

**isc N-Channel MOSFET Transistor**
**SSP80N06A**
**• DESCRIPTION**

- Drain Current  $I_D = 80A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 60V(\text{Min})$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**• APPLICATIONS**

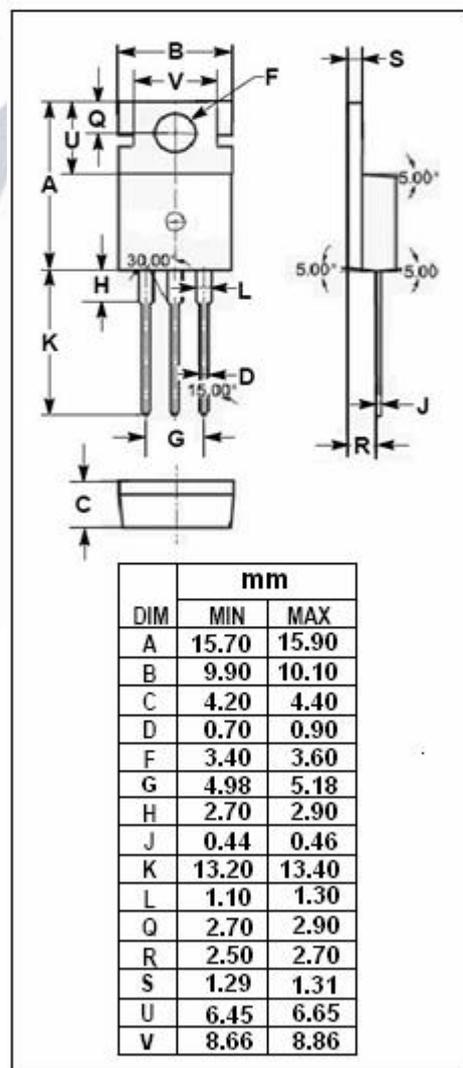
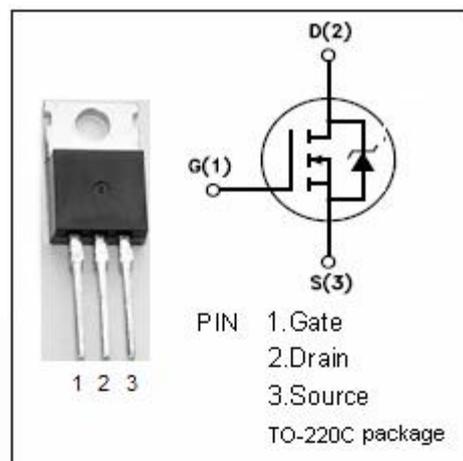
- High efficiency DC/DC Converters
- Synchronous Rectification

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

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@ $T_C = 25^\circ C$	80	A
$I_{D(\text{puls})}$	Pulse Drain Current	320	A
$P_{\text{tot}}$	Total Dissipation@ $T_C = 25^\circ C$	140	W
$T_j$	Max. Operating Junction Temperature	175	$^\circ C$
$T_{\text{stg}}$	Storage Temperature Range	-55~175	$^\circ C$

**• THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{\text{th j-c}}$	Thermal Resistance, Junction to Case	1.07	$^\circ C/W$



**isc N-Channel MOSFET Transistor****SSP80N06A****• ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> =250μA	60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250μA	2.0		4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =40A			0.01	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V; 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			10	μA
		V <sub>DS</sub> = 60V; V <sub>GS</sub> = 0; T <sub>c</sub> =150°C			100	
V <sub>SD</sub>	Diode Forward On-Voltage	I <sub>S</sub> =80A; V <sub>GS</sub> = 0			1.5	V

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