

SOT-23 Plastic-Encapsulate MOSFETS

FDN340P

P-Channel 20-V(D-S) MOSFET

V(BR)DSS	RDS(on)MAX	ID
-20 V	70mΩ@ -4.5V	-2A
	110mΩ@ -2.5V	
	210mΩ@ -1.8V	

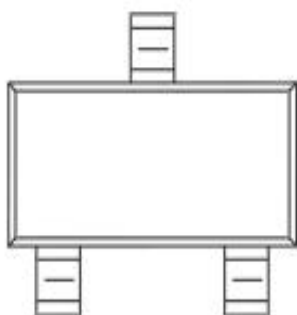
FEATURE

- TrenchFET Power MOSFET
- Supper high density cell design

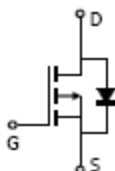
APPLICATION

- ※ Battery protection
- ※ Load switch
- ※ Battery management

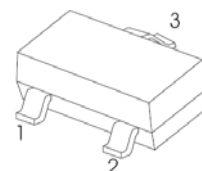
MARKING



Equivalent Circuit



SOT - 23



- 1. GATE
- 2. SOURCE
- 3. DRAIN

Maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	-20	V
Gate-Source Voltage	VGS	±8	
Continuous Drain Current	ID	-2	A
Pulsed Diode Current	IDM	-10	
Power Dissipation	PD	1.1	W
Thermal Resistance from Junction to Ambient (t≤10s)	RθJA	250	°C/W
Operating Junction	TJ	150	°C
Storage Temperature	TSTG	-55~+150	°C

SOT-23 Plastic-Encapsulate MOSFETS
MOSFET ELECTRICAL CHARACTERISTICS
Static Electrical Characteristics (Ta = 25 °C Unless Otherwise Noted)

