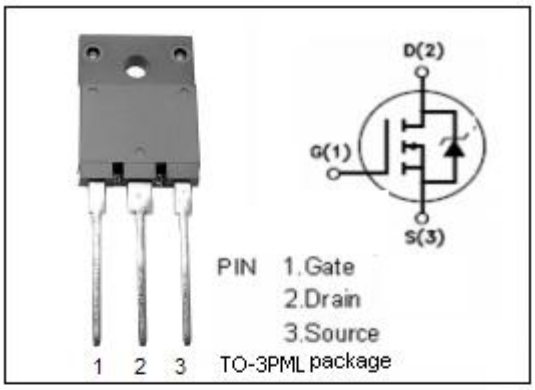
isc N-Channel MOSFET Transistor 2SK1105

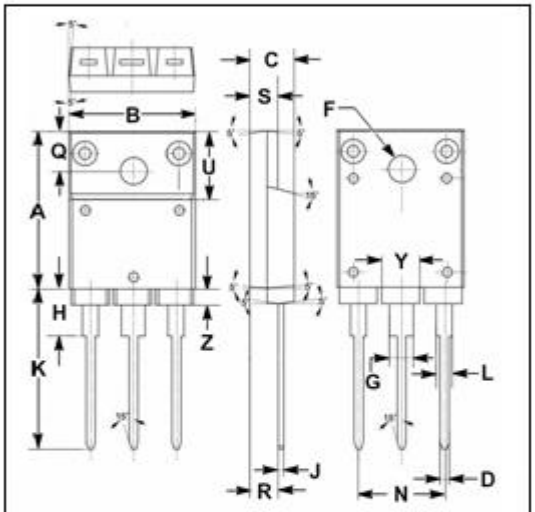
DESCRIPTION

- Drain Current –I_D=3A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=800V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for switching regulators, UPS,DC-DC converters , general purpose power amplifier applications .



DIM	mm MIN	MAX
A	19.90	20.10
B	15.90	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.10
H	5.90	6.10
J	0.595	0.605
K	22.30	22.50
L	1.90	2.10
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.40
U	9.90	10.10
Y	4.70	4.90
Z	1.90	2.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	800	V
V_{GS}	Gate-Source Voltage	±20	V
I_D	Drain Current-continuous@ TC=25℃	3	A
I_{DM}	Drain Current-Single Plused	12	A
P_{tot}	Total Dissipation@TC=25℃	80	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	1.56	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	35	℃/W

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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	800			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D=1mA	2.1	3.0	4.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	V_{GS}=10V; I_D= 1.5A		3.0	4.0	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=800V; V_{GS}= 0			500	uA
V_{SD}	Forward On-Voltage	I_S=3A; V_{GS}=0		1.0	1.35	V
Gfs	Forward Transconductance	V_{DS}= 25V； I_D=1.5A	2.0			S
tr	Rise time	VGS=10V;ID=2.1A; RL=50Ω		40	60	ns
ton	Turn-on time			20	30	ns
tf	Fall time			60	90	ns
toff	Turn-off time			150	250	ns

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