

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Surface Mount Package
- N-Channel Switch with Low $R_{DS(ON)}$
- Operated at Low Logic Level Gate Drive

SOT-723



MARKING

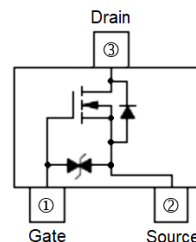
KF

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-723	8K	7 inch

ORDER INFORMATION

Part Number	Type
SSN3134KPL-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

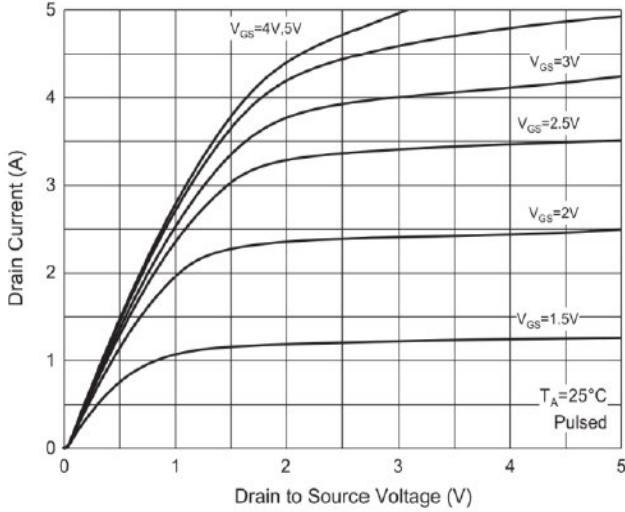
Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V _{DS}	20	V
Gate-Source Voltage	V _{GS}	±12	V
Continuous Drain Current @ V _{GS} =4.5V	I _D	0.75	A
Pulsed Drain Current	I _{DM}	1.8	A
Total Power Dissipation	P _D	150	mW
Operating Junction & Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C
Thermal Data			
Thermal Resistance Junction-ambient	R _{θJA}	833	°C/W

ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$ unless otherwise specified)

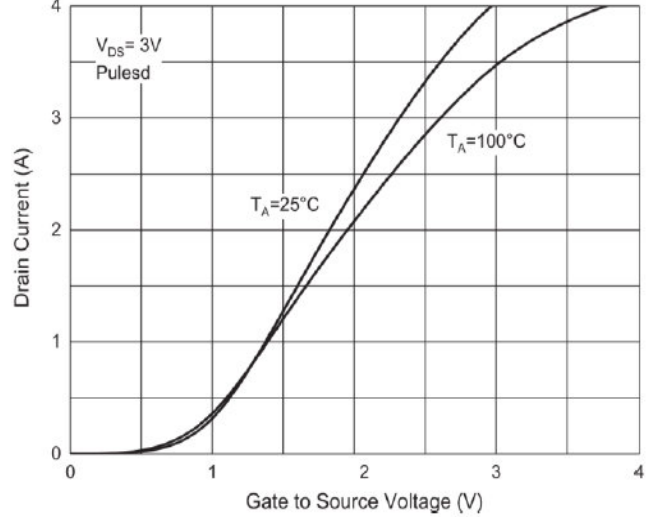
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	20	-	-	V	$V_{GS}=0, I_D=250\mu\text{A}$
Gate Threshold Voltage	$V_{GS(th)}$	0.35	-	1.1	V	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$
Forward Transconductance	g_{fs}	-	1.6	-	S	$V_{DS}=10\text{V}, I_D=0.8\text{A}$
Gate-Body Leakage Current	I_{GSS}	-	-	± 20	μA	$V_{DS}=0, V_{GS}=\pm 10\text{V}$
Zero Gate Voltage Drain Current	I_{DSS}	-	-	1	μA	$V_{DS}=20\text{V}, V_{GS}=0$
Drain-Source On-Resistance	$R_{DS(ON)}$	-	-	380	m Ω	$V_{GS}=4.5\text{V}, I_D=0.65\text{A}$
		-	-	450		$V_{GS}=2.5\text{V}, I_D=0.55\text{A}$
		-	-	800		$V_{GS}=1.8\text{V}, I_D=0.45\text{A}$
Turn-on Delay Time	$T_{d(on)}$	-	6.7	-	nS	$V_{DS}=10\text{V}$ $I_D=500\text{mA}$ $V_{GS}=4.5\text{V}$ $R_{GEN}=10\Omega$
Rise Time	T_r	-	4.8	-		
Turn-off Delay Time	$T_{d(off)}$	-	17.3	-		
Fall Time	T_f	-	7.4	-		
Input Capacitance	C_{iss}	-	79	-	pF	$V_{DS}=16\text{V}$ $V_{GS}=0$ $f=1\text{MHz}$
Output Capacitance	C_{oss}	-	13	-		
Reverse Transfer Capacitance	C_{rss}	-	9	-		
Source-Drain Diode						
Diode Forward Voltage	V_{SD}	-	-	1.2	V	$I_S=0.15\text{A}, V_{GS}=0\text{V}$

