

### INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

## **IRFP360PBF**

### FEATURES

- Drain Current –I\_D= 23A@ T\_C=25 $^\circ\!\!\!\mathrm{C}$
- Drain Source Voltage-
- : V<sub>DSS</sub>= 400V(Min)
- Static Drain-Source On-Resistance
  - : R<sub>DS(on)</sub> = 0.2 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

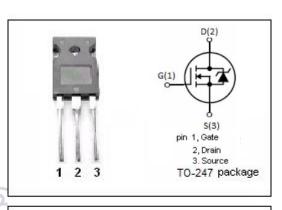
• Designed for use in switch mode power supplies and general purpose applications.

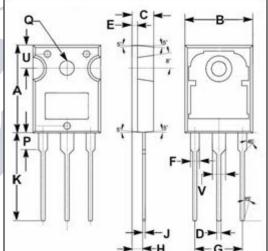
### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	400	v
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V
ID	Drain Current-Continuous	23	A
I <sub>DM</sub>	Drain Current-Single Pluse	92	А
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25°C	250	W
TJ	Max. Operating Junction Temperature	-55~150	°C
Tstg	Storage Temperature	-55~150	°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.50	°C/W
R <sub>th j-a</sub>	Thermal Resistance, Junction to Ambient	30	°C/W





	mm	
DIM	MIN	MAX
Α	19.80	20.20
В	15.40	15.80
С	4.90	5.10
D	0.90	1.10
Ε	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
Ρ	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

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#### **ELECTRICAL CHARACTERISTICS**

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SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V(BR)DSS	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	400		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	2	4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 13A		0.2	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> = 400V; V <sub>GS</sub> = 0		250	μA
Vsd	Forward On-Voltage	I <sub>S</sub> = 23A; V <sub>GS</sub> = 0		1.8	V

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