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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Technical Data
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30BQ200 SCHOTTKY RECTIFIER

SMC

Features

- Small foot print, surface moutable
- Low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram

Applications

- Disk Drives
- Switching power supply
- Redundant power subsystems
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Battery Charging

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	-	200	V
Average Rectified Forward Current	$I_{F\ (AV)}$	50% duty cycle @T_L =148°C, rectangular wave form	3.0	A
		50% duty cycle @T_L =138°C, rectangular wave form	4.0	
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse, T_C =25°C	55	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V_{F1}	@ 3 A, Pulse, T_J = 25 °C	0.83	0.92	V
	V_{F2}	@ 3 A, Pulse, T_J = 75 °C	-	0.76	V
Reverse Current*	I_{R1}	@V_R = Rated V_R, Pulse, T_J = 25 °C	0.00003	1	mA
	I_{R2}	@V_R = Rated V_R, Pulse, T_J = 100 °C	0.006	3	mA
Junction Capacitance	C_T	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz	50	60	pF
Series Inductance	L_S	Measured lead to lead 5 mm from package body	3.0	-	nH
Voltage Rate of Change	dv/dt	-	-	10,000	V/µs

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

Technical Data
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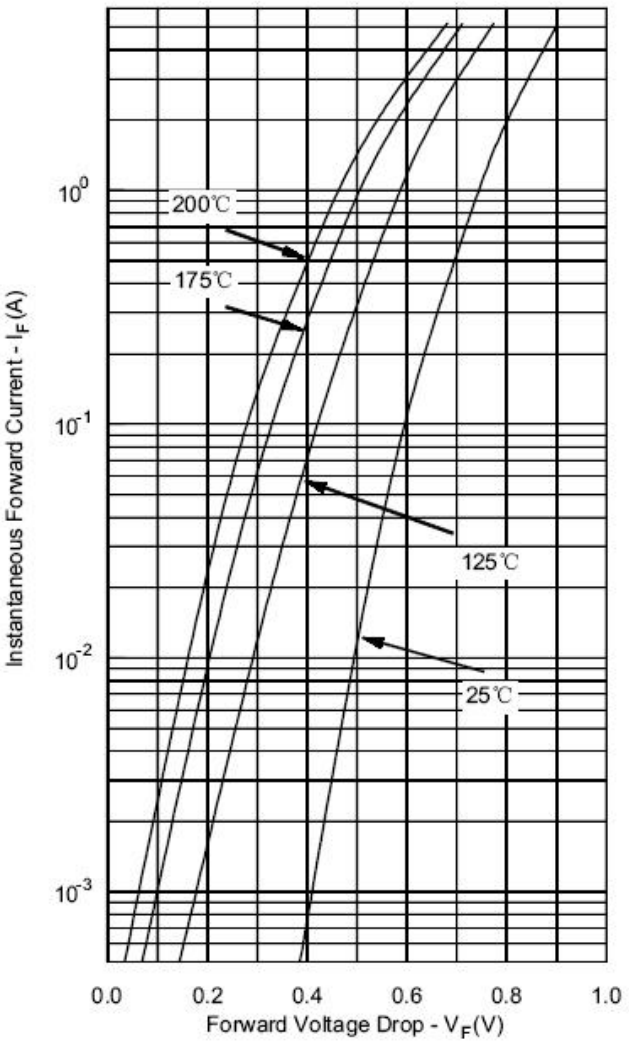
RoHS

Thermal-Mechanical Specifications:

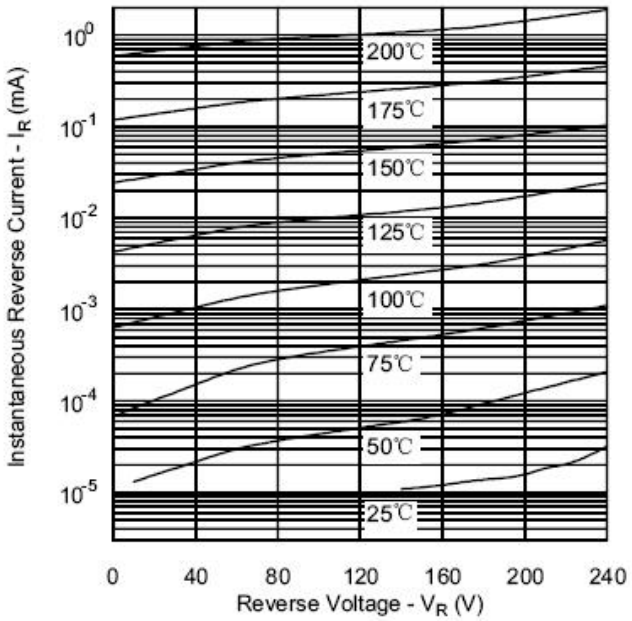
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +175	°C
Storage Temperature	T_{stg}	-	-55 to +175	°C
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	-	12	°C/W
Typical Thermal Resistance Junction to Case	$R_{\theta JA}$	DC operation	46	°C/W
Approximate Weight	wt	-	0.21	g
Case Style	SMC			

