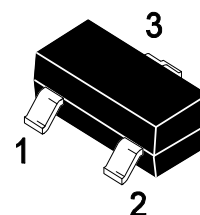
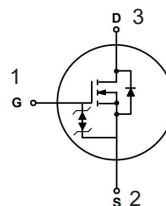


N-Channel Enhancement Mode MOSFET

Feature

- Super High dense cell design for extremely low $R_{DS(ON)}$.
- Reliable and Rugged.
- Low Threshold Voltage (1.5V—2.5 V) Make it Ideal for Low Voltage Applications.
- ESD protected.
- SOT-323 for Surface Mount Package.



Applications

- Power Management in DC/DC Converters
- Portable and Battery-powered Products.

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$

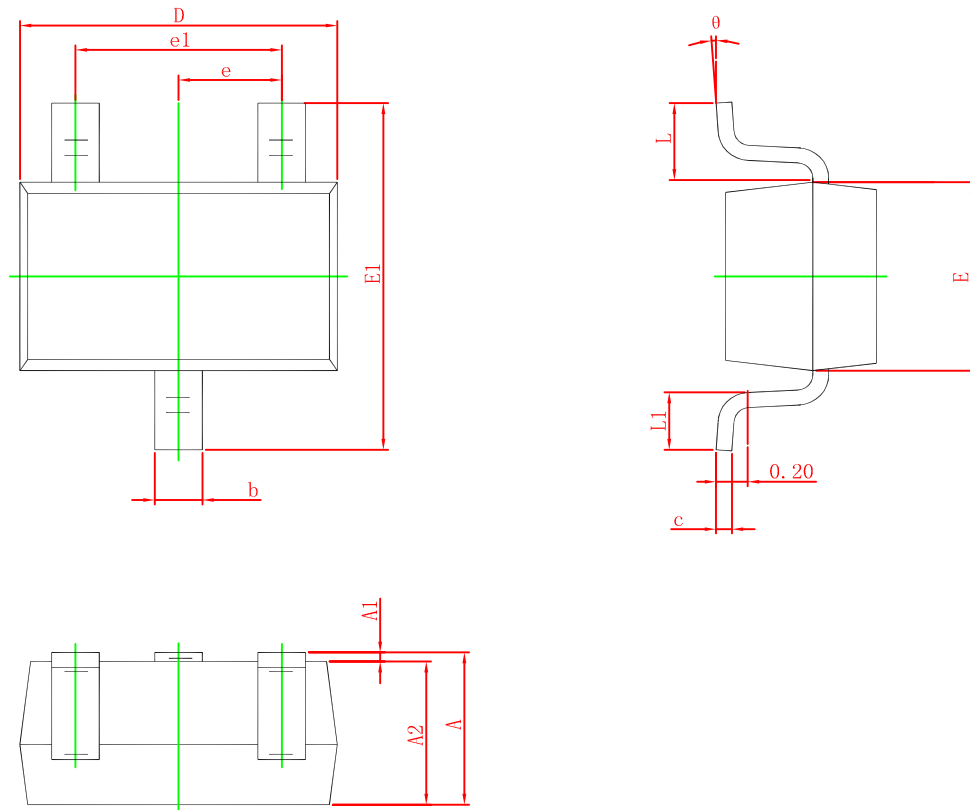
Unless Otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	0.17	A

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless Otherwise Noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Static Characteristics						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0 V, I _{DS} = 250 μA	100	-	-	V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} , I _{DS} = 250 μA	1.5	2.0	2.5	V
I _{DSS}	Drain Leakage Current	V _{DS} = 80 V, V _{GS} = 0V	-	-	1	μA
		T _J = 85 °C	-	-	30	μA
I _{GSS}	Gate Leakage Current	V _{GS} = ±20 V, V _{DS} = 0 V	-	-	± 10	μA
R _{DS(ON)} ^a	On-State Resistance	V _{GS} = 10 V, I _{DS} = 0.25 A	-	3.5	6	Ω
		V _{GS} = 4.5 V, I _{DS} = 0.2 A	-	4.5	9	
Diode Characteristics						
V _{SD}	Diode Forward Voltage	I _{SD} = 0.4 A, V _{GS} = 0 V	-	0.91	1.3	V

SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°