

isc N-Channel MOSFET Transistor

2SK859

DESCRIPTION

- Drain Current –I_D=9A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-
 - : V_{DSS}=500V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

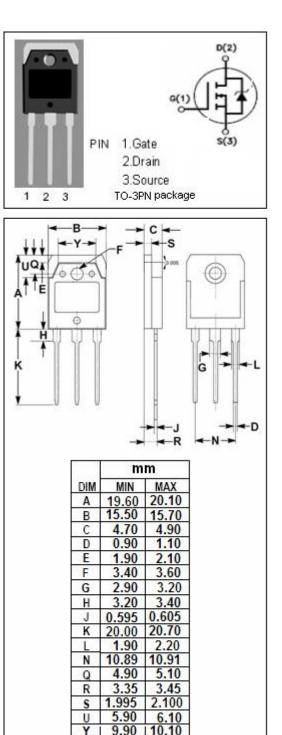
SYMBOL	ARAMETER	VALUE	UNIT					
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	500	V					
V_{GS}	Gate-Source Voltage	±20	V					
ID	Drain Current-continuous@ TC=25℃	9	А					
P _{tot}	Total Dissipation@TC=25°C	125	W					
Tj	Max. Operating Junction Temperature	150	°C					
T _{stg}	Storage Temperature Range	-55~150	°C					

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.67	°C/W
Rth j-a	Thermal Resistance, Junction to Ambient	62.5	°C/W

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT			
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	500			V			
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} =0; I _D = 1mA	2.1		4.0	V			
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D =5A			0.8	Ω			
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA			
IDSS	Zero Gate Voltage Drain Current	V _{DS} =500V; V _{GS} = 0			0.1	mA			

• ELECTRICAL CHARACTERISTICS (Tc=25°C)

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