

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

IPW60R070C6

IIPW60R070C6

• FEATURES

- Static drain-source on-resistance: $R_{DS}(on) \leqslant 70 m_{\Omega}$
- · Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

· Fast switching

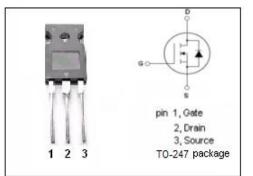
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

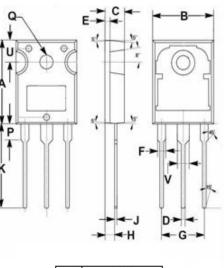
SYMBOL	PARAMETER	VALUE	UNIT	
V _{DSS}	Drain-Source Voltage	600	V	
V _{GS}	Gate-Source Voltage			
ID	Drain Current-Continuous			
I _{DM}	Drain Current-Single Pulsed	159	A W	
PD	Total Dissipation @Tc=25°C	391		
Tj	Max. Operating Junction Temperature	150	°C	
T _{stg}	Storage Temperature	-55~150	°C	

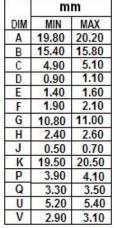
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(j-c)	Channel-to-case thermal resistance	0.32	°C/W
Rth(j-a)	(j-a) Channel-to-ambient thermal resistance		℃/W

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ELECTRICAL CHARACTERISTICS

$T_{\text{C}}\text{=}25^\circ\!\!\mathbb{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D =0.25mA	600			V
$V_{GS(th)}$	Gate Threshold Voltage	VDS=VGS; ID=1.72mA	2.5		3.5	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =25.8A			70	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = 20V; V _{DS} = 0V		~	0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} =600V; V _{GS} = 0V			5	μA
V _{SD}	Diode forward voltage	I _F =25.8A, V _{GS} = 0V			Ż	V

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