

Isc N-Channel MOSFET Transistor

STW13NM60N

• FEATURES

- Drain Current –I_D= 11A@ T_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage-
- : V_{DSS}= 600V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 360m Ω (Max)
- 100% avalanche tested
- · Low input capacitance and gate charge
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

Switching applications

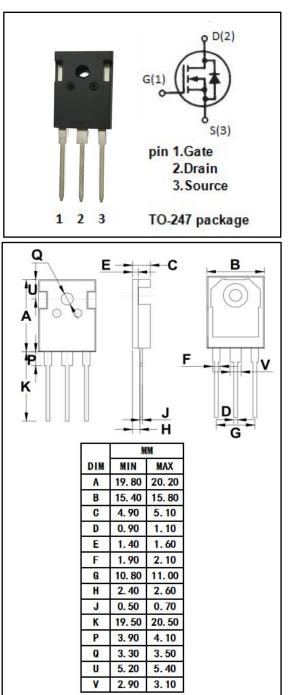
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DSS}	Drain-Source Voltage	600	
V _{GSS}	Gate-Source Voltage	±25	
ID	Drain Current-Continuous@Tc=25℃	5°C 11	
I _{DM}	Drain Current-Single Pulsed	ain Current-Single Pulsed 44	
P _D	Total Dissipation	25	W
Tj	Operating Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	1.39	°C/W

1



isc website: www.iscsemi.cn



Isc N-Channel MOSFET Transistor

STW13NM60N

ELECTRICAL CHARACTERISTICS

$T_{\texttt{C}}\text{=}25^{\circ}\!\!\!\mathbb{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D = 1mA	600			v
$V_{GS(th)}$	Gate Threshold Voltage	V _{DS} =±25V; I _D =0.25mA	2		4	v
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =5.5A		280	360	mΩ
lgss	Gate-Source Leakage Current	V _{GS} = ±25V;V _{DS} = 0V			±0.1	μ Α
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V; T _J =25°C T _J =125°C			1 100	μ Α
VSDF	Diode forward voltage	I _{SD} =11A, V _{GS} = 0 V			1.5	V

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications. ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

2