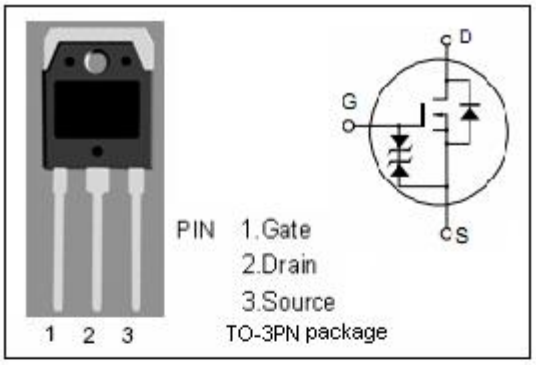
isc N-Channel MOSFET Transistor 2SK1403A

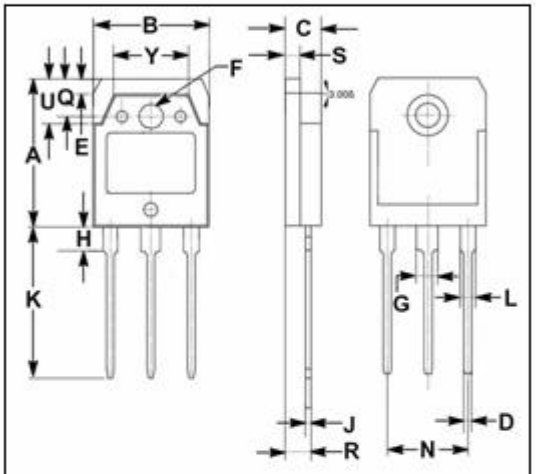


DESCRIPTION

- Drain Current I_D= 8A@ T_C=25℃
- Drain Source Voltage-
  : V_{DSS}= 650V(Min)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching regulator and DC-DC converter



DIM	mm MIN	mm MAX
A	19.60	20.10
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	20.00	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	6.10
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage (V_{GS}=0)	650	V
V_{GS}	Gate-Source Voltage	±30	V
I_D	Drain Current-continuous@ TC=25℃	8	A
P_{tot}	Total Dissipation@TC=25℃	100	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	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0; I_D= 10mA	650			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=10 V; I_D=1mA	2.0		3.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	V_{GS}=10V; I_D=4A		1.0	1.4	Ω
I_{GSS}	Gate Source Leakage Current	V_{GS}= ±25V;V_{DS}= 0			±10	μA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=550V; V_{GS}= 0			250	μA
V_{SD}	Diode Forward Voltage	I_S=8A; V_{GS}=0		0.95		V
t_r	Rise Time	V_{GS}=10V; I_D=4A; R_L=7.5Ω		50		ns
$t_{d(on)}$	Turn-on Delay Time			15		
t_f	Fall Time			45		
$t_{d(off)}$	Turn-off Delay Time			105		