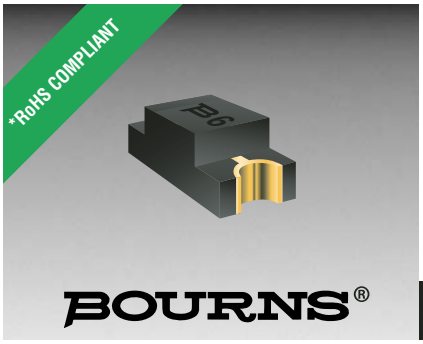


Features

- Lead free device (RoHS compliant*)
- Low profile
- High current capability
- UL 94V-0 classification

Applications

- High frequency switching power supplies
- Inverters
- Free wheeling
- Polarity protection

CD1206-B220~B2100 – Surface Mount Schottky Rectifier Diode

General Information

The markets of portable communications, computing and video equipment are challenging the semiconductor industry to develop increasingly smaller electronic components. Bourns offers Schottky Rectifier Diodes for rectification applications, in compact chip package 1206 size format, which offer PCB real estate savings and are considerably smaller than most competitive parts. The Schottky Rectifier Diodes offer a forward current of 2 A with a repetitive peak reverse voltage of 20 V up to 100 V.

Bourns® Chip Diodes conform to JEDEC standards, are easy to handle on standard pick and place equipment and their flat configuration minimizes roll away.

Electrical Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CD1206-				Unit
		B220	B240	B260	B2100	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	100	V
Maximum RMS Voltage	V_{RMS}	14	28	42	70	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	100	V
Maximum Average Forward Rectified Current[1]	$I_{(AV)}$	2				A
DC Reverse Current @ Rated DC Blocking Voltage (@T_J = 25 °C)	I_R	0.5				mA
DC Reverse Current @ Rated DC Blocking Voltage (@T_J = 100 °C)	I_R	20		10		mA
Maximum Instantaneous Forward Voltage @ 2 A[2]	V_F	0.5		0.7	0.85	V
Typical Thermal Resistance[3]	$R_{\theta JA}$ $R_{\theta JL}$	75 17				°C/W
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40				A

Notes:
1 See Forward Derating Curve.
2 Pulse test width PW = 300 µsec, 1 % duty cycle.
3 Mounted on P.C. board with 0.2 x 0.2 ˝ (5.0 x 5.0 mm) copper pad areas.

Thermal Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CD1206-B220~B2100	Unit
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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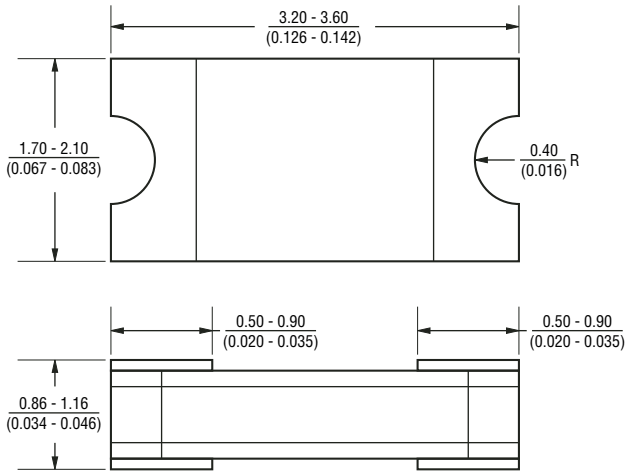
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CD1206-B220~B2100 – Surface Mount Schottky Rectifier Diode

BOURNS®

Product Dimensions

This is a lead free product, packaged with FRP substrate and is epoxy underfilled. The terminals are pure tin plated and are solderable per MIL-STD-750, Method 2026. The package weighs approximately 0.02 g. The package and dimensions are shown below.



