# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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Data Sheet N1056, Rev. A

## 66CNQ200

RoHS

## 66CNQ200 SCHOTTKY RECTIFIER

#### Applications

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

#### Features

- 175°C T<sub>J</sub> operation
- Center tap module
- Very Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Low profile, high current package
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional electrical and life testing can be performed upon request

66CNQ200	66CNQ200SL	66CNQ200SM
State C	S-age	T
ANODE 1 ANODE 2	ANODE 1 ANODE 2	ANODE 1 ANODE 2
PRM3	PRM3-SL	PRM3-SM

#### **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	200	V
Average Rectified Forward Current	I <sub>F (AV)</sub>	50% duty cycle @T <sub>c</sub> =155°C, rectangular wave form	30(Per Leg) 60(Per Device)	A
Peak One Cycle Non-Repetitive Surge Current(Per leg)	I <sub>FSM</sub>	8.3 ms, half Sine pulse	708	А

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## **Electrical Characteristics:**

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop (Per leg) *	V <sub>F1</sub>	@ 30A, Pulse, T <sub>J</sub> = 25 °C	0.80	0.92	V
(1 61 169)	V <sub>F2</sub>	@ 30A, Pulse, T <sub>J</sub> = 125 °C	0.63	0.72	V
Reverse Current (Per leg) *	I <sub>R1</sub>	$@V_R = rated V_{R, T_J} = 25 \circ C$	0.0002	1.5	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated V <sub>R</sub> , T <sub>J</sub> = 125 °C	0.28	21	mA
Junction Capacitance(Per leg)	Ст	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C f <sub>SIG</sub> = 1MHz	750	900	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

\* Pulse width < 300 µs, duty cycle < 2%

## Thermal-Mechanical Specifications:

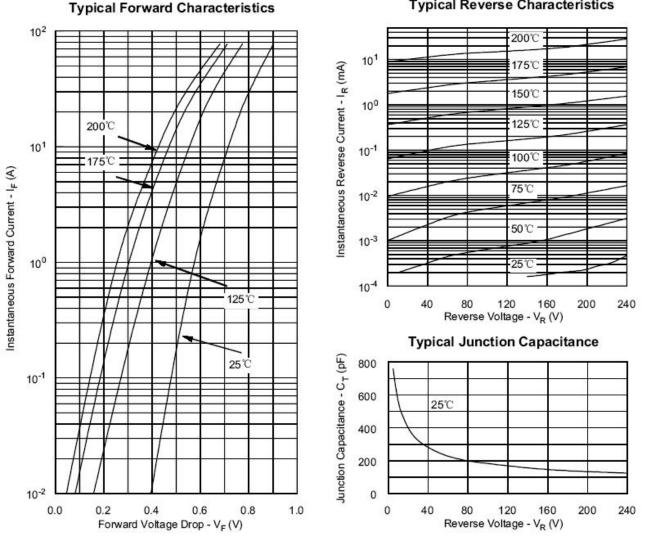
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case (per leg)	R <sub>θJC</sub>	DC operation	0.85	°C/W
Typical Thermal Resistance Junction to Case (per package)	R <sub>θJC</sub>	DC operation	0.42	°C/W
Typical Thermal Resistance, case to Heat Sink	$R_{ hetacs}$	Mounting surface, smooth and greased	0.30	°C/W
Mounting Torque	ТМ	-	40(min)	Kg-cm
			58(max)	
Approximate Weight	wt	-	7.8	g
Case Style	PRM3 PRM3-SL PRM3-SM			

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## **Ratings and Characteristics Curves**



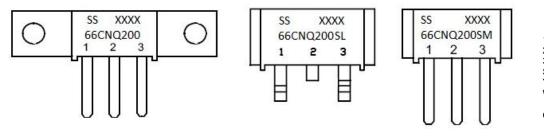
#### **Typical Reverse Characteristics**

66CNQ200

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## **Marking Diagram**



Where XXXX is YYWW

```
1st row SS YYWWL
2nd row 66CNQ200/SL/SM
3rd row 1 2 3 (pin)
SS
          = SS
YΥ
          = Year
WW
          = Week
```

Cautions: Molding resin Epoxy resin UL:94V-0

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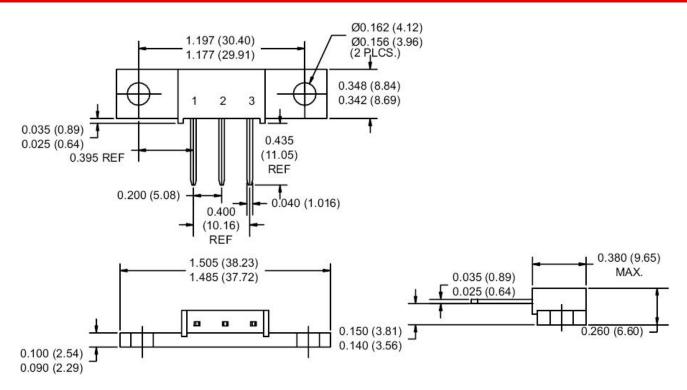
## 66CNQ200

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Device	Package	Terminals finish	Shipping
66CNQ200	PRM3	Nickel plated	48pcs / box
66CNQ200S	PRM3	Pure Sn dipped (dipped height 6-8 mm)	48pcs / box
66CNQ200SL	PRM3-SL	Nickel plated	100pcs / box
66CNQ200SM	PRM3-SM	Nickel plated	48pcs / box

#### Mechanical Dimensions PRM3 (Inches/Millimeters)



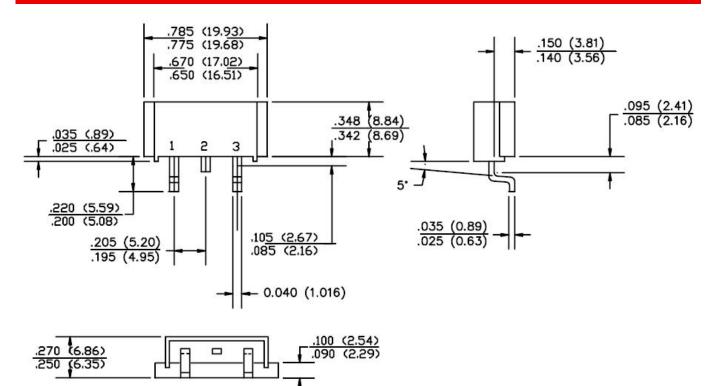


## 66CNQ200

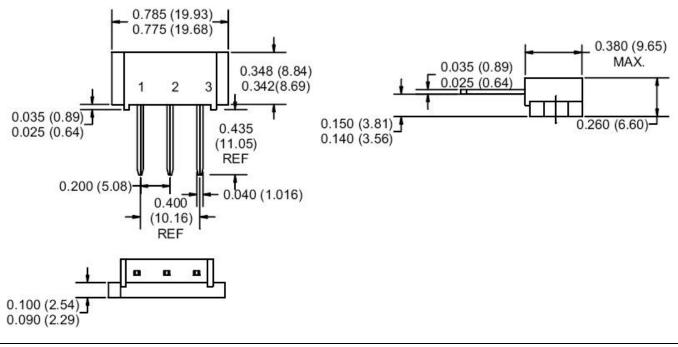
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## Mechanical Dimensions PRM3-SL (Inches/Millimeters)



Mechanical Dimensions PRM3-SM (Inches/Millimeters)



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