isc N-Channel MOSFET Transistor　　　　2SK2917

• **FEATURES**

• With TO-3PN packaging

• High speed switching

• Standard level gate drive

• Easy to use

• 100% avalanche tested

• Minimum Lot-to-Lot variations for robust device
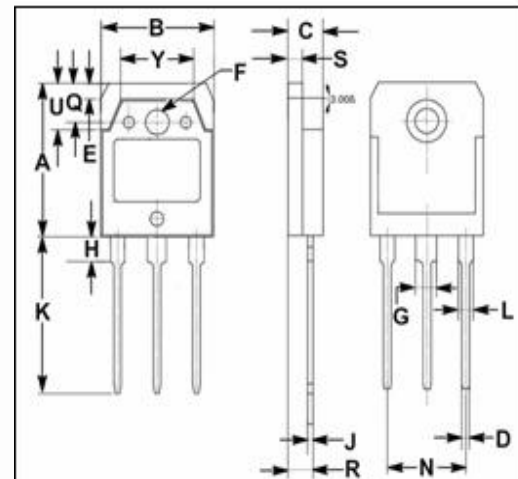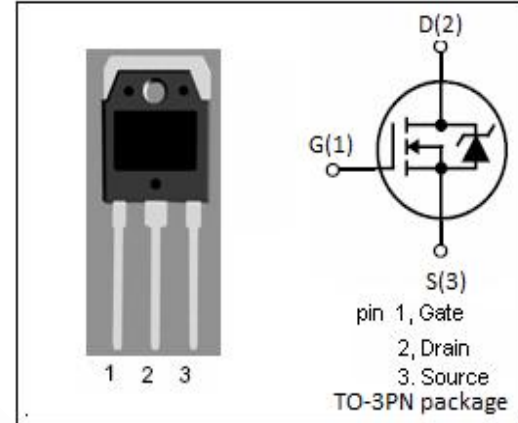 performance and reliable operation

• **APPLICATIONS**

• Power supply

• Switching applications

D(2)

G(1)

S(3)

pin 1, Gate
2, Drain
3. Source
TO-3PN package

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	500	V
V_{GSS}	Gate-Source Voltage	±30	V
I_D	Drain Current-Continuous	18	A
I_{DM}	Drain Current-Single Pulsed	72	A
P_D	Total Dissipation	90	W
T_j	Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature	-55~150	℃

• **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.39	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	41.6	℃/W

DIM	mm MIN	mm MAX
A	19.60	20.30
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	19.80	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	6.20
Y	9.90	10.10

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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$_D$= 10mA	500			V
V$_{GS(th)}$	Gate Threshold Voltage	V$_{DS}$=10V; I$_D$=1mA	2		4	V
R$_{DS(on)}$	Drain-Source On-Resistance	V$_{GS}$= 10V; I$_D$=10A		0.21	0.27	Ω
I$_{GSS}$	Gate-Source Leakage Current	V$_{GS}$= ±25V;V$_{DS}$= 0V			±10	μA
I$_{DSS}$	Drain-Source Leakage Current	V$_{DS}$= 500V; V$_{GS}$= 0V			100	μA
V$_{SDF}$	Diode forward voltage	I$_{SD}$=18A, V$_{GS}$ = 0 V			2.0	V