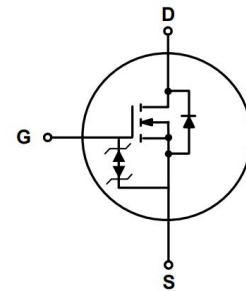
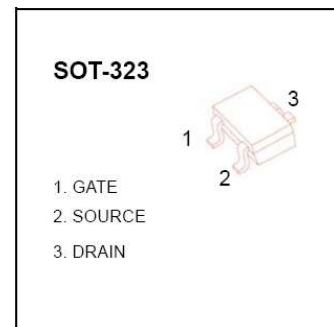


N-channel MOSFET

Feature

- 50V N-Channel MOSFET High Dense Design.
- $R_{DS(ON)} = 2.5\Omega(\text{max.}) @ V_{GS} = 10V$
 $R_{DS(ON)} = 3.5\Omega(\text{max.}) @ V_{GS} = 4.5V$
- Reliable and Rugged
- ESD Protect



Applications

- DC-DC Converter
- Motor Control.
- Load Switching

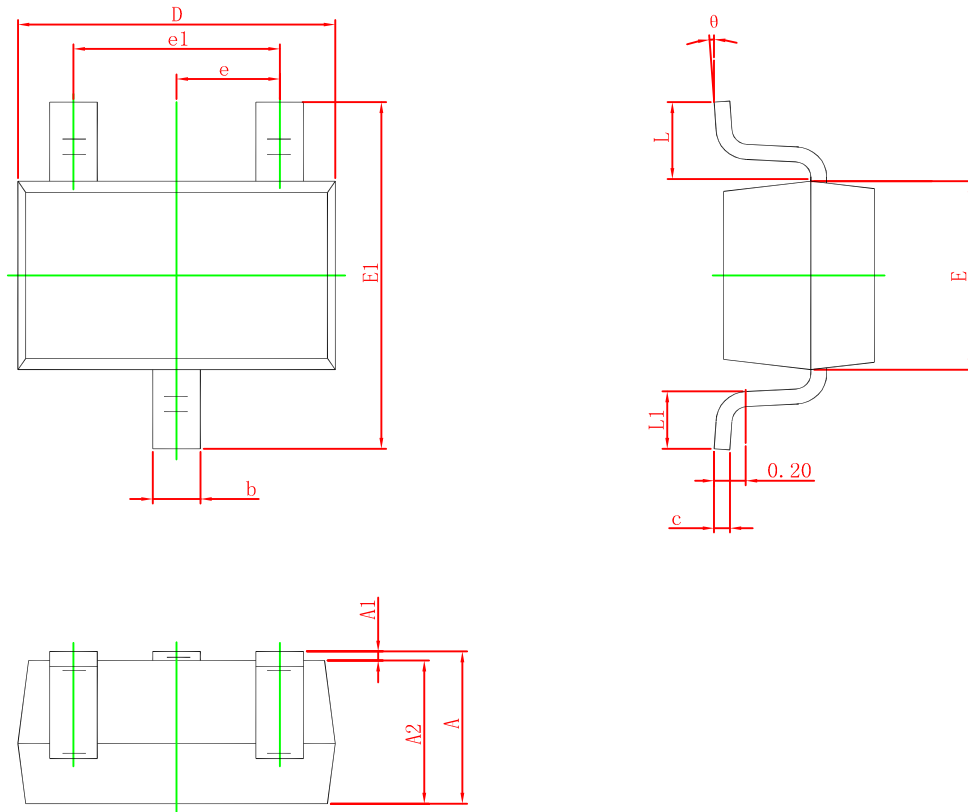
Absolute Maximum Ratings $T_A=25^\circ\text{C}$ Unless Otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	50	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	0.27	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	$V_{GS} = 0\text{ V}, I_{DS} = 250\ \mu\text{A}$	50	-	-	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS} = V_{GS}, I_{DS} = 250\ \mu\text{A}$	0.6	1.1	1.4	V
I_{DSS}	Drain Leakage Current	$V_{DS} = 40\text{ V}, V_{GS} = 0\text{ V}$	-	-	1	μA
		$T_J = 85^\circ\text{C}$	-	-	30	μA
I_{GSS}	Gate Leakage Current	$V_{GS} = \pm 20\text{ V}, V_{DS} = 0\text{ V}$	-	-	± 10	μA
$R_{DS(ON)}^a$	On-State Resistance	$V_{GS} = 10\text{ V}, I_{DS} = 250\ \mu\text{A}$	-	1.0	2.5	Ω
		$V_{GS} = 4.5\text{ V}, I_{DS} = 250\ \mu\text{A}$	-	1.1	3.5	
Diode Characteristics						
V_{SD}	Diode Forward Voltage	$I_{SD} = 150\text{mA}, V_{GS} = 0\text{ V}$	-	0.81	1.1	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°