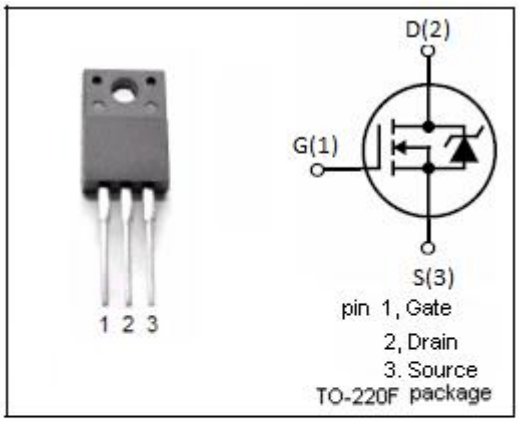
isc N-Channel MOSFET Transistor STP8NK80ZFP

DESCRIPTION

- Drain Current I_D=6.2A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=800V(Min)
- 100% avalanche tested
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

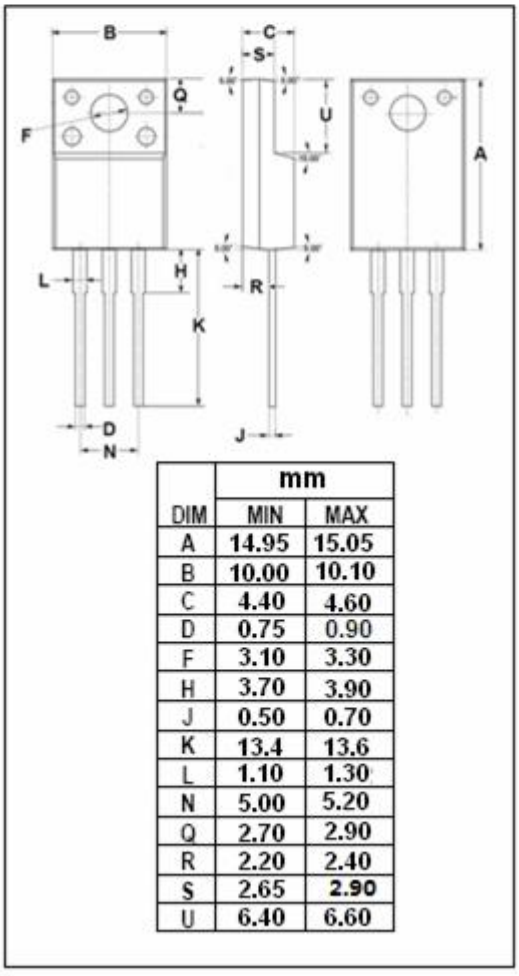


APPLICATIONS

- Switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	600	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	6.2	A
	Drain Current-continuous@ TC=100℃	3.9	
I_{CM}	Collector Current-Peak	24.8	A
P_{tot}	Total Dissipation@TC=25℃	30	W
T_j	Max. Operating Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.2	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 1mA	800		V
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 0.1mA	3	4.5	V
$R_{DS(ON)}$	Drain-Source On-stage Resistance	V_{GS}= 10V; I_D= 13.1A		1.5	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±30V;V_{DS}= 0		±1	uA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 800V; V_{GS}= 0		1	uA
V_{SD}	Diode Forward Voltage	I_F= 6.2A; V_{GS}= 0		1.5	V