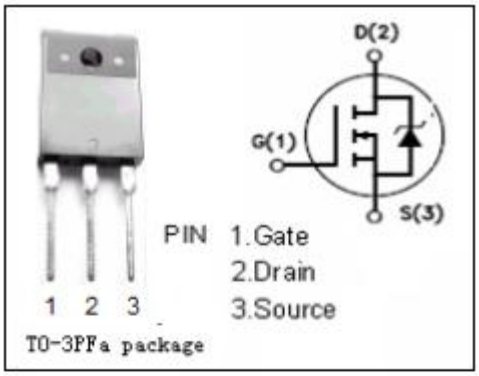
isc N-Channel MOSFET Transistor 2SK807

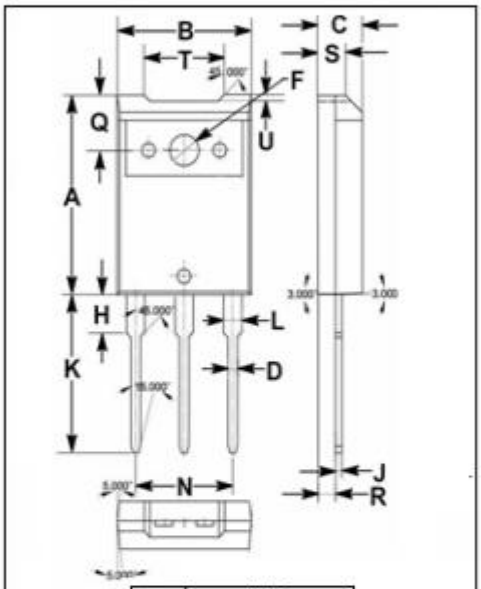


DESCRIPTION

- Drain Current –I_D=5A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}=600V(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.



DIM	mm MIN	MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	ARAMETER	VALUE	NIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	600	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

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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= 10mA	600			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		1.1	1.7	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±20V;V_{DS}= 0			±1	uA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=480V; V_{GS}= 0			0.1	mA
ton	Turn-on time	V_{GS}=10V;I_D=3A; R_L=50Ω		35		ns
toff	Turn-off time			160		ns