

**isc N-Channel MOSFET Transistor**
**2SK856**
**DESCRIPTION**

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

**APPLICATIONS**

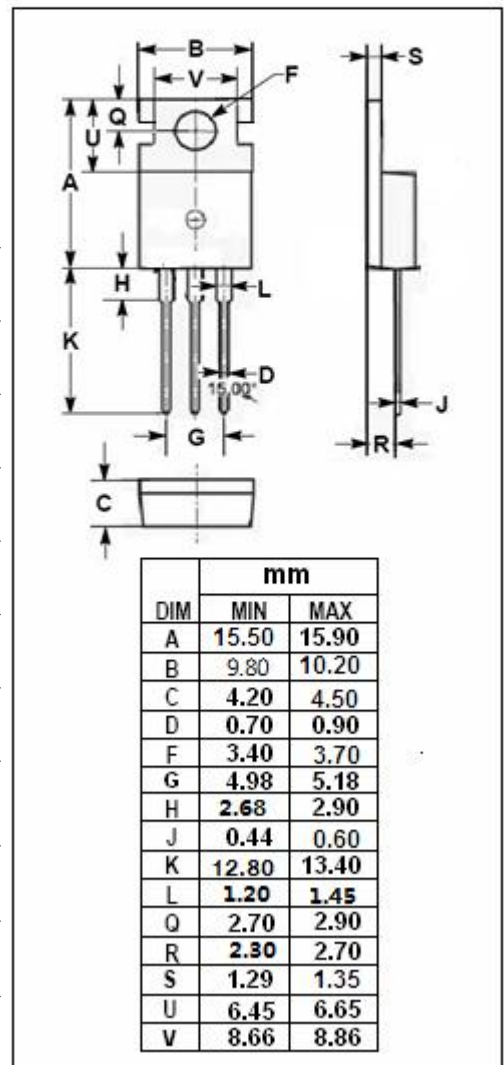
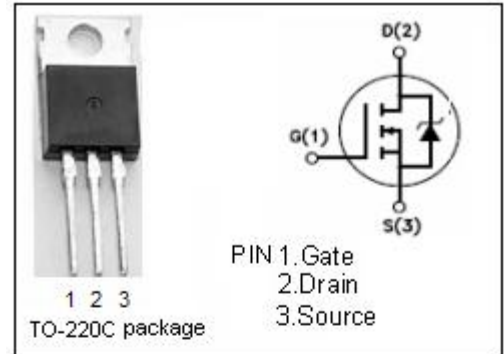
- Designed for use in switch mode power supplies and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS}=0$ )	60	V
$V_{GS}$	Gate-Source Voltage	$\pm 20$	V
$I_D$	Drain Current-continuous@ $T_C=25^\circ C$	45	A
$P_{tot}$	Total Dissipation@ $T_C=25^\circ C$	125	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	1.67	$^\circ C/W$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$



**isc N-Channel Mosfet Transistor****2SK856****• ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	60			V
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =0; I <sub>D</sub> = 1mA	1.5		3.5	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =25A			0.03	Ω
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ± 16V; V <sub>DS</sub> = 0			± 100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =60V; V <sub>GS</sub> = 0			0.1	mA

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