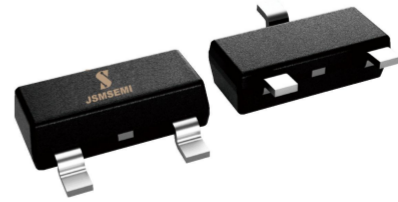


◆ Features & Applications

TrenchFET Power MOSFET.
 Super high dense cell design.

Battery management,
 High speed switch,
 low power DC to DC converter.


◆ Absolute Maximum Ratings(Ta=25°C)

Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	20	V
V_{GS}	Gate-Source Voltage	± 10	V
I_D	Continuous Drain Current	2.3	A
I_S	Continuous Source-Drain Current(Diode Conduction)	0.6	A
P_D	Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient (t \leq 5s)	300	$^{\circ}C/W$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55~+150	$^{\circ}C$

◆ Electrical Characteristics (Ta=25°C unless otherwise specified)

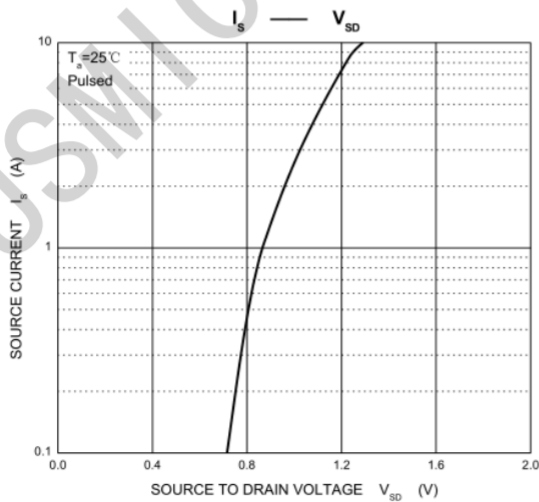
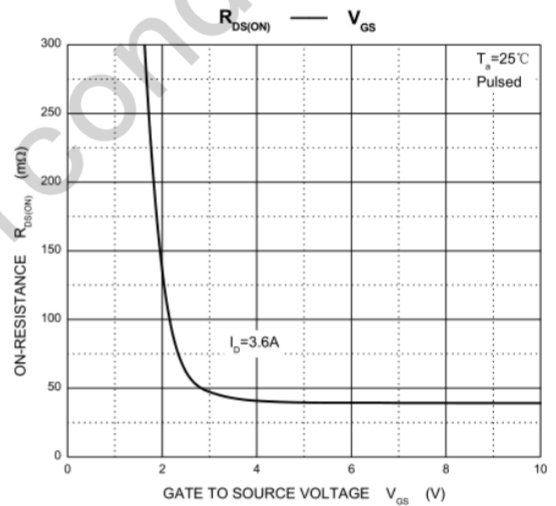
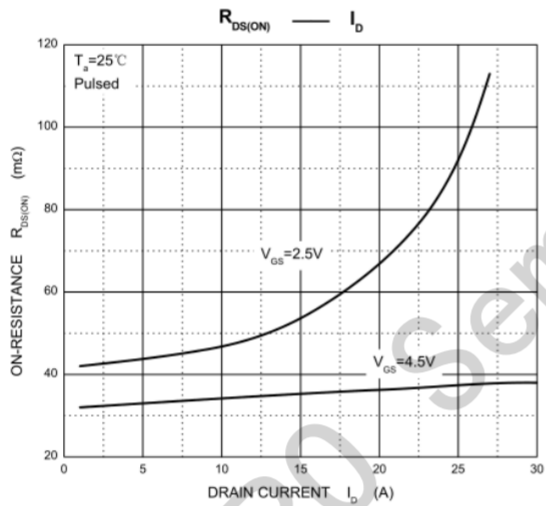
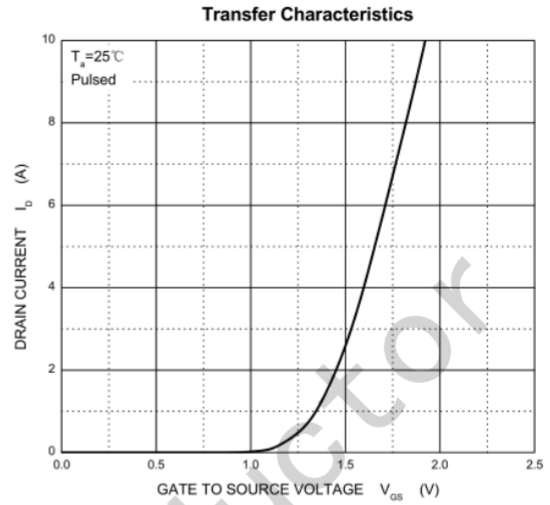
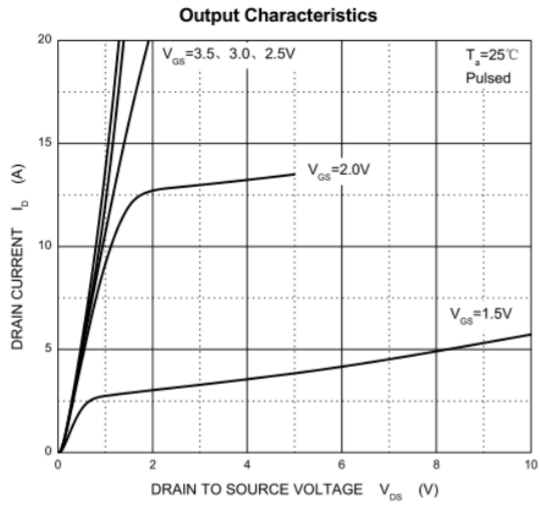
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
Static						
$V_{(BR)DSS}$	Drain-source breakdown voltage	$V_{GS}=0, I_D=10\mu A$	20			V
