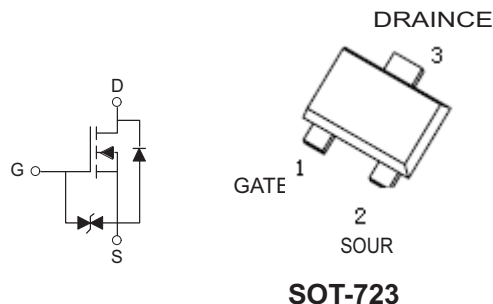


Channel Enhancement Mode Field Effect Transistor

Features

- Low on resistance $R_{DS(ON)}$
- Low gate threshold voltage
- Low input capacitance
- ESD protected up to 2KV

MARKING: R K



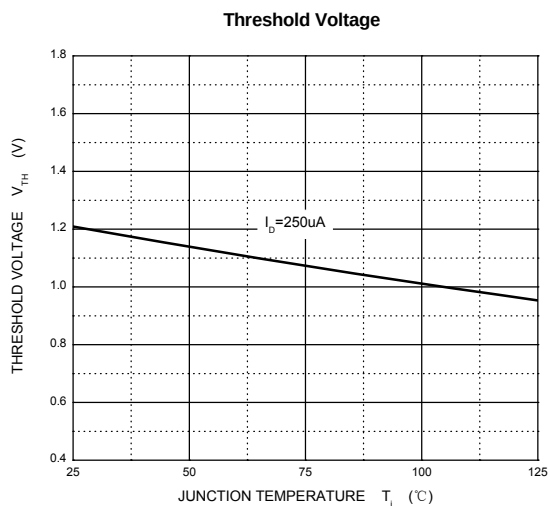
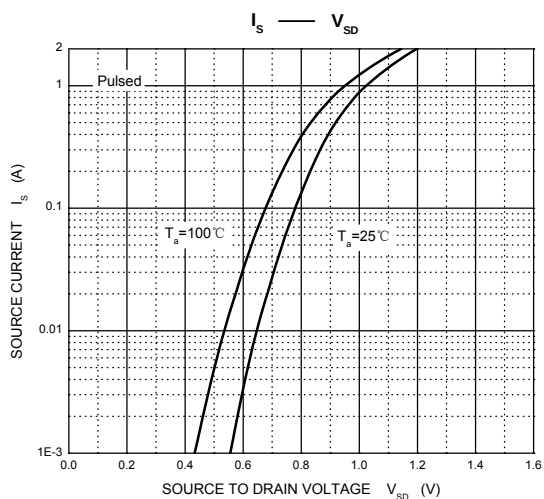
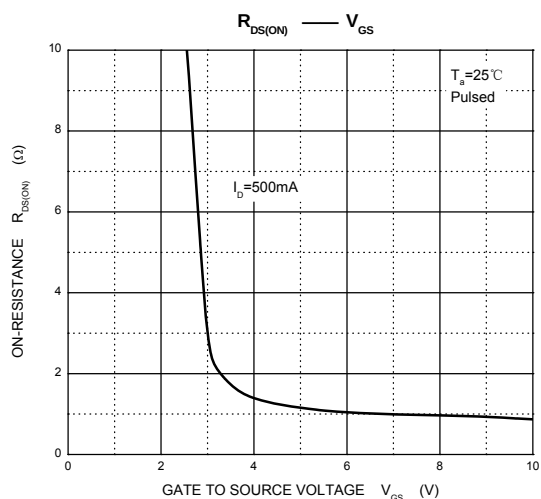
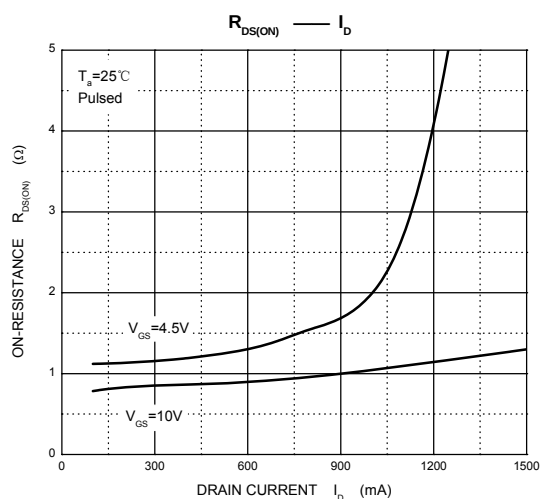
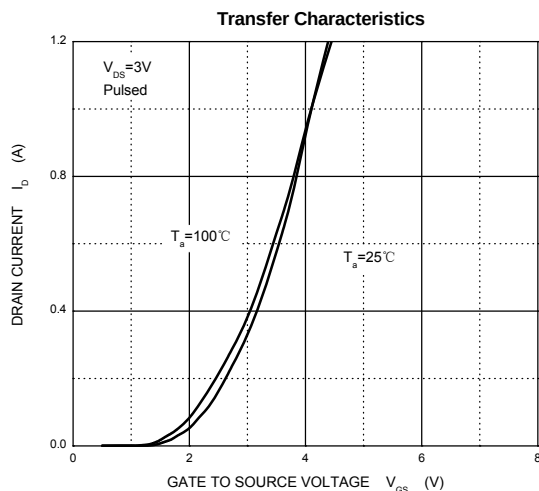
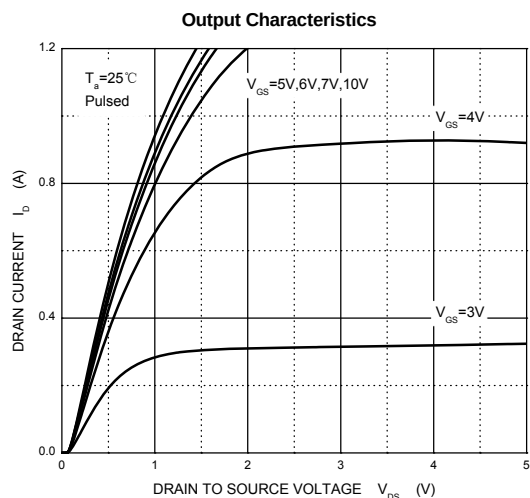
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	60	V
Gate-Source Voltage	V_{GSS}	± 20	V
Drain Current (Continuous)	I_D	300	mA
Drain Current (Pulse Width $\leq 10\text{ }\mu\text{s}$)	I_{DM}	800	mA
Total Power Dissipation	P_{tot}	150	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