DIMENSIONS: MM / (INCHES)

How To Order

CD 1206 - B 2 20

Common Code
CD = Chip Diode

Package
1206

Model Series
B = Schottky Barrier Diode

Forward Current $I_{(AV)}$
2 = 2 A

Reverse Voltage
20 = 20 V
40 = 40 V
60 = 60 V
100 = 100 V

Typical Part Marking

CD1206-B220	B 220
CD1206-B240	B 240
CD1206-B260	B 260
CD1206-B2100	B 2100

Physical Specifications

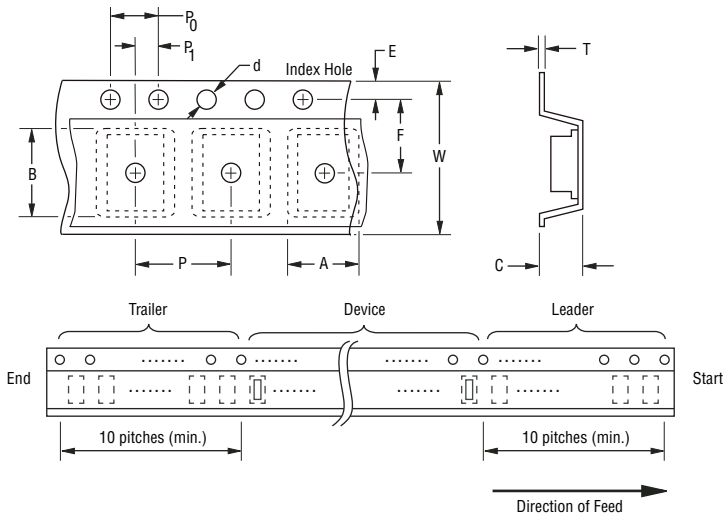
Case .....1206 (3216) Molded plastic
Terminals .....Solder plated, solderable per MIL-STD-750, Method 2026
Polarity .....Indicated by cathode band
Mounting Position .....Any

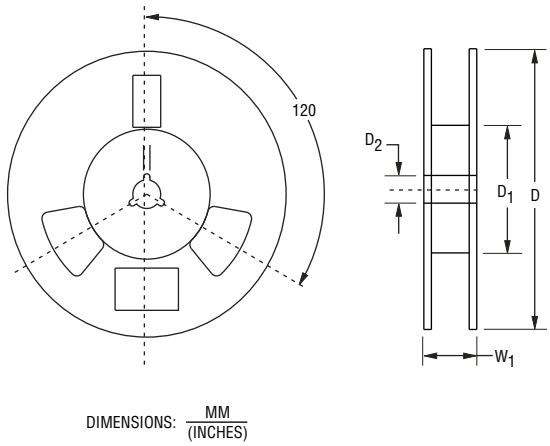
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Packaging Information

The product will be dispensed in Tape and Reel format (see diagram below).





DIMENSIONS: MM / (INCHES)

Devices are packed in accordance with EIA standard RS-481-A and specifications shown here.

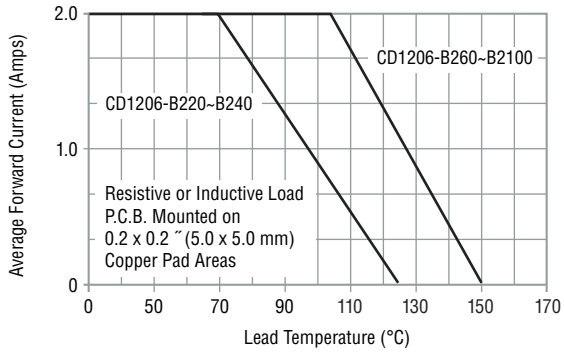
Item	Symbol	1206
Carrier Width	A	1.70 ±0.10 (0.067 ±0.004)
Carrier Length	B	3.40 ±0.10 (0.134 ±0.004)
Carrier Depth	C	1.25 ±0.10 (0.049 ±0.004)
Sprocket Hole	d	1.55 ±0.05 (0.061 ±0.002)
Reel Outside Diameter	D	178 (7.008)
Reel Inner Diameter	D_1	60.0 (2.362) Min.
Feed Hole Diameter	D_2	13.0 ±0.20 (0.512 ±0.008)
Sprocket Hole Position	E	1.75 ±0.10 (0.069 ±0.004)
Punch Hole Position	F	3.50 ±0.05 (0.138 ±0.002)
Punch Hole Pitch	P	4.00 ±0.10 (0.157 ±0.004)
Sprocket Hole Pitch	P_0	4.00 ±0.10 (0.157 ±0.004)
Embossment Center	P_1	2.00 ±0.05 (0.079 ±0.002)
Overall Tape Thickness	T	0.20 ±0.05 (0.008 ±0.002)
Tape Width	W	8.00 ±0.20 (0.315 ±0.008)
Reel Width	W_1	13.5 (0.531) Max.
Quantity per Reel	—	3,000

