

isc N-Channel MOSFET Transistor
IXFN44N100P
• DESCRIPTION

- Drain Current $-I_D = 37A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 1000V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 220m \Omega (\text{Max}) @ V_{GS} = 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

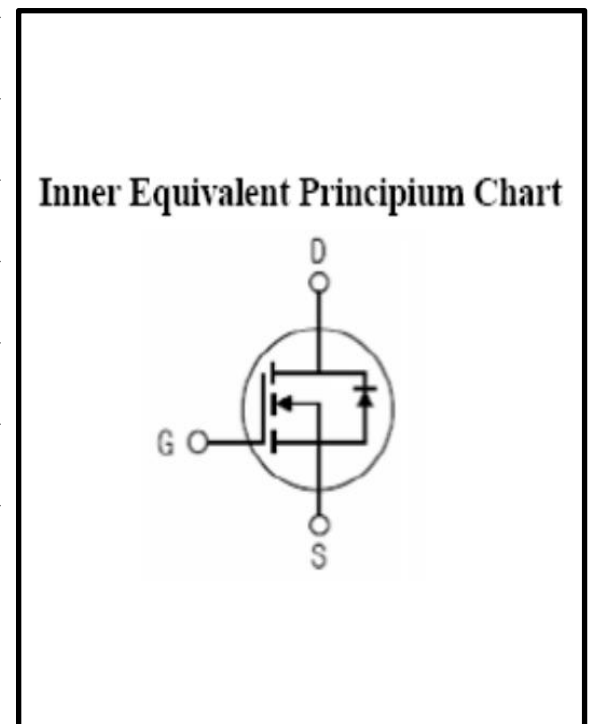
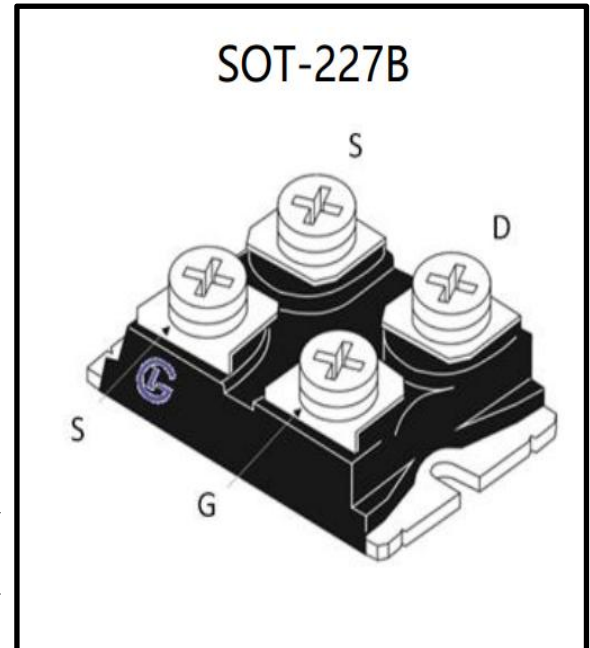
- DC-DC converter, Battery Chargers, High speed power switch.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS} = 0$)	1000	V
V_{GSS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_C = 25^\circ C$	37	A
I_{DM}	Pulse Drain Current	110	A
P_D	Total Dissipation@ $T_C = 25^\circ C$	890	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	0.14	$^\circ C/W$



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• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D =250uA	1000			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250uA	2.0		4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =22A			220	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 1000V; V _{GS} = 0			1	μA
V _{SD}	Diode Forward On-Voltage	I _S =37A; V _{GS} =0			1.5	V

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