

## isc N-Channel MOSFET Transistor

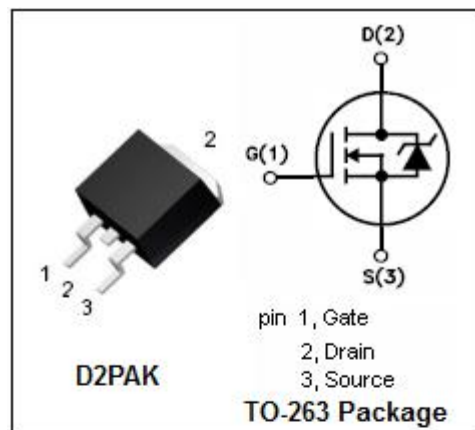
## IXFA22N65X2 IIXFA22N65X2

## • DESCRIPTION

- Drain Current :  $I_D = 22A @ T_C = 25^\circ C$
- Drain Source Voltage :  $V_{DSS} = 650V (Min)$
- 100% Avalanche Rated
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## • APPLICATIONS

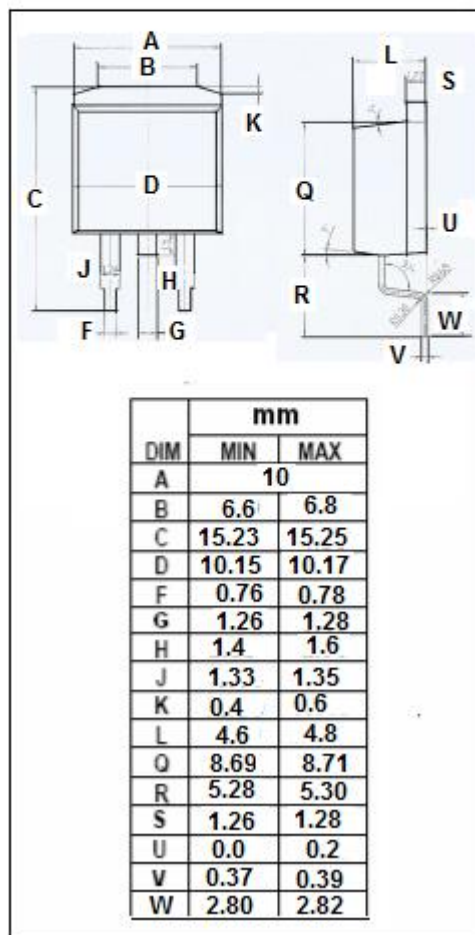
- Switch-Mode and Resonant-Mode Power Supplies
- DC-DC Converters
- AC and DC Motor Drives


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	650	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-continuous@ $T_C = 25^\circ C$	22	A
$I_{DM}$	Pulse Drain Current	44	A
$P_{tot}$	Total Dissipation@ $T_C = 25^\circ C$	390	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	0.32	$^\circ C/W$



**isc N-Channel MOSFET Transistor****IXFA22N65X2****IIXFA22N65X2****• 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	650			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> =250μA	3		5	V
V <sub>SD</sub>	Diode Forward On-Voltage	I <sub>F</sub> = 22A; V <sub>GS</sub> = 0			1.4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =11A			145	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> =±30V; V <sub>DS</sub> = 0			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0			10	μA

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