

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

IXTH15N50L2

• FEATURES

- Static drain-source on-resistance: RDs(on) ≤ 480mΩ@V_{GS}=10V
- · Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATION

SYMBOL

VDSS

 V_{GS}

 I_D

lом

 \mathbf{P}_{D}

Τį

Tstg

SYMBOL

R_{th(j-c)}

- Current Regulators
- Solid State Circuit Breakers

Drain-Source Voltage

Gate-Source Voltage

Drain Current-Continuous

Drain Current-Single Pulsed

Total Dissipation @Tc=25℃

Storage Temperature

THERMAL CHARACTERISTICS

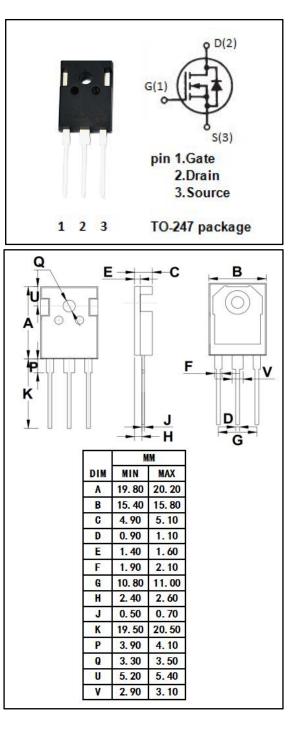
Operating Junction Temperature

PARAMETER

Junction-to-case thermal resistance

• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

PARAMETER



isc website: www.iscsemi.cn

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VALUE

500

 ± 20

15

35

300

-55~150

-55~150

MAX

0.42

UNIT

V

V

А

А

W

°C

°C

UNIT

°C/W



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; ID = 250 μ A	500		V
$V_{\text{GS}(\text{th})}$	Gate Threshold Voltage	V _{DS} =V _{GS} ; ID = 250 μ A	2.5	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D = 7.5A		480	mΩ
I _{GSS}	Gate-Source Leakage Current	V_{GS} = ±20V; V_{DS} =0V		±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = V _{DSS} ; V _{GS} = 0V		25	- μ Α
		V _{DS} = V _{DSS} ; V _{GS} = 0V;T _J = 125°C		200	
V _{SD}	Diode forward voltage	I _F = 15A; V _{GS} = 0V		1.5	V

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