

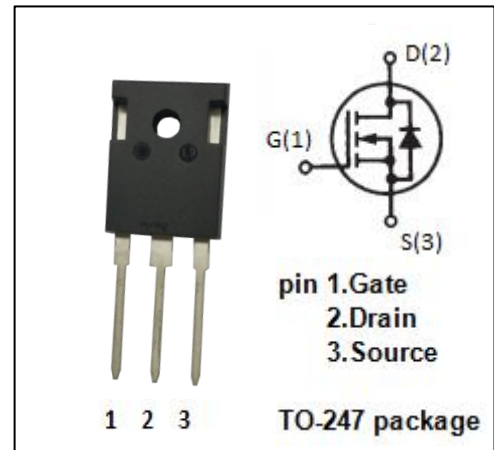
N-Channel MOSFET Transistor

FEATURES

- Drain Current $-I_D = 47A @ T_C = 25^\circ C$
- Drain Source Voltage $-V_{DSS} = 600V(\text{Min})$
- Static Drain-Source On-Resistance
 $-R_{DS(on)} = 0.07\Omega(\text{Max}) @ V_{GS} = 10V$

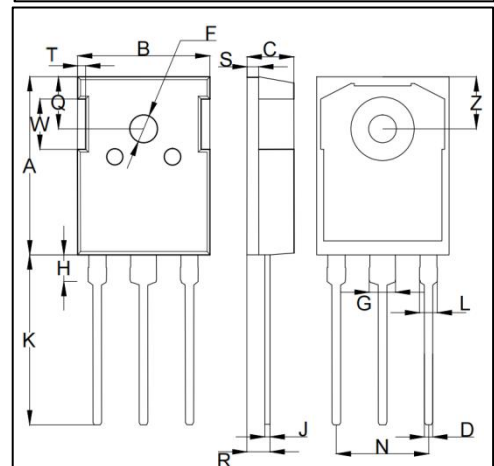
APPLICATIONS

- DC-DC Converters
- Automatic Test Equipment
- High-Side Switching



Absolute Maximum Ratings($T_C = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage-Continuous	± 20	V
I_D	Drain Current-Continuous	47	A
I_{DM}	Drain Current-Single Pulse	141	A
P_D	Total Dissipation @ $T_C = 25^\circ C$	417	W
T_J	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$



DIM	mm		
	MIN	TYP.	MAX
A	19.80	20.65	21.50
B	15.40	15.65	15.90
C	4.70	5.00	5.30
D	0.90	1.08	1.26
F	3.50	3.70	3.90
G	2.70	3.00	3.30
H	3.90	4.05	4.20
J	0.50	0.60	0.70
K	19.50	20.00	20.50
L	1.90	2.05	2.20
N	10.80	10.90	11.00
Q	6.00	6.15	6.30
R	2.90	3.10	3.30
S	1.80	2.00	2.20
T	2.15	2.25	2.35
W	4.90	5.00	5.10
Z	6.00	6.15	6.30

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.3	$^\circ C/W$

N-Channel MOSFET Transistor

ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0, I _D = 0.25mA	600	-	-	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 600V, V _{GS} = 0V	-	-	25	μA
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±20V, V _{DS} = 0 V	-	-	±100	nA
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} , I _D = 2.7mA	2.5	-	4.5	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V, I _D = 30A	-	-	0.07	Ω
V _{SD}	Diode Forward Voltage	I _{SD} = 47A, V _{GS} = 0V	-	-	1.2	V

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