

650V MOSFET Wafer

Ordering Information

Wafer Name	CDJX735N650A	Chip Name	/
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Die outline and Info.

	<p>$V_{DS}=650V, I_D=40A$</p> <p>$R_{DS(ON)} < 248m\Omega$</p> <p>Die Size: 9000 μm * 6000 μm (含划片槽)</p> <p>Gate Pad Size: 502 μm * 806 μm</p> <p>Source Pad Size: 8039 μm * 1741 μm* 3, With PA Layer</p> <p>Back Metal: TiNiAg, 1.4μm</p> <p>Front Metal, Thickness: AlSiCu, 4μm</p> <p>Gross Die: 258</p>
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Mechanical Data

Nominal Back Metal Composition:	TiNiAg 1.4 μm
Nominal Front Metal Composition, Thickness:	AlSiCu(98.5%-1%-0.5%) 4 μm
Wafer Diameter:	150 mm (6 inch)
Wafer Thickness:	300 μm +/-20 μm
Minimum Street Width	60 μm
Reject Ink Dot	ink
Recommended Storage Environment:	Store in original container, in desiccated nitrogen, with no contamination
Recommended Die Attach Conditions:	For optimum electrical results, die attach temperature should not exceed 300 °C

Electrical Characteristic Note*

(Device Major Electrical Characteristics for TO-247H package Reference ; T_J=25°C unless otherwise specified.)

Parameter	Description	Min.	Typ.	Max.	Test Conditions	Unit
V _{(BR)DSS}	Drain-to-Source Breakdown Voltage	650	--	--	V _{GS} = 0V, I _D = 250μA	V
V _{GSS}	Gate-to-Source Voltage	--	--	±30	NA	V
R _{DS(on)}	Static Drain-to-Source On-Resistance	--	207	248	V _{GS} = 10V, I _D = 20A	mΩ
V _{GS(th)}	Gate Threshold Voltage	2.0	--	4.0	V _{DS} = V _{GS} , I _D = 250μA	V
I _{DSS}	Drain-to-Source Leakage Current	--	--	1	V _{DS} = 650V, V _{GS} = 0V, T _J = 25°C	uA
I _{GSS}	Gate-to-Source Leakage Current	--	--	±100	V _{GS} = ±30V	nA
V _{SD}	Body Diode Voltage	--	--	1.5	V _{GS} = 0V, I _{SD} = 40A	V
T _j	Operating Junction and	-55°C to 150 °C Max.				°C
T _{STG}	Storage Temperature Range					

Note*

Electrical characteristics are reported for the reference packaged part (TO-247H) and can not be guaranteed in die sales form. Variations in customer packaging materials, dimensions and processes may affect parametric performance.

Shipping

- One shipping options is offered as standard.
- Un-sawn wafer

Handling

- Product must be handled only at ESD safe workstations. Standard ESD precautions and safe work environments are as defined in MIL-HDBK-263.
- Product must be handled only in a class 10,000 or better-designated clean room environment.

Wafer/Die Storage

- Proper storage conditions are necessary to prevent product contamination and/or degradation after shipment.
- Un-sawn wafers and singulated die can be stored for up to 12 months when in the original sealed packaging at room temperature (45% +/- 15% RH controlled environment).
- Un-sawn wafers and singulated die that have been opened can be stored when returned to their containers and placed in a Nitrogen purged cabinet, at room temperature (45% +/- 15% RH controlled environment).
- Note: To reduce the risk of contamination or degradation, it is recommended that product not being used in the assembly process be returned to their original containers and resealed with a vacuum seal process.
- Sawn wafers on a film frame are intended for immediate use and have a limited shelf life.

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