

## **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

# IPD60R360P7,IIPD60R360P7

### • FEATURES

- Static drain-source on-resistance:  $R_{\text{DS}}(\text{on}){\leqslant}0.36\Omega$
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## DESCRITION

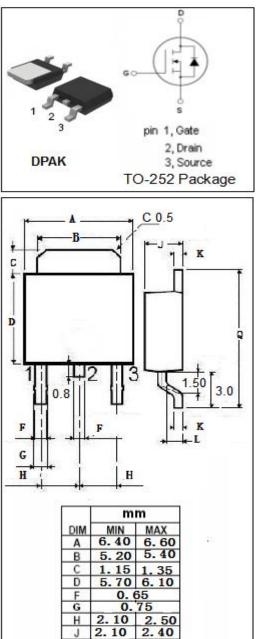
Suitable for hard and soft switching

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

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SYMBOL	PARAMETER	VALUE	UNIT				
V <sub>DSS</sub>	Drain-Source Voltage	600	V				
V <sub>GS</sub>	Gate-Source Voltage	±20	V				
ID	Drain Current-Continuous 9		А				
I <sub>DM</sub>	Drain Current-Single Pulsed	26	А				
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25°C 41		W				
Tj	Max. Operating Junction Temperature 150		°C				
T <sub>stg</sub>	Storage Temperature	-40~150	°C				

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT	
Rth(j-c)	Channel-to-case thermal resistance	3.04	°C/W	
Rth(j-a)	Rth(j-a) Channel-to-ambient thermal resistance		°C/W	



K

0

0.40

0.90

9.90

0.60

10

10



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#### **ELECTRICAL CHARACTERISTICS**

T<sub>c</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; I <sub>D</sub> =1mA	600			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	VDS=VGS; I <sub>D</sub> =0.14mA	3		4	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; I <sub>D</sub> =2.7A			0.36	Ω
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =20V; V <sub>DS</sub> =0V			1	μA
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =600V; V <sub>GS</sub> = 0V			1	μA
V <sub>SD</sub>	Diode forward voltage	I <sub>F</sub> =2.7A, V <sub>GS</sub> = 0V		0.9		V

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