

isc N-Channel MOSFET Transistor

2SK1403A

DESCRIPTION

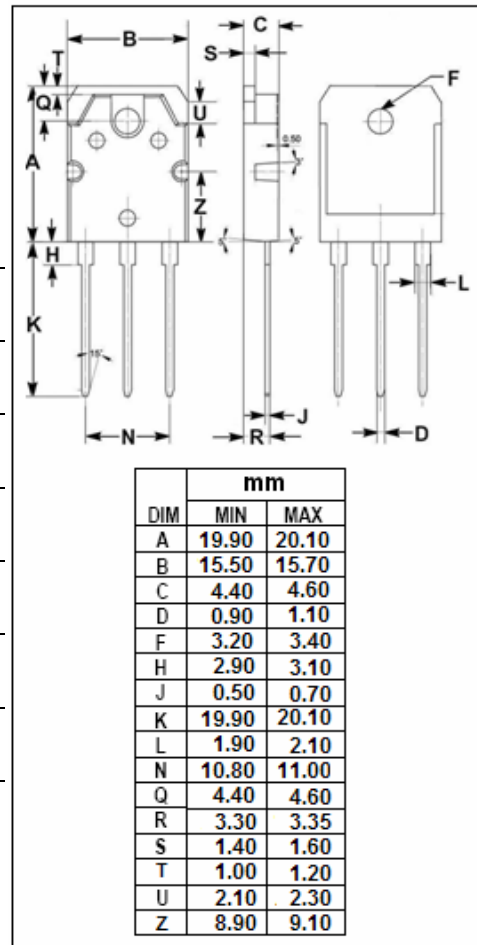
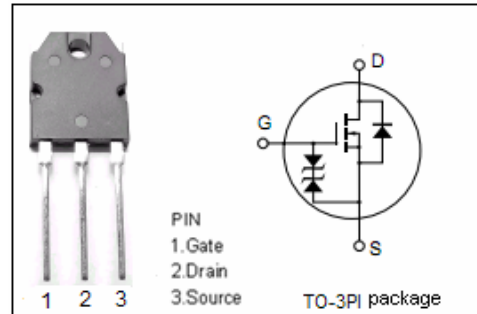
- Drain Current  $I_D = 8A @ T_C = 25^\circ C$
- Drain Source Voltage:  
:  $V_{DSS} = 650V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- Switching regulator and DC-DC converter

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	650	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	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	$^\circ C$



## isc N-Channel MOSFET Transistor

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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	$V_{GS}=0; I_D=10\text{mA}$	650			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	$V_{GS}=10\text{V}; I_D=4\text{A}$		1.0	1.4	$\Omega$
$I_{GSS}$	Gate Source Leakage Current	$V_{GS}=\pm 25\text{V}; V_{DS}=0$			$\pm 10$	$\mu\text{A}$
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=550\text{V}; V_{GS}=0$			250	$\mu\text{A}$
$V_{SD}$	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		