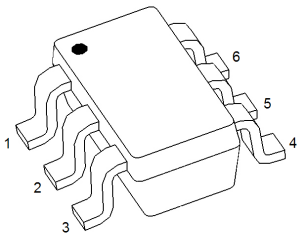
$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
30V	38mΩ@10V	5A
	55mΩ@4.5V	

SOT-23-6L



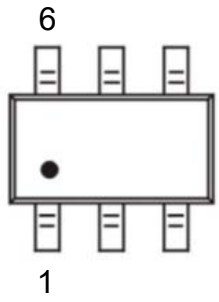
FEATURE

- TrenchFET Power MOSFET
- Low Gate Charge
- Low On-resistance
- Surface Mount Package

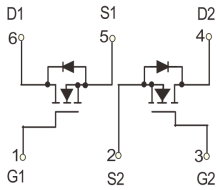
APPLICATION

- DC/DC converter
- Load switch for portable devices
- Commercial-industrial applications

MARKING:



Equivalent Circuit



ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current	I_D	5	A
Pulsed Drain Current (note 1)	I_{DM}	12	A
Power Dissipation (note 2)	P_D	1.1	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	114	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{STG}	-55~ 150	℃

Notes : 1. Pulse width limited by Max.junction temperature.

2.Per element must not be exceeded

MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
STATIC PARAMETERS						
Drain-source breakdown voltage	$V_{(BR)DSS}$	V_{GS} = 0V, I_D =250μA	30			V
Zero gate voltage drain current	I_{DSS}	V_{DS} =30V,V_{GS} = 0V			1	μA
Gate-body leakage current	I_{GSS}	V_{GS} =±12V, V_{DS} = 0V			±100	nA
Gate threshold voltage	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D =250μA	0.6		1.5	V
Drain-source on-resistance (note 3)	$R_{DS(on)}$	V_{GS} =10V, I_D =5A		28	38	mΩ
		V_{GS} =4.5V, I_D =4A		41	55	mΩ
Forward tranconductance	g_{FS}	V_{DS} =5V, I_D =3.4A	4.5			S
Diode forward voltage (note 3)	V_{SD}	I_S=2.7A, V_{GS} = 0V			1.2	V
DYNAMIC PARAMETERS(note 4)						
Input Capacitance	C_{iss}	V_{DS} =15V,V_{GS} =0V,f =1MHz		210		pF
Output Capacitance	C_{oss}			65		pF
Reverse Transfer Capacitance	C_{rss}			32		pF
Gate resistance	R_g	f =1MHz		6.5		pF
SWITCHING PARAMETERS (note 3,4)						
Total Gate Charge	Q_g	V_{DS} =10V,V_{GS} =4.5V,I_D=3.4A		6.2		nC
Gate-Source Charge	Q_{gs}			0.5		nC
Gate-Drain Charge	Q_{gd}			1.7		nC

Notes : 3. Pulse Test : Pulse width≤300μs, duty cycle≤2%.

4. Graranted by design，not subject to production testing.