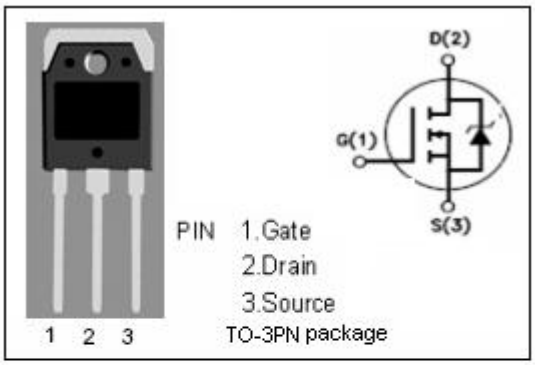
isc N-Channel MOSFET Transistor 2SK818A

DESCRIPTION

- Drain Current –I_D=5A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=900V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

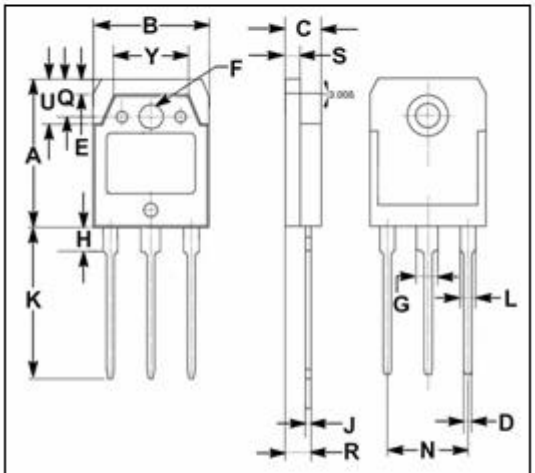
- Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	NIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	900	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=25℃	5	A
P_{tot}	Total Dissipation@TC=25℃	100	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.0	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W



DIM	mm MIN	MAX
A	19.60	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

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• **ELECTRICAL CHARACTERISTICS (T_C=25℃)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D= 1mA	900			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=25 V_{GS}; I_D=1mA	1.0		5.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	V_{GS}=10V; I_D= 3A		1.5	3.0	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±1	uA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=640V; V_{GS}= 0			0.1	mA
ton	Turn-on time	V_{GS}=10V;I_D=3A; R_L=66Ω		60		ns
toff	Turn-off time			365		ns