

isc N-Channel MOSFET Transistor

2SK1403

DESCRIPTION

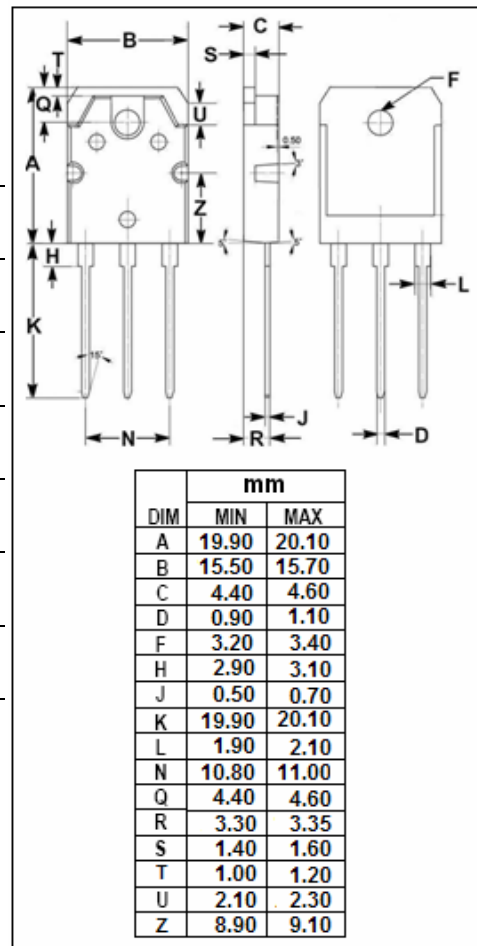
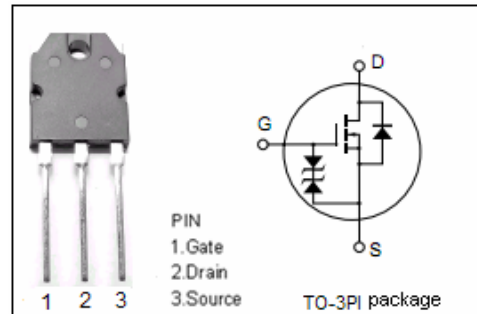
- Drain Current $I_D = 8A @ T_C = 25^\circ C$
- Drain Source Voltage:
: $V_{DSS} = 600V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- Switching regulator and DC-DC converter

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS} = 0$)	600	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	8	A
P_{tot}	Total Dissipation@ $T_C = 25^\circ C$	100	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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• ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$; $I_D=10\text{mA}$	600			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10\text{V}$; $I_D=1\text{mA}$	2.0		3.0	V
$R_{DS(on)}$	Drain-Source On-stage Resistance	$V_{GS}=10\text{V}$; $I_D=4\text{A}$		0.9	1.3	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}=\pm 25\text{V}$; $V_{DS}=0$			± 10	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=500\text{V}$; $V_{GS}=0$			250	μA
V_{SD}	Diode Forward Voltage	$I_S=8\text{A}$; $V_{GS}=0$		0.95		V
t_r	Rise Time	$V_{GS}=10\text{V}$; $I_D=4\text{A}$; $R_L=7.5\Omega$		50		ns
$t_{d(on)}$	Turn-on Delay Time			15		
t_f	Fall Time			45		
$t_{d(off)}$	Turn-off Delay Time			105		