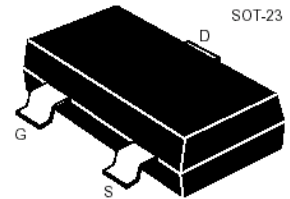


**P-Channel Enhancement-Mode MOS FETs**

**MAXIMUM RATINGS**

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	$BV_{DSS}$	-50	V
Gate- Source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current (continuous)	$I_{DR}$	-130	mA
Drain Current (pulsed)	$I_{DRM}$	-520	mA

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max	Unit
Total Device Dissipation $T_A = 25^\circ\text{C}$	$P_D$	200	mW
Derate above $25^\circ\text{C}$		1.8	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	350	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_J, T_{stg}$	150 $^\circ\text{C}$ , -55to+150 $^\circ\text{C}$	

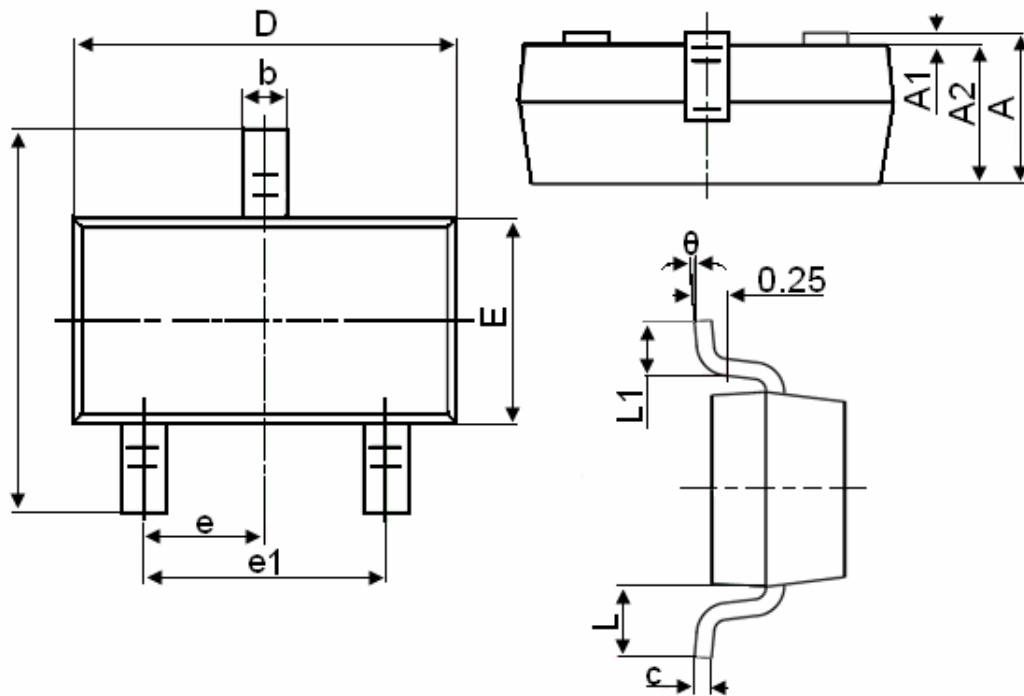
**ELECTRICAL CHARACTERISTICS**

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

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage ( $I_D=-250\mu\text{A}, V_{GS}=0\text{V}$ )	$BV_{DSS}$	-50	—	—	V
Gate Threshold Voltage ( $I_D=-250\mu\text{A}, V_{GS}=V_{DS}$ )	$V_{GS(th)}$	-1.0	—	-2.5	V
Diode Forward Voltage Drop ( $I_{SD}=-200\text{mA}, V_{GS}=0\text{V}$ )	$V_{SD}$	—	—	-1.5	V
Zero Gate Voltage Drain Current ( $V_{GS}=0\text{V}, V_{DS}=-50\text{V}$ ) ( $V_{GS}=0\text{V}, V_{DS}=-50\text{V}, T_A=125^{\circ}\text{C}$ )	$I_{DSS}$	—	—	-15 -60	$\mu\text{A}$
Gate Body Leakage ( $V_{GS}=\pm 20\text{V}, V_{DS}=0\text{V}$ )	$I_{GSS}$	—	—	$\pm 10$	nA
Static Drain-Source On-State Resistance ( $I_D=-100\text{mA}, V_{GS}=-5\text{V}$ )	$R_{DS(ON)}$	—	—	10	$\Omega$
Input Capacitance ( $V_{GS}=0\text{V}, V_{DS}=-25\text{V}, f=1\text{MHz}$ )	$C_{ISS}$	—	73	—	pF
Common Source Output Capacitance ( $V_{GS}=0\text{V}, V_{DS}=-25\text{V}, f=1\text{MHz}$ )	$C_{OSS}$	—	10	—	pF
Turn-ON Time ( $V_{DS}=-30\text{V}, I_D=-270\text{mA}, R_{GEN}=6\Omega$ )	$t_{(on)}$	—	—	5	ns
Turn-OFF Time ( $V_{DS}=-30\text{V}, I_D=-270\text{mA}, R_{GEN}=6\Omega$ )	$t_{(off)}$	—	—	20	ns
Reverse Recovery Time ( $I_{SD}=-100\text{mA}, V_{GS}=0\text{V}$ )	$t_{rr}$	—	10	—	ns

1. FR-5=1.0×0.75×0.062in.
2. Alumina=0.4×0.3×0.024in.99.5%alumina.
3. Pulse Width≤300  $\mu\text{s}$ ; Duty Cycle≤2.0%.

## SOT-23 Package Information



Symbol	Dimensions in Millimeters	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
$\theta$	0°	8°