

isc N-Channel MOSFET Transistor

DMNH4011SK3

FEATURES

- Drain Current –I_D= 50A@ T_C=25 $^\circ\!\!\!\mathrm{C}$
- Drain Source Voltage-
- : V_{DSS}= 40V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 10m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

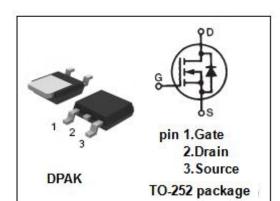
DESCRIPTION

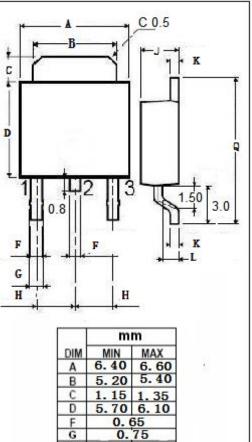
• Designed for use in switch mode power supplies and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C) VALUE SYMBOL PARAMETER UNIT Drain-Source Voltage 40 V VDSS Gate-Source Voltage-Continuous V V_{GS} ± 20 Drain Current-Continuous 50 А I_D Drain Current-Single Pluse 120 A **I**DM Total Dissipation @Tc=25°C W \mathbf{P}_{D} 50 Max. Operating Junction Temperature -55~175 °C ТJ -55~175 Tstg Storage Temperature °C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.0	°C/W





Н

0

10

40

0.90

2.10

50

2.40

0.



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	40		V
V _{GS(th)}	Gate Threshold Voltage	V_{DS} = V_{GS} ; I_D = 0.25mA	2.0	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 50A		10	mΩ
lgss	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0		±100	nA
IDSS	Zero Gate Voltage Drain Current	V _{DS} = 40V; V _{GS} = 0		1.0	μA
V _{SD}	Forward On-Voltage	I _S = 20A; V _{GS} = 0		1.2	V

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