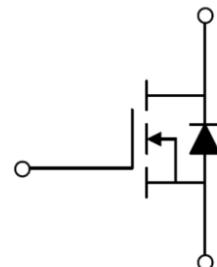


PowerMOSFET Wafer Datasheet

FEATURES

- 500V, 100A*, N-channel
- $R_{DS(on)}=46\text{m}\Omega(\text{MAX})$
- Ultra low Q_{gd}
- Fast switching
- 100% CP tested



Electrical Characteristics(TJ=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
$V_{(\text{BR})\text{DSS}}$	Drain-Source Breakdown Voltage	500			V	$\text{VGS}=0\text{V}, \text{ID}=250\mu\text{A}$
$R_{\text{DS}(\text{on})}$	Static Drain-Source On-Resistance		40	46	$\text{m}\Omega$	$\text{VGS}=10\text{V}, \text{ID}=50\text{A}$
$V_{\text{GS}(\text{th})}$	Gate Threshold Voltage	2.0		4.0	V	$\text{VDS}=\text{VGS}, \text{ID}=250\mu\text{A}$
I_{DSS}	Drain-to-Source Leakage Current			1	μA	$\text{VDS}=500\text{V}, \text{VGS}=0\text{V}, \text{TJ}=25^\circ\text{C}$
I_{GSS}	Gate-Body Leakage Current			± 100	nA	$\text{VGS}=\pm 30\text{V}$
V_{SD}	Body Diode Voltage			1.4	V	$\text{VGS}=0\text{V}, \text{ISD}=100\text{A}$
$T_{\text{J}}, T_{\text{stg}}$	Operating and Storage Temperature Range	-55~+150			°C	

Mechanical Data

Die Size	14000×10000	μm^2	
Gate Pad Size	500×1000*8		
Source Pad Size	2010×6000*6		
Scribe Line Size	60		
Wafer Diameter	150		
Wafer Thickness	280		
Passivation Frontside	SIN		
Source Metallization	AL		
Drain Metallization	Ti- Ni - Ag		
Reject Ink Dot Size	0.51		
Recommended Storage Environment	Store in original container, in dessicated nitrogen, with no contamination		

* Electrical characteristics are reported for the reference packaged part (TO-264\ SOT-227B) and can not be guaranteed in die sales form.

Variations in customer packaging materials, dimensions and processes may affect parametric performance.