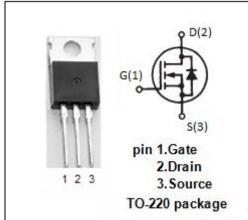


# isc N-Channel MOSFET Transistor

# DMG7N65SCT

#### **FEATURES**

- Drain Current -I<sub>D</sub>= 7.7A@ T<sub>C</sub>=25°C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>= 650V(Min)
- · Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 1.4 \Omega (Max)$
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



### **DESCRIPTION**

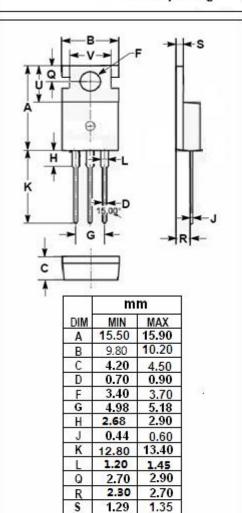
 Designed for use in switch mode power supplies and general purpose applications.

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	650	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V
l <sub>D</sub>	Drain Current-Continuous	7.7	А
I <sub>DM</sub>	Drain Current-Single Pluse	10	А
P <sub>D</sub>	Total Dissipation @T <sub>C</sub> =25℃	125	W
TJ	Max. Operating Junction Temperature	-55~150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~150	°C

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.0	°C/W



6.45

8.66

6.65



# isc N-Channel MOSFET Transistor

## DMG7N65SCT

#### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	650		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 0.25mA	3.0	5.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 2.5A		1.4	Ω
Igss	Gate-Body Leakage Current	V <sub>GS</sub> = ±24V;V <sub>DS</sub> = 0		±10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0		1.0	μА
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 5A; V <sub>GS</sub> = 0		1.5	V

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