



Product Summary

$V_{(BR)DSS}$	$R_{DS(on)TYP}$	I_D
-100V	580mΩ@-10V	-1.0A
	650mΩ@-4.5V	

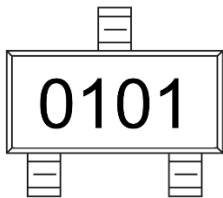
Feature

- TrenchFET Power MOSFET
- Excellent $R_{DS(on)}$
- Low Gate Charge

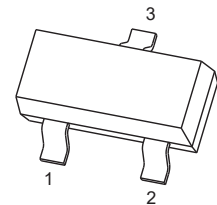
Application

- DC/DC Converter
- Load Switch for Portable Devices
- Battery Switch

MARKING:

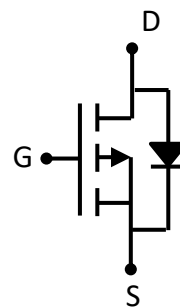


SOT-23



1. GATE
2. SOURCE
3. DRAIN

Schematic diagram



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

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-100	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current ^{1,2}	I_D	-1.0	A
Pulsed Drain Current	I_{DM}	-4.0	A
Power Dissipation	P_D	0.77	W
Thermal Resistance from Junction to Ambient ^{1,2}	$R_{\theta JA}$	162	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^\circ\text{C}$

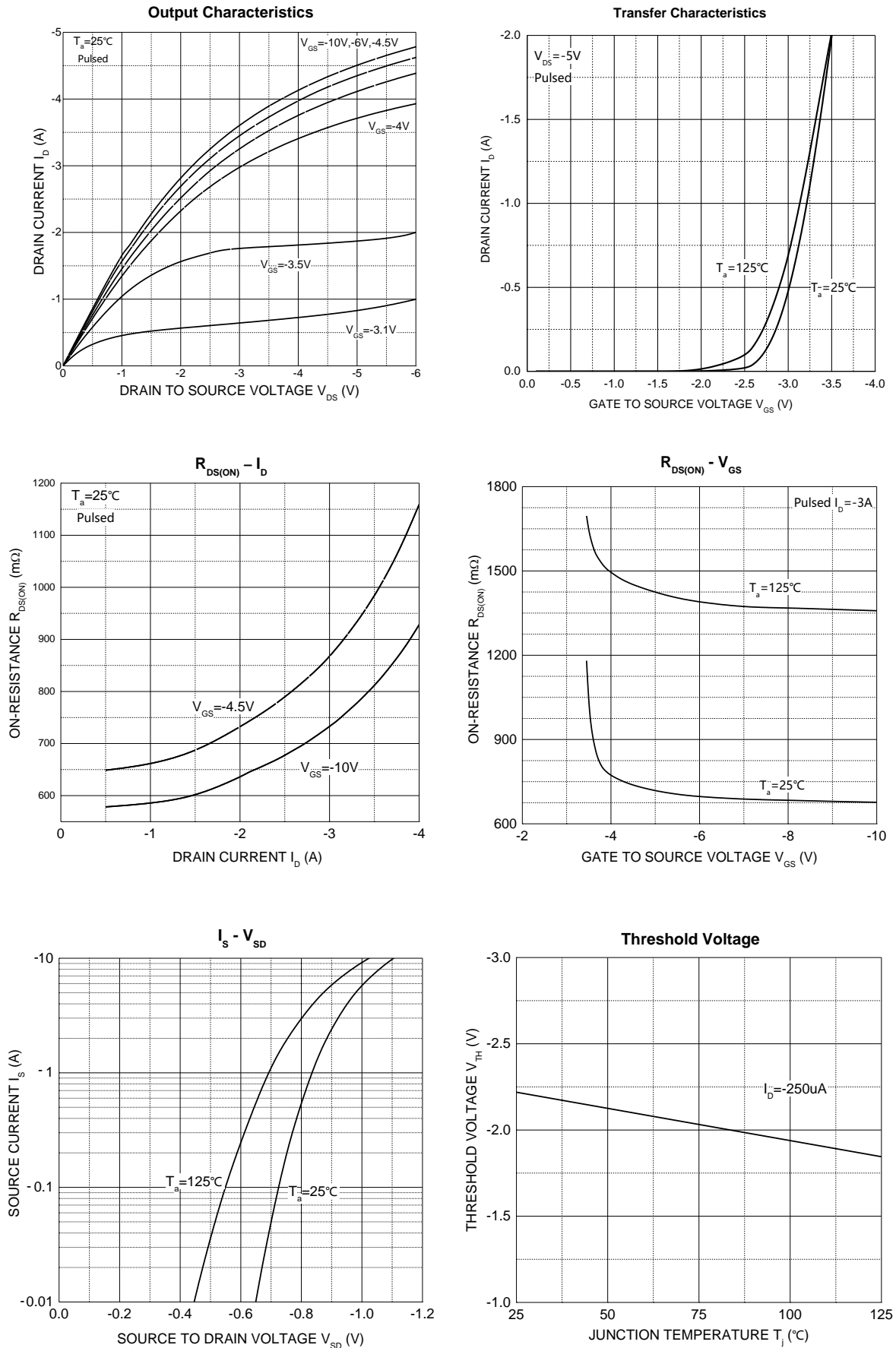
MOSFET ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

