

Features:

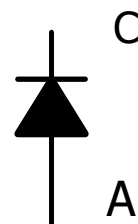
- Emitter injection control technology
- Soft, fast switching
- Low reverse recovery charge
- Small and positive temperature coefficient

Recommended for:

Low / medium power modules

Applications:

Low / medium power drives



Mechanical parameters

Die size (include scribe lane)	L x W	4.17×8.16	mm ²
Anode pad size	L x W	3.00×7.00	mm ²
Scribe lane		60	um
Silicon thickness		110	um
Wafer size		200	mm
Maximum possible chips per wafer		804	
Passivation frontside		Polyimide	
Pad Metallization	AlSiCu	4	um
Backside Metallization	Ti / Ni / Ag	1.3	um

Maximum Ratings

Parameters	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	1200	V
Continuous forward current, limited by $T_{vj\ max}^1$	I_F	75 ²	A
Maximum repetitive forward current, t_p limited by $T_{vj\ max}$	I_{FRM}	150	A
Operating junction temperature	$T_{vj\ op}$	-40~175	°C
Storage temperature	T_{stg}	-40~150	°C

Static Characteristic (T_j=25°C, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Cathode-Anode breakdown voltage	V_{BR}	$I_R=1mA$	1200	-	-	V
Diode forward voltage	V_F	$I_F=25A$	1.05	1.25	1.50	V
Reverse leakage	I_R	$V_R=1200V$	-	-	10	μA

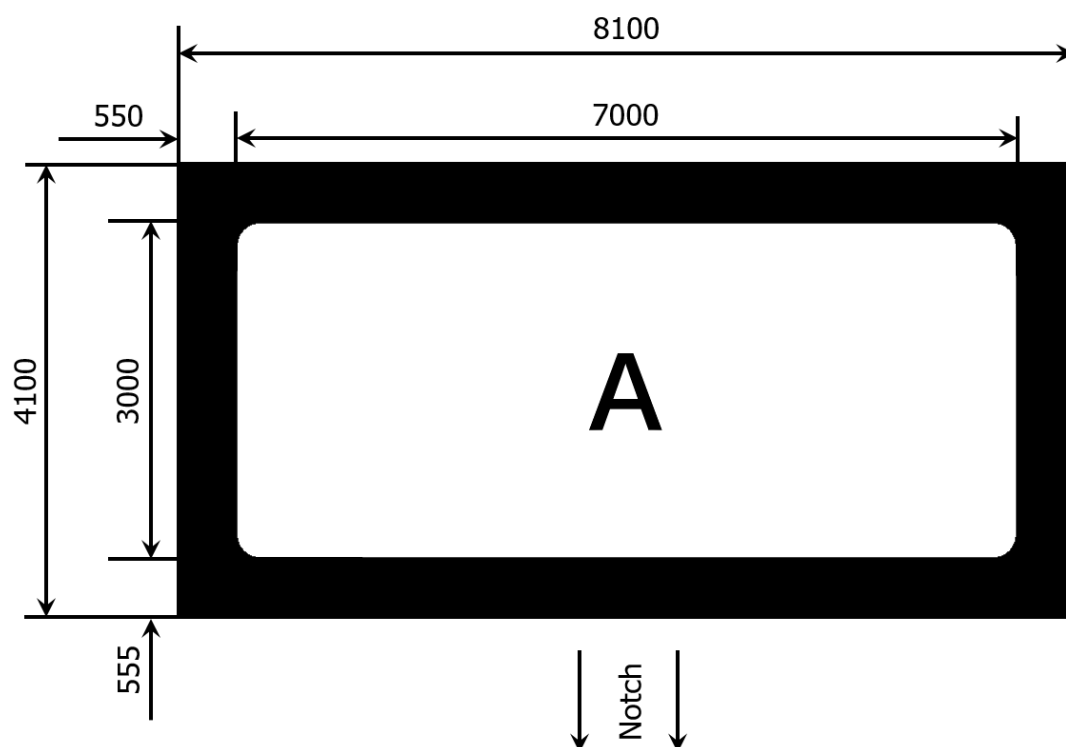
¹ Depending on thermal properties of assembly.

² Not subject to production test - verified by design/characterization.

Electrical Characteristic ¹

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Diode forward voltage	$T_{vj}=25^{\circ}\text{C}$	V_F	$I_F=75\text{A}$	1.52	1.70	1.98	V
	$T_{vj}=150^{\circ}\text{C}$			1.58	1.75	2.05	V
Cathode-Anode breakdown voltage		V_{BR}	$I_R=1\text{mA}$	1200			V
Reverse leakage		I_R	$V_R=1200\text{V}$			10	μA

Chip Drawing (unit: μm)



¹ Not subject to production test-verified by design/characterization.

Disclaimer:

NJSM does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.

NJSM reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

NJSM makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, NJSM disclaims (1) any and all liability arising out of the application or use of any product, (2) any and all liability, including without limitation special, consequential or incidental damages, and (3) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

NJSM products, except as expressly indicated in writing, are not designed for use in medical, life-saving, or life-sustaining applications, or for any other application in which the failure of the NJSM product could result in personal injury or death. Customers using or selling NJSM products not expressly indicated for use in such applications do so at their own risks.

Resale of NJSM products with statements different from or beyond the parameters stated by NJSM for that product or service voids all express or implied warranties for the associated NJSM product or service and is unfair and deceptive business practice. NJSM is not responsible or liable for any such statements.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of NJSM. Product names and markings noted herein may be trademarks of their respective owners.