

isc N-Channel MOSFET Transistor

2SK2996

• FEATURES

- Drain Current $I_D = 10A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 600V(\text{Min})$
- Low leakage current
- High forward transfer admittance
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

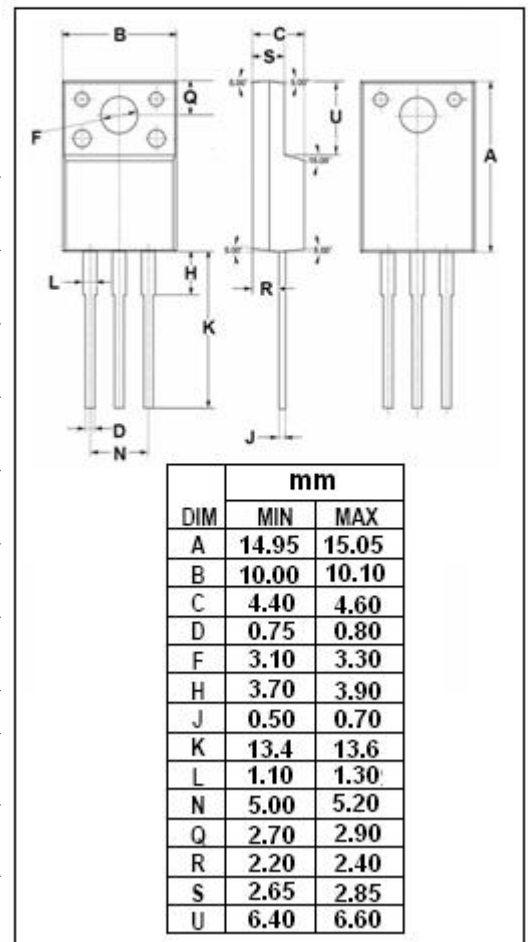
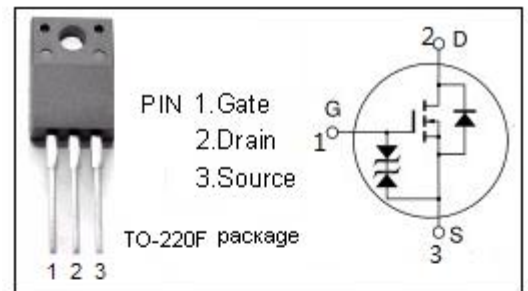
- DC-DC converter, Relay Drive and motor Drive Application

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 30	V
I_D	Drain Current-Continuous	10	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	45	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	2.78	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$



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• ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	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} = 10V; I _D =1mA	2.0		4.0	V
V _{DSF}	Forward voltage(Diode)	I _{DR} = 10A; V _{GS} = 0			-1.7	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 5A			1.0	Ω
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±25V; V _{DS} = 0			±10	μA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =600V; V _{GS} = 0			100	μA

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