

# PCRL75120SQF

## Product Preview

### 1200 V Rectifier Die

Low forward voltage rectifier die for free-wheeling applications.  
Ideal for use as a reverse diode in IGBT applications.

#### Features

- Low  $V_f$
- Soft Fast Reverse Recovery Diode

#### Typical Applications

- Solar Inverters
- UPS Systems

#### MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Peak Reverse Voltage, $T_J = 25^\circ\text{C}$	$V_{RRM}$	1200	V
Max Forward Conduction Current	$I_F$	(Note 1)	A
Operating Junction Temperature	$T_J$	-55 to +175	$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Depending on thermal properties of assembly.

#### MECHANICAL DATA

Parameter	Symbol	Unit
Die Size	6200 × 3300	$\mu\text{m}^2$
Die Thickness	121	$\mu\text{m}$
Wafer Size	150	mm
Total Pad Size (Anode)	5552 × 2652	$\mu\text{m}^2$
Top Pad metal	3.9 $\mu\text{m}$ AlSi	
Back metal	2 $\mu\text{m}$ AlTiNiAg	
Passivation	1.5 $\mu\text{m}$ HR NIT	
Max possible chips per wafer	610	
Reject Ink dot size	25 mils	
Recommended storage environment: In original container, in dry nitrogen, or temperature of 18–28 $^\circ\text{C}$ , 30–65% RH	Type: Sawn wafer on tape. Storage time: <3 months	

#### ORDERING INFORMATION

Device	Inking?	Shipping
PCRL75120SQF	Yes	Sawn Wafer on Tape



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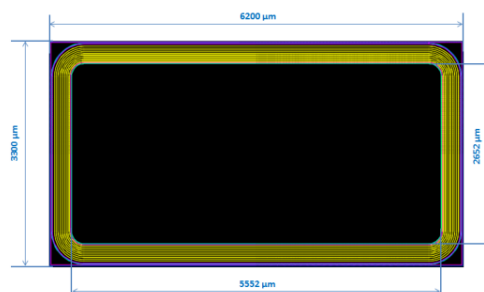
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$V_{RRM} = 1200\text{ V}$   
 $I_F = \text{Limited by } T_{J(\text{max})}$


#### DIODE DIE



#### DIE OUTLINE



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