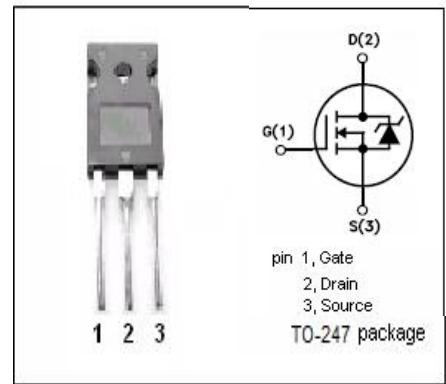


## isc N-Channel MOSFET Transistor

**IXTX200N10L2**
**• FEATURES**

- With TO-247 packaging
- With low gate drive requirements
- Easy to drive
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**• APPLICATIONS**

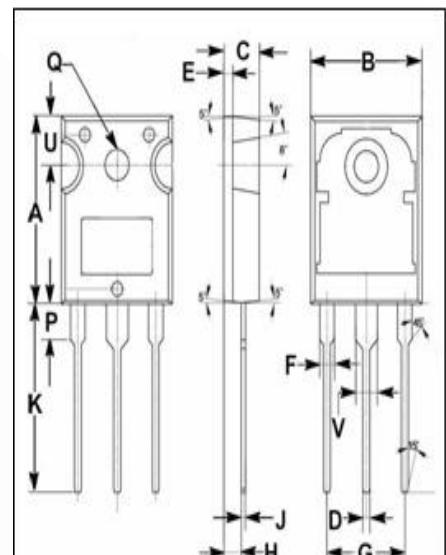
- Switching applications

**• ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage	100	V
$V_{GSS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-Continuous@ $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	200 160	A
$I_{DM}$	Drain Current-Single Pulsed	500	A
$P_D$	Total Dissipation	1040	W
$T_j$	Operating Junction Temperature	-55~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$

**• THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.12	$^\circ\text{C}/\text{W}$



DIM	mm	
	MIN	MAX
A	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

**isc N-Channel MOSFET Transistor****IXTX200N10L2****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$\text{BV}_{\text{DSS}}$	Drain-Source Breakdown Voltage	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D= 1.0\text{mA}$	500			V
$\text{V}_{\text{GS(th)}}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=\text{V}_{\text{GS}}; \text{I}_D=3.0\text{mA}$	2.0		4.5	V
$\text{R}_{\text{DS(on)}}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}= 10\text{V}; \text{I}_D=100\text{A}$			11	$\text{m}\Omega$
$\text{I}_{\text{GSS}}$	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 20\text{V}; \text{V}_{\text{DS}}= 0\text{V}$			$\pm 0.2$	$\mu\text{A}$
$\text{I}_{\text{DSS}}$	Drain-Source Leakage Current	$\text{V}_{\text{DS}}= 100\text{V}; \text{V}_{\text{GS}}= 0\text{V}; @T_c=25^\circ\text{C}$ $\text{V}_{\text{DS}}= 100\text{V}; \text{V}_{\text{GS}}= 0\text{V}; T_c=125^\circ\text{C}$			10 250	$\mu\text{A}$
$\text{V}_{\text{SDF}}$	Diode forward voltage	$\text{I}_{\text{SD}}=100\text{A}, \text{V}_{\text{GS}} = 0 \text{ V}$			1.4	V