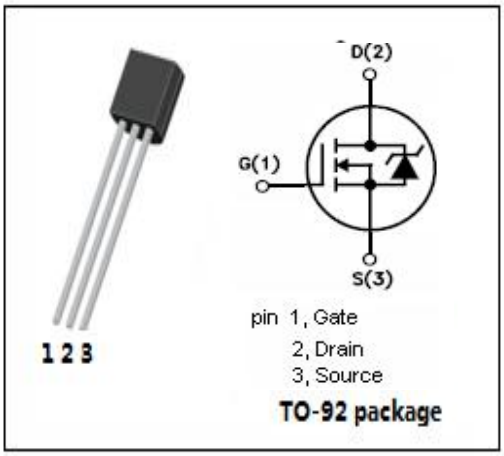
Isc N-Channel MOSFET Transistor 2N7000



- **FEATURES**
- With TO-92 package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

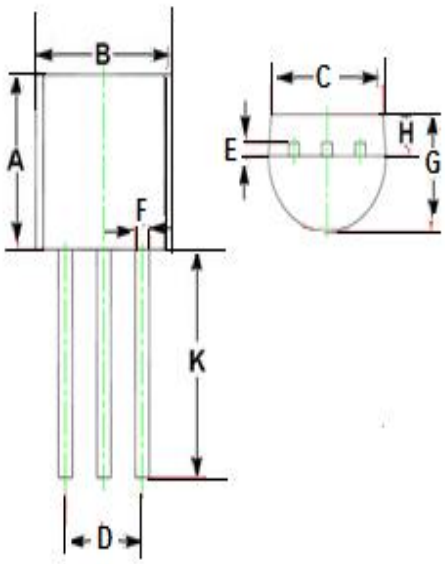
- **APPLICATIONS**
- Switching applications
- Load switch
- Power management

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	60	V
V_{GSS}	Gate-Source Voltage	±20	V
I_D	Drain Current-Continuous	200	mA
I_{DM}	Drain Current-Single Pulsed	1.3	A
P_D	Total Dissipation @T_C=25℃	350	mW
Tj	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-a)	Channel-to-ambient thermal resistance	357	℃/W



DIM	mm MIN	MAX
A	4.30	4.70
B	4.30	4.70
C	3.43	
D	2.44	2.64
E	0.36	0.51
F	0.38	0.55
G	3.30	3.70
H	1.10	1.40
K	14.10	14.50

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D= 0.01mA	60			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D=1mA	0.8		3.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=0.5A			5	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±15V;V_{DS}= 0V			±0.01	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}=48V; V_{GS}= 0V;Tc=25℃ V_{DS}=48V; V_{GS}= 0V;Tc=125℃			1 1000	μA
V_{SDF}	Diode forward voltage	I_{SD}=0.5A, V_{GS} = 0 V			1.5	V