

# isc N-Channel MOSFET Transistor

### DMG9N65CT

### FEATURES

- Drain Current –I\_D= 9A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage : V<sub>DSS</sub>= 650V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 1.3 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

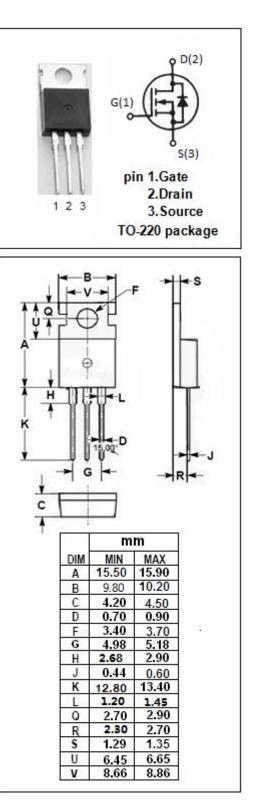
 Designed for use in switch mode power supplies and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25 C)						
	SYMBOL	PARAMETER	VALUE	UNIT		
	V <sub>DSS</sub>	Drain-Source Voltage	650	V		
	$V_{\text{GS}}$	Gate-Source Voltage-Continuous	±30	V		
ID		Drain Current-Continuous	9	А		
	Idm	IDM Drain Current-Single Pluse   PD Total Dissipation @Tc=25°C		А		
-	P <sub>D</sub>			W		
-	ТJ	Max. Operating Junction Temperature	-55~150	°C		
	T <sub>stg</sub>	Storage Temperature	-55~150	°C		

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.7	°C/W





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### **ELECTRICAL CHARACTERISTICS**

#### $T_{\text{C}}\text{=}25\,^{\circ}\!\!\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	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</sub> (th)	Gate Threshold Voltage	$V_{DS}$ = $V_{GS}$ ; $I_D$ = 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> = 4.5A		1.3	Ω
lgss	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0		±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0		1.0	μA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 1A; V <sub>GS</sub> = 0		1.0	V

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