

## **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

## IXFA22N65X2 IIXFA22N65X2

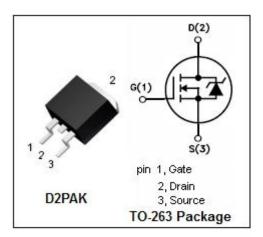
### DESCRIPTION

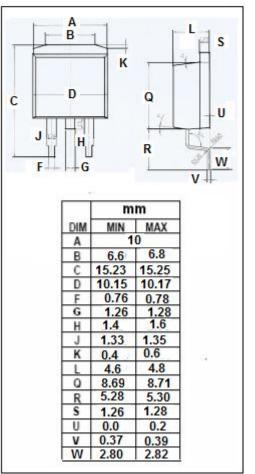
- Drain Current : I<sub>D</sub>= 22A@ T<sub>C</sub>=25℃
- Drain Source Voltage : V<sub>DSS</sub>= 650V(Min)
- 100% Avalanche Rated
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

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

### ABSOLUTE MAXIMUM RATINGS(Tc=25℃)





#### SYMBOL ARAMETER VALUE UNIT VDSS Drain-Source Voltage 650 V Gate-Source Voltage V<sub>GS</sub> $\pm 30$ V Drain Current-continuous@ Tc=25°C $I_D$ 22 А Pulse Drain Current 44 А **I**DM Total Dissipation@Tc=25℃ $\mathbf{P}_{tot}$ 390 W Max. Operating Junction Temperature Tj 150 °C Storage Temperature Range -55~150 °C T<sub>stg</sub> • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER		UNIT				
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.32	°C/W				

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	МАХ	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		
IDSS	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0			10	μA		

## • ELECTRICAL CHARACTERISTICS (Tc=25℃)

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