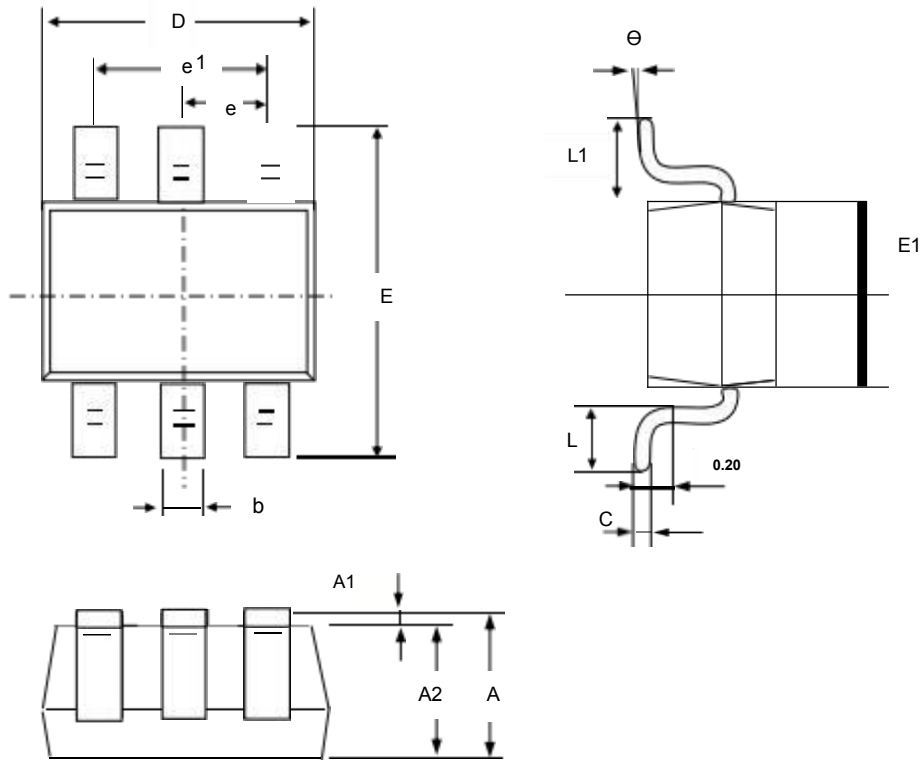
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	$V_{(BR) DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	20			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 20V, V_{GS} = 0V$			1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 10V, V_{DS} = 0V$			± 20	μA
Gate threshold voltage (note 1)	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	0.35	0.54	1.1	V
Drain-source on-resistance (note 1)	$R_{DS(on)}$	$V_{GS} = 4.5V, I_D = 0.65A$		270	380	$m\Omega$
		$V_{GS} = 2.5V, I_D = 0.55A$		320	450	$m\Omega$
		$V_{GS} = 1.8V, I_D = 0.45A$		390	800	$m\Omega$
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	$t_{d(on)}$	$V_{GS} = 4.5V, V_{DS} = 10V,$ $I_D = 0.5A, R_{GEN} = 10\Omega$		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	$V_{DS} = 10V, V_{GS} = 4.5V, I_D = 0.25A$		750		PC
Gate-Source Charge	Q_{gs}			75		PC
Gate-Drain Charge	Q_{gd}			225		PC

Notes :

1. Pulse Test : Pulse width $\leq 300\mu s$, duty cycle $\leq 0.5\%$.
2. Guaranteed by design, not subject to production testing.

SOT-363 Plastic-Encapsulate MOSFET

成品外观尺寸/SOT-363 Package Information



Symbol	Dim in mm		
	Min	Nor	Max
A	0.90	1.00	1.10
A1	0.00	0.05	0.10
A2	0.90	0.95	1.00
b	0.15	0.25	0.35
c	0.08	0.12	0.15
D	2.00	2.10	2.20
E	2.15	2.30	2.45
E1	1.15	1.25	1.35
e	0.650TPY		
e^1	1.2	1.3	1.4
L1	0.26	0.36	0.46
L1	0.525REF.		
θ	0°	4°	8°