

isc N-Channel MOSFET Transistor

IXTH76N25T

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 39m\Omega @ V_{GS}=10V$
- Fully characterized avalanche voltage and current
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATION

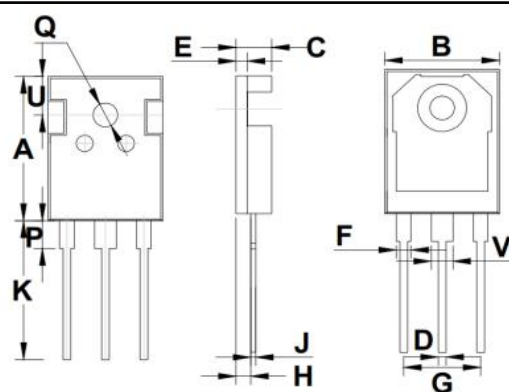
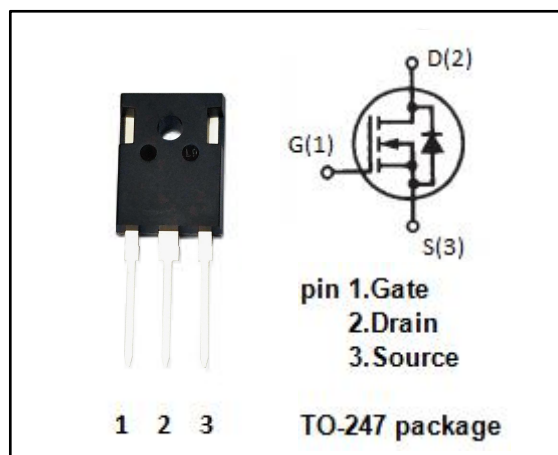
- DC/DC Converters
- High Speed Power Switching Applications

• ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	250	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	76	A
I_{DM}	Drain Current-Single Pulsed	170	A
P_D	Total Dissipation @ $T_c=25^\circ C$	300	W
T_j	Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Junction-to-case thermal resistance	0.5	$^\circ C/W$



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**IXTH76N25T****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V$; $I_D = 250\ \mu A$	200		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}$; $I_D = 1mA$	3.0	5.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10V$; $I_D = 38A$		39	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS} = \pm 20V$; $V_{DS}=0V$		± 100	nA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=V_{DSS}$; $V_{GS}=0V$		2	μA
		$V_{DS}=V_{DSS}$; $V_{GS}=0V$; $T_J = 125^{\circ}\text{C}$		200	
V_{SD}	Diode forward voltage	$I_F = 76A$; $V_{GS} = 0V$		1.5	V

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