

isc N-Channel MOSFET Transistor
ISCNH373F
FEATURES

- Drain Current $-I_D = 3.0A @ T_C = 25^\circ C$
- Drain Source Voltage-
: $V_{DSS} = 1500V(\text{Min})$
- Static Drain-Source On-Resistance
: $R_{DS(on)} = 6.5 \Omega (\text{Max})$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

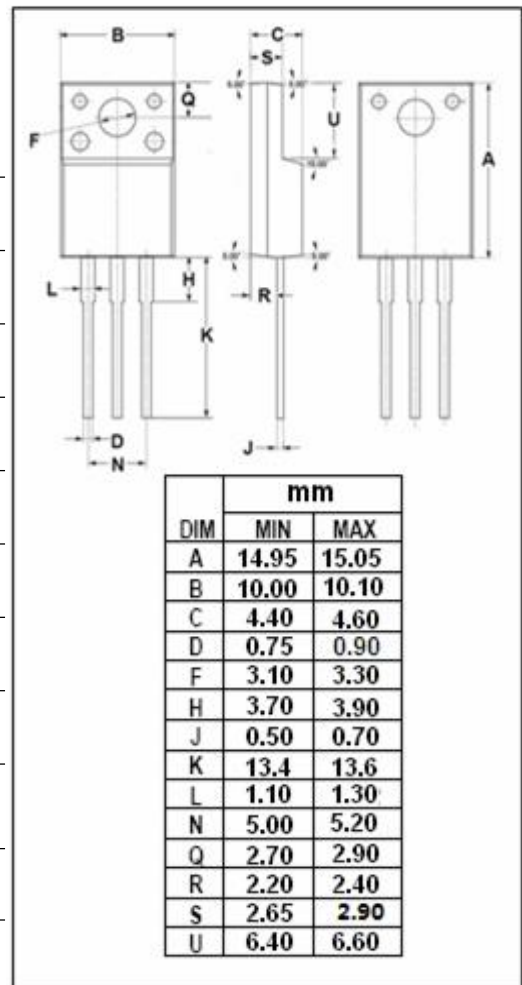
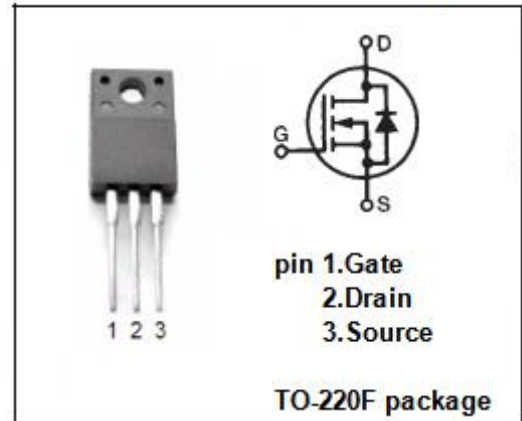
- High speed power switching
- Switching regulator, DC-DC converter

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	1500	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	3.0	A
I_{DM}	Drain Current-Single Pulsed	12	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	45	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	2.5	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0V; I _D = 0.25mA	1500			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2.5		4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 1.5A		5.0	6.5	Ω
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0V			±0.1	μ A
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 1500V; V _{GS} = 0V			10	μ A
V _{SD}	Diode forward voltage	I _F = 3A; V _{GS} = 0V			1.5	V

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