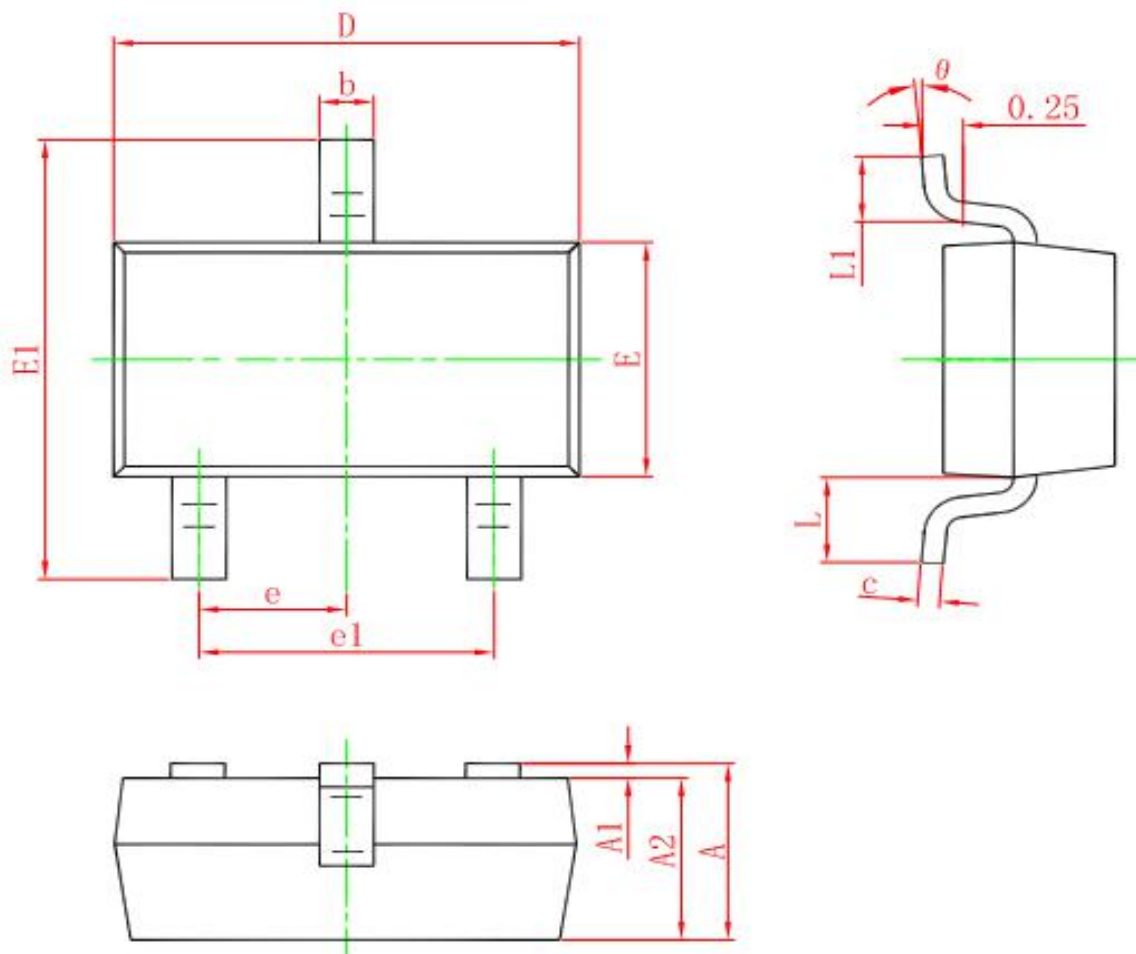
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Drain-source breakdown voltage	V(BR)DSS	VGS = 0V, ID = -250μA	-20			V
Gate-source threshold voltage	VGS(th)	VDS = VGS, ID = -250μA	-0.4		-1.5	V
Gate-source leakage	IGSS	VDS = 0V, VGS = ±8V			±100	nA
Zero gate voltage drain current	IDSS	VDS = -16V, VGS = 0V			-1	μA
Drain-source on-state resistancea	RDS(on)	VGS = -4.5V, ID = -2A		52	70	mΩ
		VGS = -2.5V, ID = -1.7A		78	110	mΩ
		VGS = -1.8V, ID = -1.2A			210	mΩ
Forward transconductancea	gfs	VDS = -4.5V, ID = -2A		8		S
Diode forward voltage	VSD	IS = -1A, VGS = 0V		-0.8	-1.2	V
Dynamic						
Input capacitance	Ciss	VDS = -10V, VGS = 0V, f = 1MHz		600		pF
Output capacitance	Coss			175		pF
Reverse transfer capacitanceb	Crss			80		pF
Total gate charge	Qg	VDS = -10V, VGS = -4.5V, ID = -2A		8		nC
Gate-source charge	Qgs			1.3		nC
Gate-drain charge	Qgd			2.2		nC
Gate resistance	Rg	f = 1MHz	0.5		3.2	Ω
Switchingbtr						
Turn-on delay time	td(on)	VDS = -10V RL = 3.5Ω, ID ≈ -1A, VGEN = -4.5V, Rg = 3Ω		6		ns
Rise time	tr			9		ns
Turn-off delay time	td(off)			31		ns
Fall time	tf			26		ns
Drain-source body diode characteristicstr						
Continuous Source-Drain Diode Current	IS	Tc = 25°C			-1.2	A
Pulsed Diode forward Curren	ISM				-10	A

Note :

1. Repetitive Rating : Pulse width limited by maximum junction temperature.
2. Surface Mounted on FR4 Board, t < 10 sec.
3. Pulse Test : Pulse Width ≤ 300μs, Duty Cycle ≤ 2%.
4. Guaranteed by design, not subject to production testing.

SOT-23 Plastic-Encapsulate MOSFETS

SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		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	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	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 [Youtai](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [NTNS3A92PZT5G](#) [IRFD120](#) [IRFF430](#) [JANTX2N5237](#) [2N7000](#)
[AOD464](#) [2SK2267\(Q\)](#) [2SK2545\(Q,T\)](#) [405094E](#) [423220D](#) [MIC4420CM-TR](#) [VN1206L](#) [614234A](#) [715780A](#) [751625C](#)
[IPS70R2K0CEAKMA1](#) [BSF024N03LT3 G](#) [PSMN4R2-30MLD](#) [TK31J60W5,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#) [DMN1017UCP3-7](#)
[EFC2J004NUZTDG](#) [FCAB21350L1](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE2384](#) [NTE2969](#) [NTE6400A](#) [DMC2700UDMQ-7](#)
[DMN2080UCB4-7](#) [DMN61D9UWQ-13](#) [US6M2GTR](#) [DMN31D5UDJ-7](#) [SSM6P54TU,LF](#) [DMP22D4UFO-7B](#) [IPS60R3K4CEAKMA1](#)
[DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#) [IRF40H233XTMA1](#) [IPSA70R950CEAKMA1](#) [IPSA70R2K0CEAKMA1](#) [STU5N65M6](#)
[C3M0021120D](#) [DMN6022SSD-13](#)