

isc P-Channel MOSFET Transistor

DMP3010LK3

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FEATURES

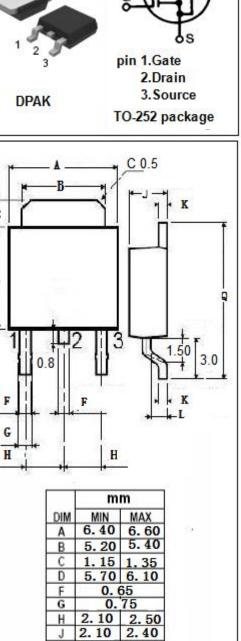
- Drain Current –I_D= -17A@ T_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage : V_{DSS}= -30V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)} = 8m \Omega$ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

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

VALUE SYMBOL PARAMETER UNIT Drain-Source Voltage -30 V VDSS Gate-Source Voltage-Continuous V V_{GS} ± 20 Drain Current-Continuous -17 А I_D Drain Current-Single Pluse -100 A **I**DM Total Dissipation @Tc=25°C 42 W \mathbf{P}_{D} Max. Operating Junction Temperature -55~150 °C ТJ Tstg Storage Temperature -55~150 °C

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)



C

D

THERMAL CHARACTERISTICS

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

isc website: <u>www.iscsemi.com</u>

K

0

0.40

0.90

9.90

0.60

1.



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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	-30		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = -0.25mA	-1.1	-2.1	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = -10V; I _D = -10A		8	mΩ
lgss	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0		±100	nA
loss	Zero Gate Voltage Drain Current	V _{DS} = -30V; V _{GS} = 0		-1.0	μA
V _{SD}	Forward On-Voltage	I _S = -1A; V _{GS} = 0		-1.0	V

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