CHARACTERISTIC CURVES

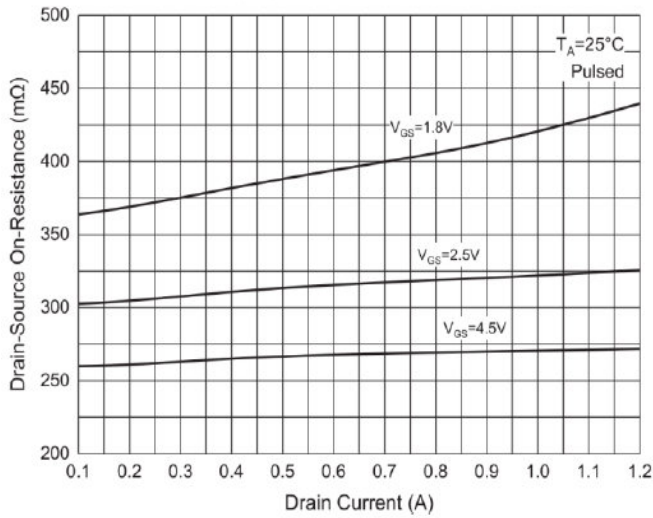
Output Characteristics



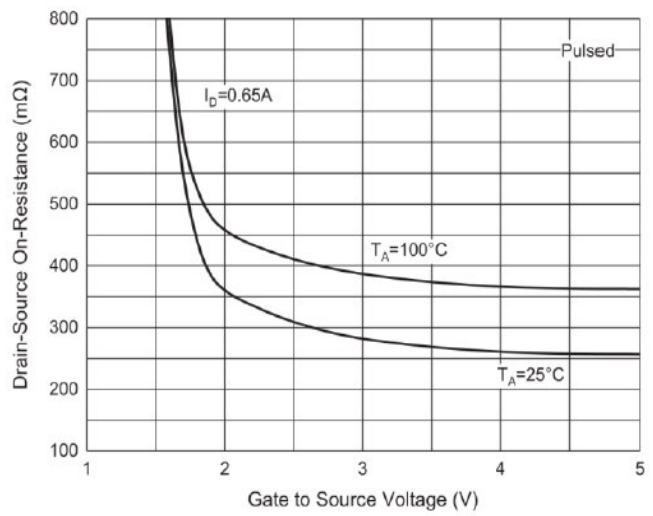
Transfer Characteristics



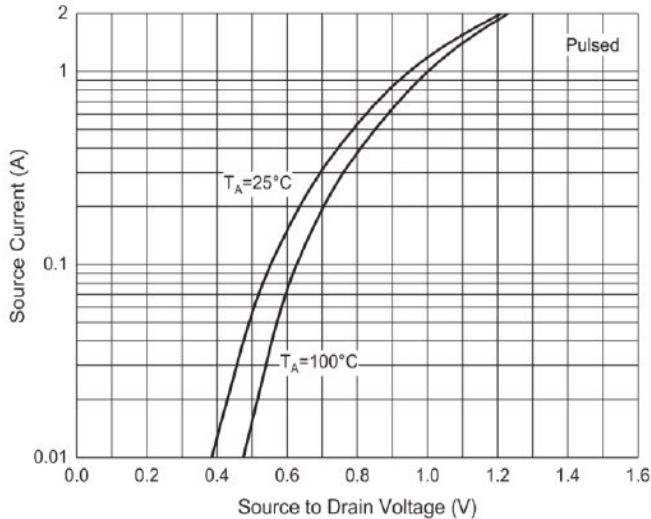
$R_{DS(ON)}-I_D$ Characteristics



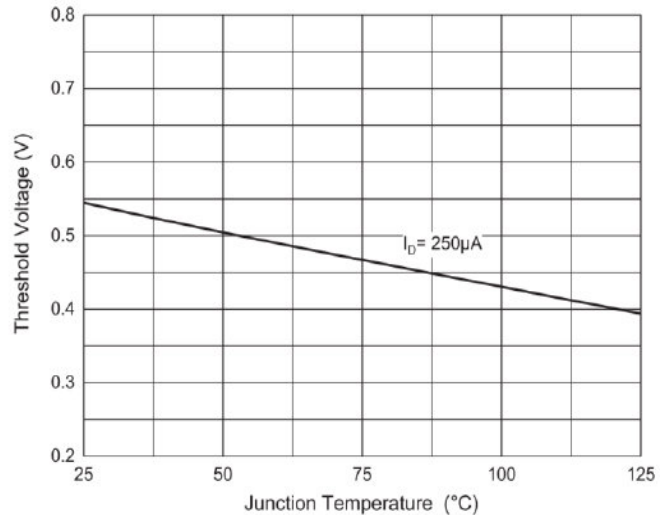
$R_{DS(ON)}-V_{GS}$ Characteristics



I_S-V_{SD} Characteristics