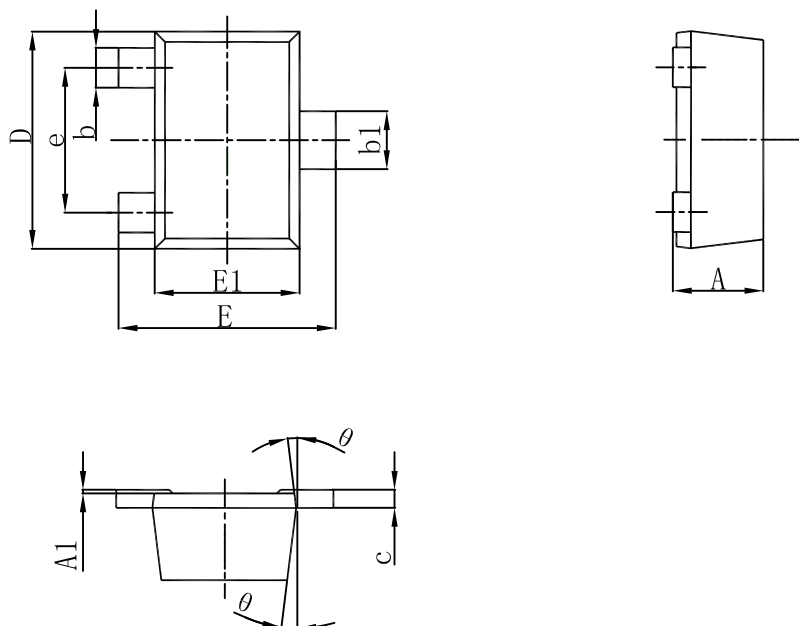
Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Drain Source Breakdown Voltage at $I_D = 10\text{ }\mu\text{A}$	BV_{DSS}	60	-	V
Zero Gate Voltage Drain Current at $V_{DS} = 60\text{ V}$	I_{DSS}	-	1	μA
Gate Source Leakage Current at $V_{GS} = \pm 20\text{ V}$	I_{GSS}	-	± 10	μA
Gate Threshold Voltage at $V_{DS} = 10\text{ V}$, $I_D = 250\text{ }\mu\text{A}$	$V_{GS(th)}$	1	2.5	V
Static Drain Source On-Resistance at $V_{GS} = 10\text{ V}$, $I_D = 500\text{ mA}$ at $V_{GS} = 4.5\text{ V}$, $I_D = 200\text{ mA}$	$R_{DS(ON)}$	- -	3 4	Ω
Diode Forward Voltage $I_S=115\text{mA}$, $V_{GS}=0\text{ V}$	V_{SD}	0.55	1.2	V
Forward Transconductance at $V_{DS} = 10\text{ V}$, $I_D = 200\text{ mA}$	g_{fs}	80	-	mS
Input Capacitance at $V_{DS} = 25\text{ V}$, $f = 1\text{ MHz}$	C_{iss}	-	50	pF
Output Capacitance at $V_{DS} = 25\text{ V}$, $f = 1\text{ MHz}$	C_{oss}	-	25	pF
Reverse Transfer Capacitance at $V_{DS} = 25\text{ V}$, $f = 1\text{ MHz}$	C_{rss}	-	5	pF

Typical Characteristics

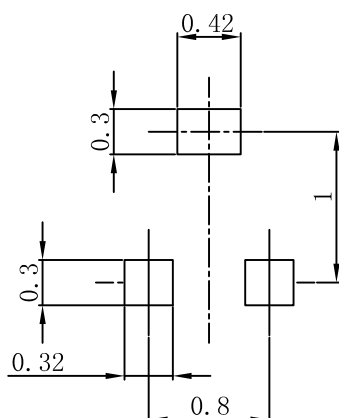


SOT-723 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.007	0.011
b1	0.270	0.370	0.011	0.015
c	0.080	0.150	0.003	0.006
D	1.150	1.250	0.045	0.049
E	1.150	1.250	0.045	0.049
E1	0.750	0.850	0.030	0.033
e	0.800TYP.		0.031TYP.	
θ	7° REF.		7° REF.	

SOT-723 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.