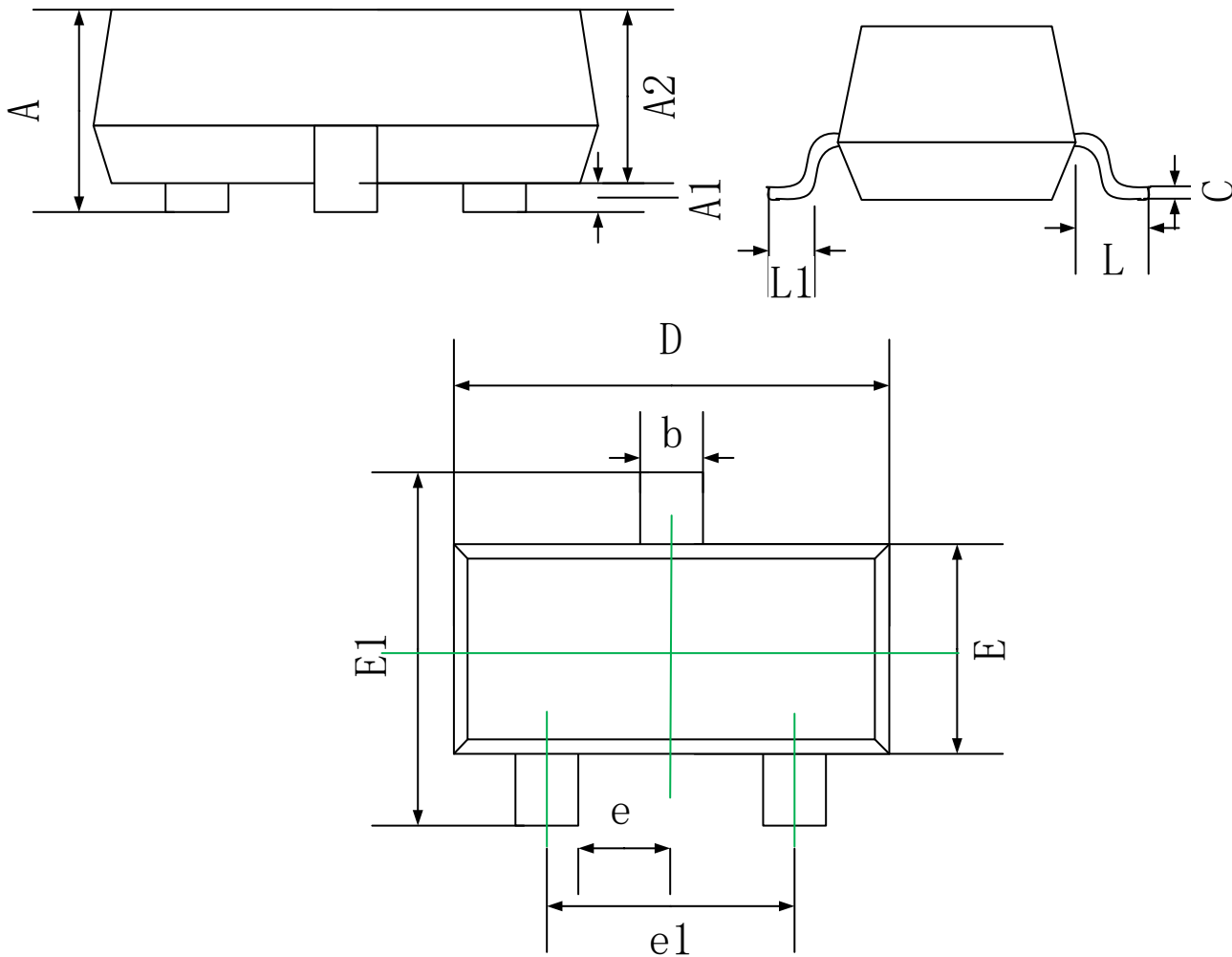
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Off Characteristics						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-100			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -100V, V_{GS} = 0V$			-1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			± 100	nA
On Characteristics³						
Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	1.5	2.2	3.0	V
Drain-source on-resistance	$R_{DS(on)}$	$V_{GS} = -10V, I_D = -1.0A$		580	800	m Ω
		$V_{GS} = -4.5V, I_D = -0.5A$		650	1000	
Dynamic Characteristics						
Input Capacitance	C_{iss}	$V_{DS} = -40V, V_{GS} = 0V, f = 1MHz$		388		pF
Output Capacitance	C_{oss}			19		
Reverse Transfer Capacitance	C_{rss}			15		
Switching Characteristics						
Total Gate Charge	Q_g	$V_{DS} = -10V, V_{GS} = -10V, I_D = -1A$		3.2		nC
Gate-Source Charge	Q_{gs}			0.5		
Gate-Drain Charge	Q_{gd}			1.1		
Turn-on delay time	$t_{d(on)}$	$V_{DD} = -10V, V_G = -10V, I_D = -1A$ $R_G = 2.5\Omega$		10		ns
Turn-on rise time	t_r			32		
Turn-off delay time	$t_{d(off)}$			28		
Turn-off fall time	t_f			9		
Diode Characteristics						
Diode forward current	I_S	$T_A = 25^\circ\text{C}$			-1	A
Diode pulsed forward current	I_{SM}				-4	A
Diode Forward voltage	V_{DS}	$V_{GS} = 0V, I_S = -1A$			-1.2	V

Notes :

1. $R_{\theta JA}$ is measured with the device mounted on 1 in² FR4 board with 1oz. single side copper, in a still air environment with $T_A = 25^\circ\text{C}$.
2. $R_{\theta JA}$ is measured in the steady state
3. Pulse test : Pulse width $\leq 380\mu s$, duty cycle $\leq 2\%$.

Typical Electrical and Thermal Characteristics



SOT-23 Package Information


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)