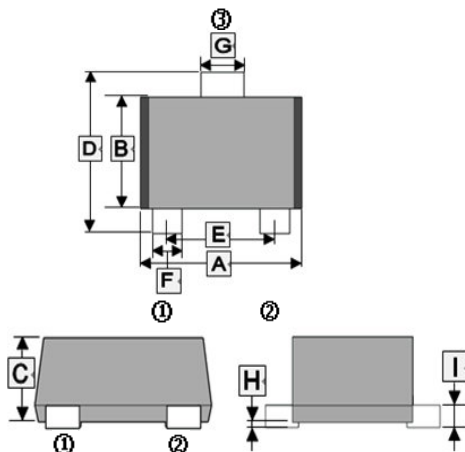


Threshold Voltage Characteristics



PACKAGE OUTLINE DIMENSIONS

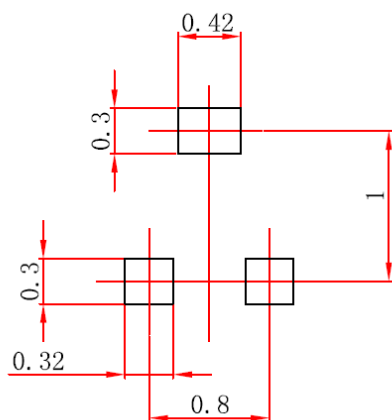
SOT-723



REF.	Millimeter	
	Min.	Max.
A	1.15	1.25
B	0.75	0.85
C	-	0.55
D	1.15	1.25
E	0.80 TYP.	
F	0.15	0.27
G	0.25	0.37
H	0.025 TYP.	
I	-	0.17

MOUNTING PAD LAYOUT

SOT-723



*Dimensions in millimeters