

isc N-Channel MOSFET Transistor

SPW16N50C3 ISPW16N50C3

• FEATURES

- Static drain-source on-resistance: R_{DS}(on)≤280mΩ
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

• Improved Transconductance

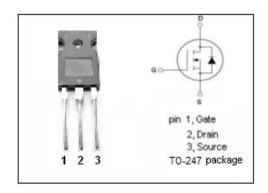


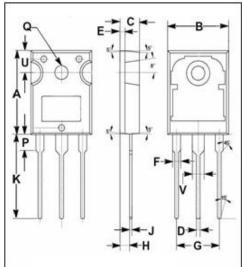
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V_{DSS}	Drain-Source Voltage	500	V	
V _{GS}	Gate-Source Voltage	±20	V	
I _D	Drain Current-Continuous	16	А	
I _{DM}	Drain Current-Single Pulsed	48	А	
P _D	Total Dissipation @T _C =25℃	160	W	
Tj	Max. Operating Junction Temperature	150	${\mathbb C}$	
T _{stg}	Storage Temperature	-55~150	${\mathbb C}$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth(j-c)	Channel-to-case thermal resistance	0.78	°C/W
Rth(j-a)	Channel-to-ambient thermal resistance		°C/W





	mm		
DIM	MIN	MAX	
Α	19.80	20.20	
В	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	
Н	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	

mm



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D =0.25mA	500			V
V _{GS(th)}	Gate Threshold Voltage	VDS=VGS; I _D =675 μ A	2.1		3.9	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D =10A			280	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = 20V; V _{DS} = 0V			0.1	μА
I _{DSS}	Drain-Source Leakage Current	V _{DS} =500V; V _{GS} = 0V			1	μА
V _{SD}	Diode forward voltage	I _F =Is, V _{GS} = 0V			1.2	V

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