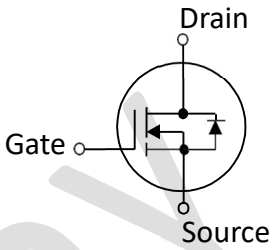
SPQ6R5N85W

85V, 90A (1) N-Channel MOSFET

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

SYMBOL



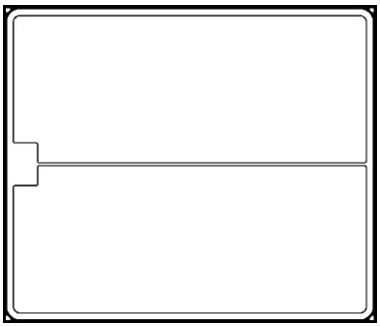
Electrical Characteristics in C/P Test (T_J at 25 ℃)

Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Condition
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	85	—	—	V	V_{GS} =0V, I_D =250μA
$R_{DS(ON)}$	Static Drain-Source On-Resistance	—	—	6.5	mΩ	V_{GS} =10V, I_D =1A(2)
$V_{GS\ (th)}$	Gate Threshold Voltage	2.0	—	4.0	V	V_{DS} = V_{GS}, I_D =250μA
I_{DSS}	Drain-to-Source Leakage Current	—	—	1	μA	V_{DS} =85V, 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℃ to 150℃ Max.				

Mechanical Data

Chip Size	3628 μm X 3086 μm
Gate Pad Size	304 μm X 420 μm
Source Pad Size	3114 μm X 2942 μm
Scribe Line Width	60 μm
Wafer Thickness	150 μm
Wafer Diameter	200 mm
Gross Die	2420 EA
Source Metallization	Al-Cu (4 μm 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

Die Drawing



(1) This characteristic assumes the die is assembled in TO-220 package. Actual performance may degrade when assembled.

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

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