Ratings and Characteristics Curves

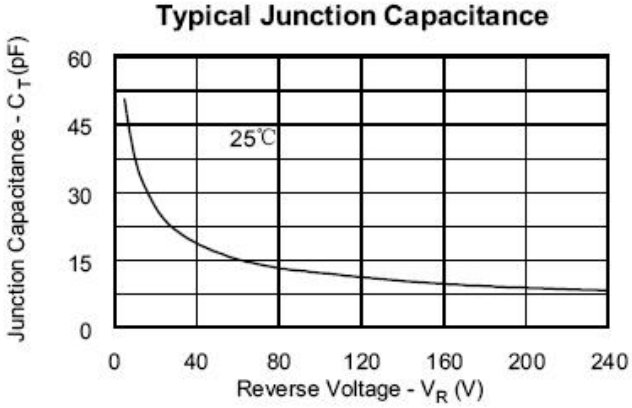
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Technical Data
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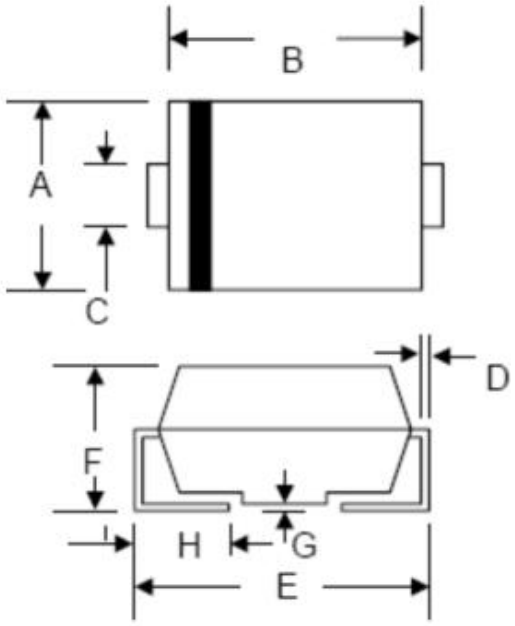
Mechanical Dimensions SMC



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.59	6.22	0.220	0.245
B	6.60	7.11	0.260	0.280
C	2.75	3.25	0.108	0.128
D	0.152	0.305	0.006	0.012
E	7.75	8.25	0.305	0.325
F	2.00	2.95	0.079	0.116
G	0.051	0.203	0.002	0.008
H	0.76	1.60	0.030	0.063

Ordering Information

Device	Package	Shipping
30BQ200	SMC (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

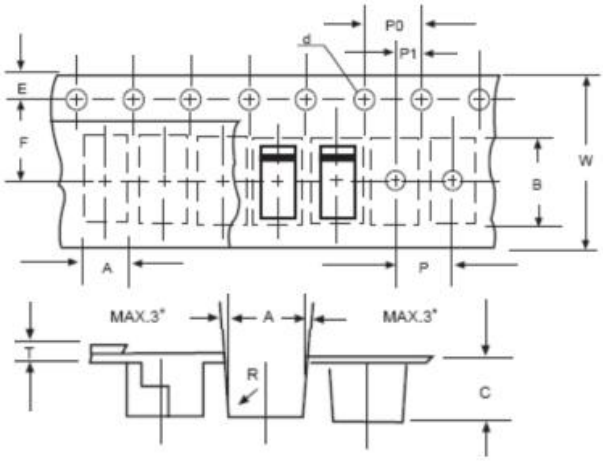
Marking Diagram

Where XXXXX is YYWWL

SC3N = Part Name
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification SMC



SYMBOL	Millimeters	
	Min.	Max.
A	5.90	6.10
B	8.20	8.40
C	2.40	2.60
d	1.40	1.60
E	1.40	1.60
F	7.60	7.70
P	7.90	8.10
P0	3.90	4.10
P1	3.90	4.10
T	-	0.600
W	15.80	16.20

Technical Data
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