

isc N-Channel MOSFET Transistor

2SK791

DESCRIPTION

- Drain Current $-I_D=3A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}=850V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

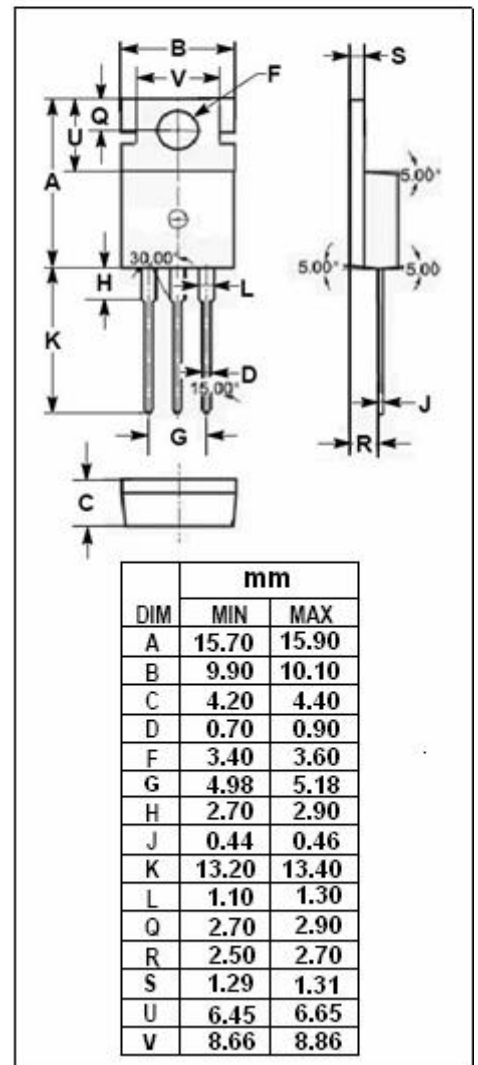
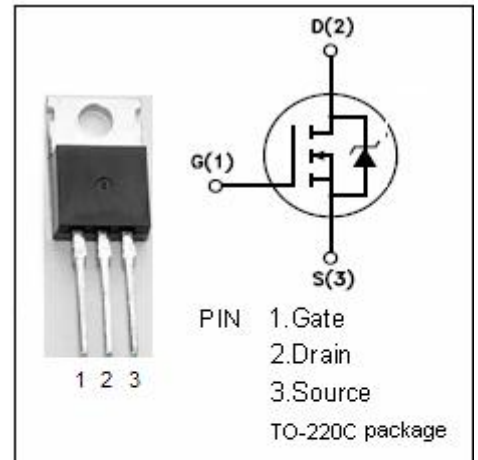
- Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	850	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_C=25^\circ C$	3	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	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance,Junction to Case	1.0	$^\circ C/W$
$R_{th j-a}$	Thermal Resistance,Junction to Ambient	62.5	$^\circ C/W$



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• ELECTRICAL CHARACTERISTICS (T_C=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	850			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =10 V _{GS} ; I _D =1mA	1.5		3.5	V
R _{DS(on)}	Drain-Source On-stage Resistance	V _{GS} =10V; I _D = 1.5A		3.3	4.5	Ω
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			± 100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =850V; V _{GS} = 0			300	uA
tr	Rise time	V _{GS} =10V; I _D =1.5A; R _L =133 Ω		55	120	ns
ton	Turn-on time			70	165	ns
tf	Fall time			60	120	ns
toff	Turn-off time			280	550	ns