$V_{GS(th)}$	Gate-threshold voltage	$V_{DS}=V_{GS}, I_D=250\mu A$	0.6		1.1	V
I_{GSS}	Collector cut-off current	$V_{DS}=0, V_{GS}=\pm 10V$			100	nA
I_{DSS}	Collector cut-off current	$V_{DS}=20V, V_{GS}=0V$			1	μA
$R_{DS(on)}$	Drain-source on-resistance ^a	$V_{GS}=4.5V, I_D=2A$		50	60	m Ω
		$V_{GS}=2.5V, I_D=1A$		65	85	m Ω
g_{FS}	Forward transconductance ^a	$V_{DS}=5V, I_D=2.5A$		10		S
V_{SD}	Diode forward voltage	$I_S=1A, V_{GS}=0V$			1.2	V
Dynamic						
Q_g	Total gate charge	$V_{DS}=10V, V_{GS}=4.5V, I_D=2.5A$		5.0	10	nC
Q_{gs}	Gate-source charge			0.65		
Q_{gd}	Gate-drain charge			1.5		
C_{iss}	Input capacitance ^b	$V_{DS}=10V, V_{GS}=0V, f=1MHz$		340		pF
C_{oss}	Output capacitance ^b			120		
C_{rss}	Reverse transfer capacitance ^b			80		
Switching^b						
$t_{d(on)}$	Turn-on delay time	$V_{DS}=10V, RL=5.5\Omega, I_D\approx 2.5A, V_{GEN}=4.5V, Rg=6\Omega$		12		nS
t_r	Rise time			36		
$t_{d(off)}$	Turn-off delay time			34		
t_f	Fall time			10		

Notes :

a. Pulse Test : Pulse width \leq 300 μ s, duty cycle \leq 2%.

