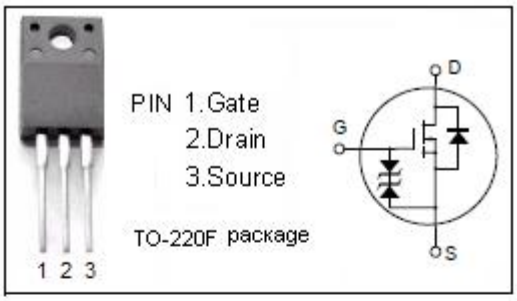
isc N-Channel MOSFET Transistor 2SK2115

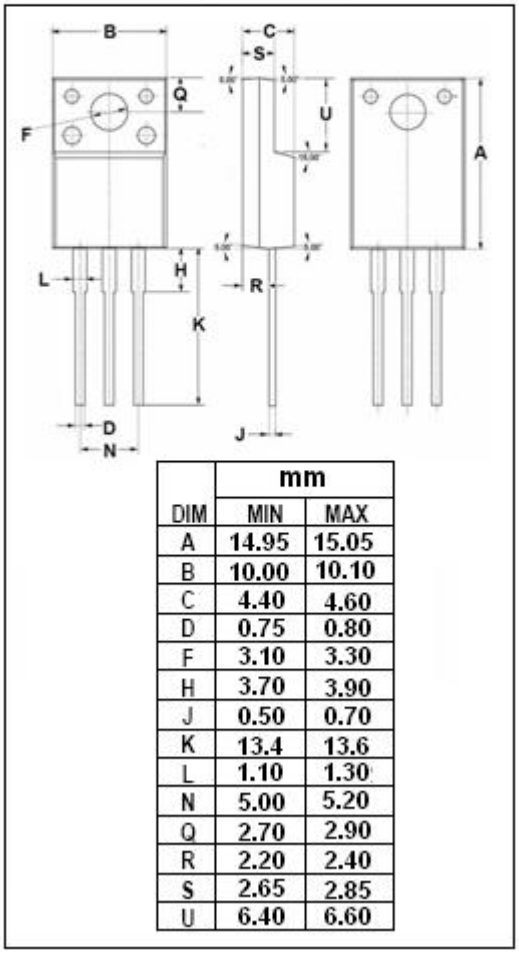
DESCRIPTION

- Drain Current –I_D= 5A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 500V(Min)
- High speed power switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Suitable for Switching regulator



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.80
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	2.85
U	6.40	6.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	500	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	5	A
$I_{D(puls)}$	Pulsed Drain Current	20	A
P_{tot}	Total Dissipation@TC=25℃	35	W
T_j	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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• ELECTRICAL CHARACTERISTICS (T_C=25℃)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 10mA	500			V
$V_{(BR)GSS}$	Gate-Source Breakdown Voltage	V_{DS}= 0; I_G=100μA	±30			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= 10V; I_D=1mA	2.0		3.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 2.5A		1.2	1.5	Ω
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±25V;V_{DS}= 0			±10	μA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 400V; V_{GS}= 0			250	μA
Ciss	Input Capacitance	V_{DS}=10V; V_{GS}=0V; f_T=1MHz		640		pF
Crss	Reverse Transfer Capacitance			20		
Coss	Output Capacitance			160		
tr	Rise Time	V_{GS}=10V; I_D=2.5A; R_L=12Ω		25		Ns
td(on)	Turn-on Delay Time			10		
tf	Fall Time			30		
td(off)	Turn-off Delay Time			50		