

Features:

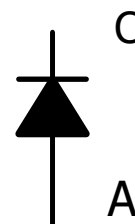
- Emitter injection control technology
- Soft, fast switching
- Low reverse recovery charge
- Small and positive temperature coefficient

Recommended for:

Low / medium power modules

Applications:

Low / medium power drives



Mechanical parameters

Die size (include scribe lane)	L x W	4.06×4.95	mm ²
Anode pad size	L x W	2.90×3.80	mm ²
Scribe lane		60	um
Silicon thickness		110	um
Wafer size		200	mm
Maximum possible chips per wafer		1383	
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 $T_{vj\ max}^2$	I_F	40 ¹	A
Maximum repetitive forward current, t_p limited by $T_{vj\ max}$	I_{FRM}	80	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	$I_F=25A$	1.20	1.40	1.70	V
Reverse leakage	I_R	$V_R=1200V$	-	-	10	μA

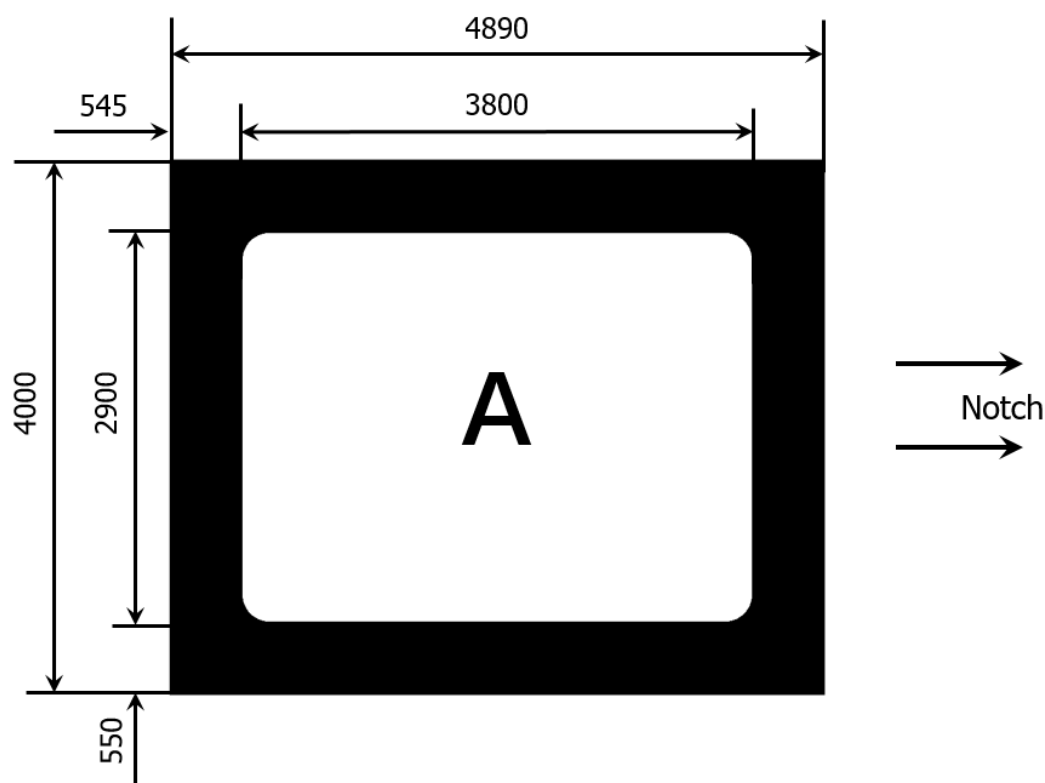
¹ Depending on thermal properties of assembly.

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	$I_F=40\text{A}$	1.42	1.60	1.88	V
	$T_{vj}=150^{\circ}\text{C}$			1.50	1.70	1.95	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.

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