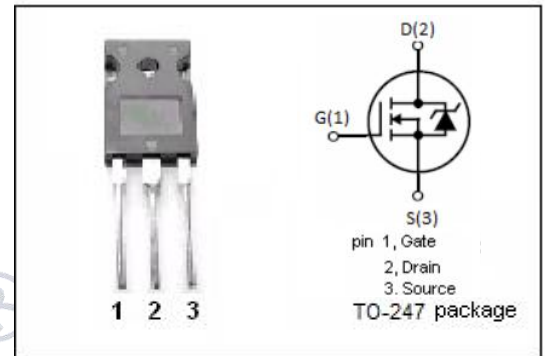


**isc N-Channel MOSFET Transistor**
**STW30N65M5**
**FEATURES**

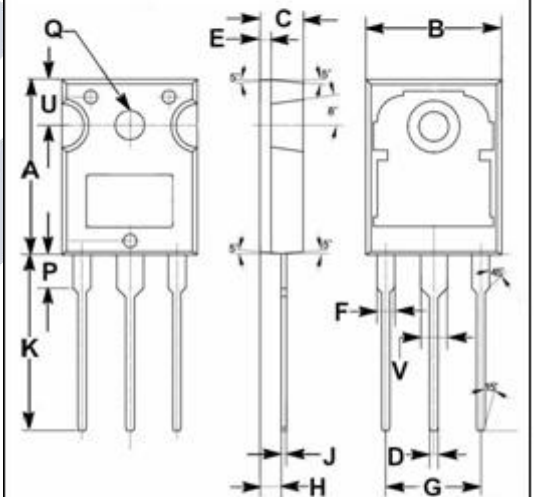
- Static Drain-Source On-Resistance  
:  $R_{DS(on)} = 0.139 \Omega$  (Max)
- Fast Switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**DESCRIPTION**

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

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DS}$	Drain-Source Voltage	650	V
$V_{GS}$	Gate-Source Voltage-Continuous	$\pm 25$	V
$I_D$	Drain Current-Continuous	22	A
$I_{DM}$	Drain Current-Single Pulse	88	A
$P_D$	Total Dissipation @ $T_c=25^\circ\text{C}$	140	W
$T_J$	Max. Operating Junction Temperature	-55~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



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

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.89	$^\circ\text{C/W}$

**isc N-Channel MOSFET Transistor****STW30N65M5****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0; I_D=1\text{mA}$	650		V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=0.25\text{mA}$	3	5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=11\text{A}$		0.139	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}=\pm 25\text{V}; V_{DS}=0$		$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=650\text{V}; V_{GS}=0$		1	$\mu\text{A}$
		$V_{DS}=650\text{V}; V_{GS}=0; T_C=125^{\circ}\text{C}$		100	
$V_{SD}$	Forward On-Voltage	$I_S=22\text{A}; V_{GS}=0$		1.5	V

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