

isc N-Channel MOSFET Transistor

2SK857

DESCRIPTION

- Drain Current –I_D=45A@ T_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage-
- : V_{DSS}=60V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Designed for use in switch mode power supplies and general purpose applications.

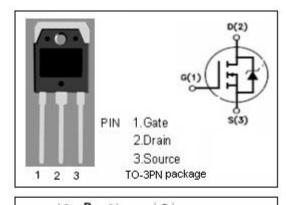
SYMBOL	ARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage (V _{GS} =0)	60	V
V _{GS}	Gate-Source Voltage	±20	V
ID	Drain Current-continuous@ TC=25°C	45	А
P _{tot}	Total Dissipation@TC=25°C	125	W
Tj	Max. Operating Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

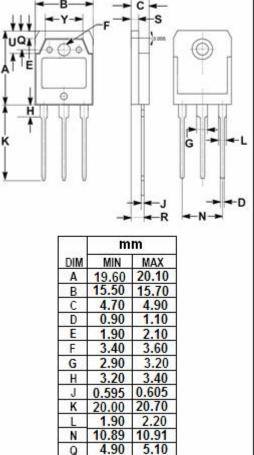
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

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

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT			
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	60			V			
$V_{\text{GS(TH)}}$	Gate Threshold Voltage	V _{DS} =0; I _D = 1mA	1.5		3.5	V			
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D =25A			0.03	Ω			
I _{GSS}	Gate Source Leakage Current	V_{GS} = \pm 16V; V_{DS} = 0			±100	nA			
IDSS	Zero Gate Voltage Drain Current	V _{DS} =60V; V _{GS} = 0			0.1	mA			

• ELECTRICAL CHARACTERISTICS (Tc=25°C)

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