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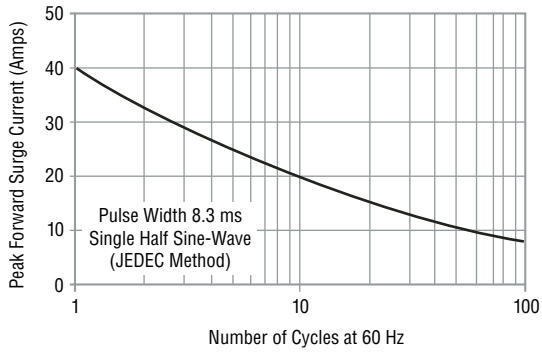
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Performance Graphs

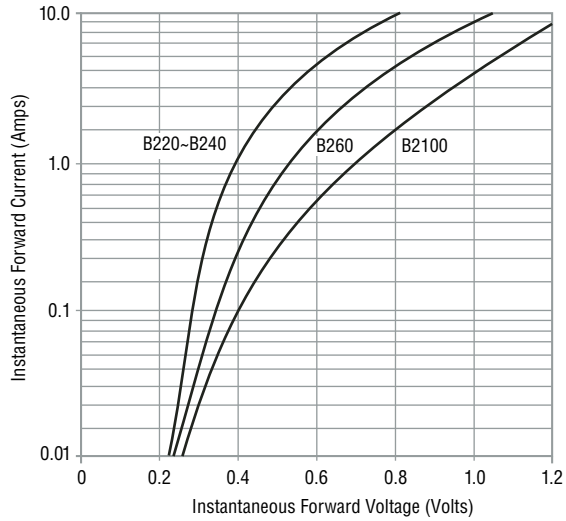
Forward Current Derating Curve



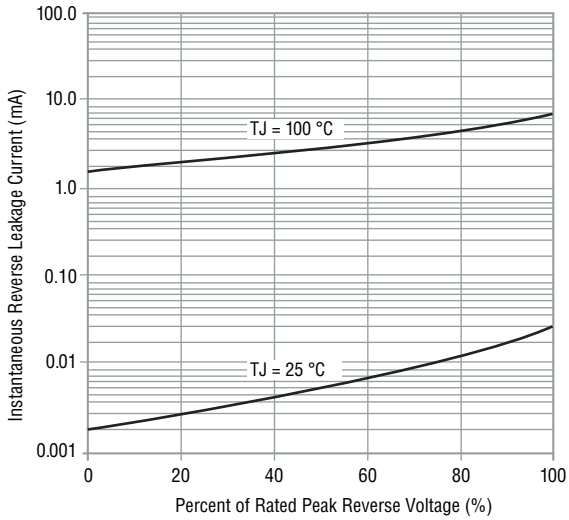
Maximum Non-Repetitive Surge Current



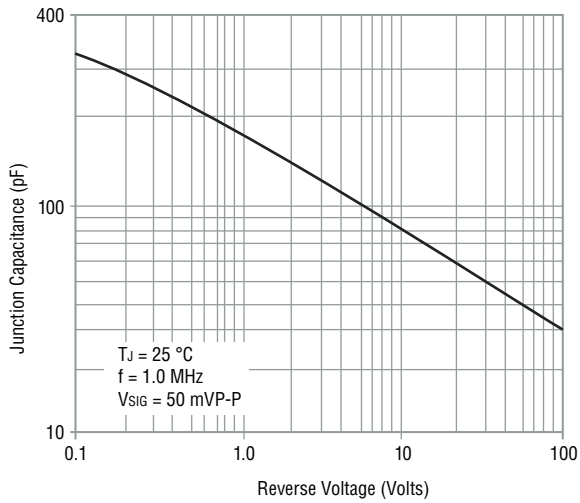
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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