

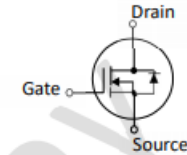


SPQ8R5N30W

30V, 10A ⁽¹⁾ N-Channel MOSFET

- Advanced Trench Device Design and Processes
- High Reliability Capability
- 100% CP Probing and Inking

SYMBOL



Electrical Characteristics in C/P Test (T_J at 25 °C)

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
V _{(BR)DSS}	Drain-Source Breakdown Voltage	30	—	—	V	V _{GS} = 0V, I _D = 250μA
R _{DS(ON)}	Static Drain-Source On-Resistance	—	6.5	8.5	mΩ	V _{GS} = 10V, I _D = 1A(2)
R _{DS(ON)}	Static Drain-Source On-Resistance	—	8.5	14	mΩ	V _{GS} = 4.5V, I _D = 1A(2)
V _{GS(th)}	Gate Threshold Voltage	1.0	—	2.5	V	V _{DS} = V _{GS} , I _D = 250μA
I _{DSS}	Drain-to-Source Leakage Current	—	—	1	μA	V _{DS} = 30V, V _{GS} = 0V
I _{GSS}	Gate-Body Leakage Current	—	—	±100	nA	V _{DS} = 0V, V _{GS} = ±20V
T _J , T _{STG}	Operating and Storage Temperature	-55°C to 150°C Max.				

Mechanical Data		Die Drawing
Chip Size	1532 μm X 940 μm	
Gate Pad Size	180 μm X 180 μm	
Source Pad Size	1314 μm X 874 μm	
Scribe Line Width	60 μm	
Wafer Thickness	150 μm	
Wafer Diameter	200 mm	
Gross Die	18012 EA	
Source Metallization	Al-Cu (4μm typical)	
Drain Metallization	Ti-Ni-Ag	
Passivation	N/A	
Recommended Storage Environment	Store in original container, in dry nitrogen, 6 months at ambient temperature of 23°C ± 3°C	

(1) This characteristic assumes the die is assembled in SO-8 package. Actual performance may degrade when assembled.

(2) Pulse Width t_p = < 300 μS, Duty Cycle < 2%.