

# isc N-Channel MOSFET Transistor

# IPP60R099C7, IIPP60R099C7

#### • FEATURES

- Static drain-source on-resistance:
  R<sub>DS</sub>(on) ≤0.099Ω
- · Enhancement mode
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

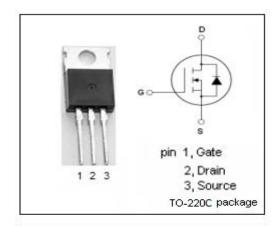
 Combines the benefits of a fast switching SJ MOSFET with excellent ease of use

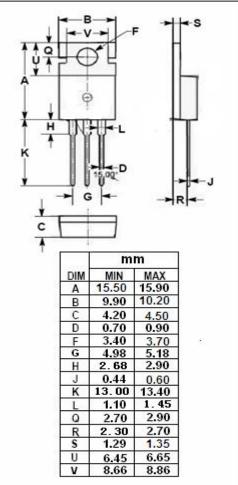


SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>DSS</sub>	Drain-Source Voltage	600	V	
V <sub>GS</sub>	Gate-Source Voltage	±20	V	
I <sub>D</sub>	Drain Current-Continuous	22	А	
I <sub>DM</sub>	Drain Current-Single Pulsed 83		А	
$P_D$	Total Dissipation @T <sub>C</sub> =25°C	110	W	
Tj	Max. Operating Junction Temperature 150		°C	
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$	

#### • THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.135	°C/W
Rth(ch-a) Channel-to-ambient thermal resistance		62	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV <sub>DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V; ID =0.25mA	600			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> ; ID =1.2mA	2.5		3.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> =10V; ID=18A			0.099	Ω
I <sub>GSS</sub>	Gate-Source Leakage Current	V <sub>GS</sub> =20V; V <sub>DS</sub> =0V			0.1	μА
I <sub>DSS</sub>	Drain-Source Leakage Current	V <sub>DS</sub> =600V; V <sub>GS</sub> = 0V			5	μА
V <sub>SD</sub>	Diode forward voltage	I <sub>F</sub> =18A; V <sub>GS</sub> = 0V			1.2	V

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