



1200V Fast Recovery Diode

FEATURES

- Very fast recovery time
- Soft recovery characteristics
- Low forward voltage
- Low leakage current
- Low recovery loss

APPLICATIONS

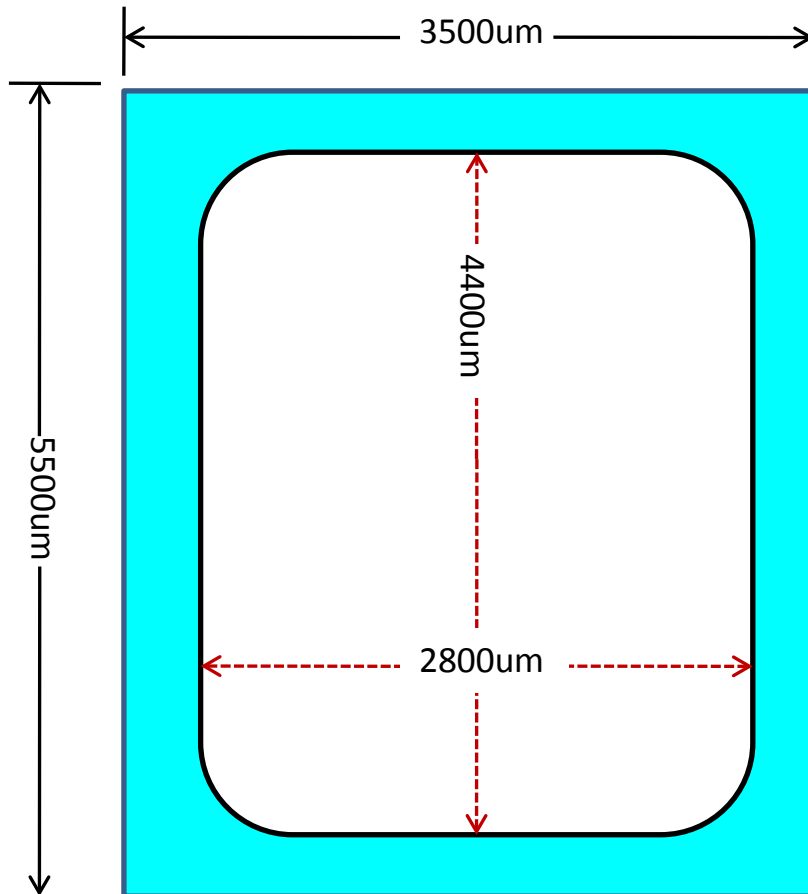
- Freewheeling
- Switching power supply
- Ultrasonic Cleaner
- Inversion Welder



Electrical Characteristic $T_J = 25^\circ\text{C}$, unless otherwise noted						
Parameter	Symbol	Test Conditions	Value			Unit
			Min.	Typ.	Max.	
Static						
Repetitive Reverse Voltage	V_{RRM}	$I_R = 50\mu\text{A}$	1200	--	--	V
Reverse leakage current	I_{RM}	$V_R = 1200\text{V}, T_J = 25^\circ\text{C}$	--	--	250	μA
		$V_R = 1200\text{V}, T_J = 125^\circ\text{C}$	--	--	1000	
Average Forward Current	$I_{F(AV)}$	$T_C = 100^\circ\text{C}, \text{Duty} = 0.5$	--	30	--	A
Forward Voltage	V_F	$I_F = 30\text{A}, T_J = 25^\circ\text{C}$	--	--	2.68	V
		$I_F = 30\text{A}, T_J = 125^\circ\text{C}$	--	--	1.71	V
Reverse Recovery Time	t_{rr}	$I_F = 1\text{A}, V_R = 30\text{V}, \text{di/dt} = -200\text{A}/\mu\text{s}$	--	40	--	ns
		$I_F = 30\text{A}, V_R = 600\text{V}, \text{di/dt} = -200\text{A}/\mu\text{s}$	--	80	--	ns
Reverse Recovery Time	t_{rr}	$I_F = 30\text{A}, V_R = 600\text{V}, \text{di/dt} = -200\text{A}/\mu\text{s}, T_J = 100^\circ\text{C}$	--	200	--	ns
Reverse Recovery Charge	Q_{rr}		--	1100	--	nC
Max Reverse Recovery Current	I_{RRM}		--	13	--	A
Operating and Storage Temperature Range	T_J, T_{stg}	-55~+150				$^\circ\text{C}$



Chip Information	
Wafer size	6inch
Die thickness	460 ± 20μm
Top metal	Al
Back metal	Ag
Scribe line width	80um
Die size (with scribe line)	3500μm × 5500μm
Gross die per wafer	730
Bonding Size	2800μm × 4400μm





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