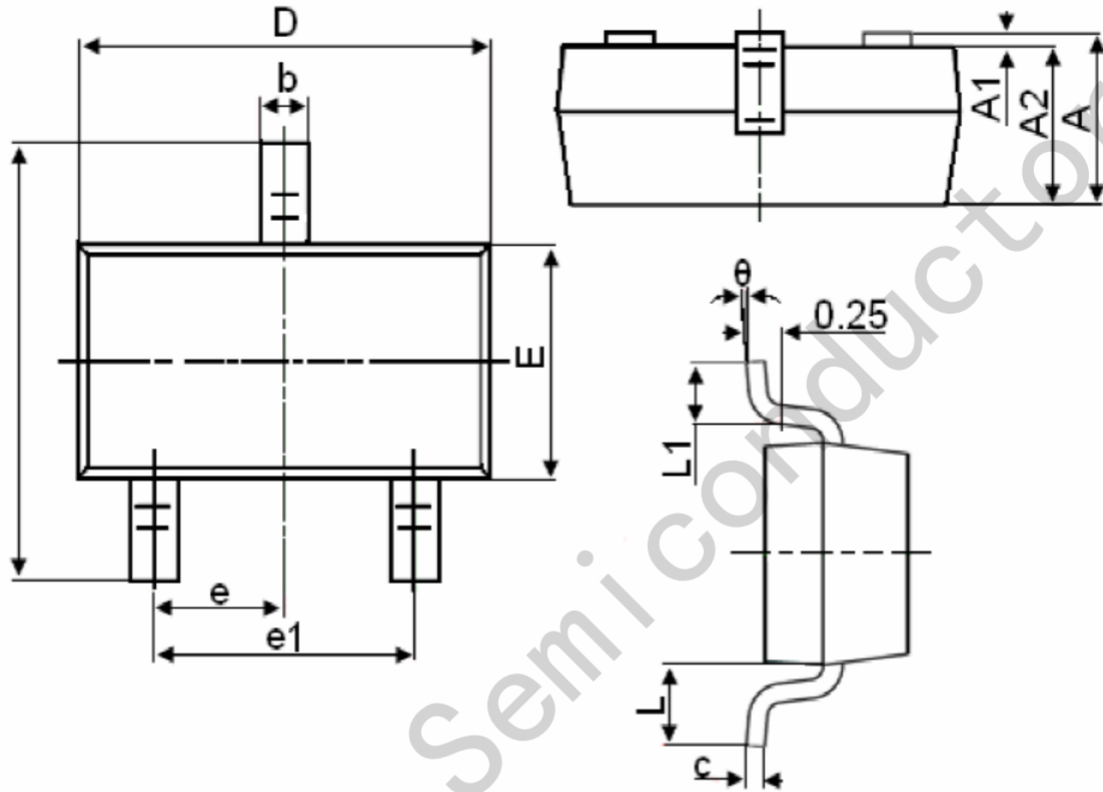
b. These parameters have no way to verify.

◆ Typical Characteristics



Package Information

SOT-23



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
theta	0°	8°	0°	8°

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [JSMSEMI](#) manufacturer:

Other Similar products are found below :

[IRFD120](#) [JANTX2N5237](#) [2SK2267\(Q\)](#) [BUK455-60A/B](#) [TK100A10N1,S4X\(S](#) [MIC4420CM-TR](#) [VN1206L](#) [NDP4060](#) [SI4482DY](#)
[IRS2092STRPBF-EL](#) [IPS70R2K0CEAKMA1](#) [TK31J60W5,S1VQ\(O](#) [TK31J60W,S1VQ\(O](#) [TK16J60W,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#)
[DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE2384](#) [DMC2700UDMQ-7](#) [DMN2080UCB4-7](#)
[DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#)
[STF5N65M6](#) [IRF40H233XTMA1](#) [STU5N65M6](#) [DMN6022SSD-13](#) [DMN13M9UCA6-7](#) [DMTH10H4M6SPS-13](#) [IPS60R360PFD7SAKMA1](#)
[DMN2990UFB-7B](#) [SSM3K35CT,L3F](#) [IPLK60R1K0PFD7ATMA1](#) [2N7002W-G](#) [MCAC30N06Y-TP](#) [IPWS65R035CFD7AXKSA1](#)
[MCQ7328-TP](#) [SSM3J143TU,LXHF](#) [DMN12M3UCA6-7](#) [PJMF280N65E1_T0_00201](#) [PJMF380N65E1_T0_00201](#)
[PJMF280N60E1_T0_00201](#) [PJMF600N65E1_T0_00201](#) [PJMF900N65E1_T0_00201](#)