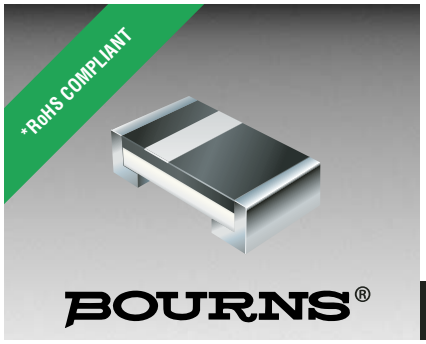


Features

- Lead free as standard
- RoHS compliant*
- Leadless
- High speed

Applications

- Cellular phones
- PDAs
- Desktop PCs and notebooks
- Digital cameras
- MP3 players

CD1206-S01575 Switching Chip 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 small-signal high-speed Switching Diodes for switching digital signal applications, in compact chip package 1206 size format, which offers PCB real estate savings and are considerably smaller than competitive parts. The Switching Diodes offer a forward current of 150 mA and a reverse voltage of 75 V. The diodes are lead-free and are compatible with lead-free manufacturing processes, conforming to many industry and government regulations on lead-free components.

Bourns® Chip Diodes conform to JEDEC standards, 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-S01575	Unit
Forward Voltage (Max.)	V_F	1.00 (I_f = 50 mA)	V
Capacitance Between Terminals (Max.)	C_T	3 (f = 100 MHz, V_r = 0 V DC)	pF
Reverse Recovery Time (Max.)	t_{rr}	4 (V_r = 6V, I_f = 10 mA, R_L = 100 Ω)	nS
Reverse Current (Max.)	I_R	2.5 (V_r = 75 V)	µA

Absolute Ratings (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CD1206-S01575	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Average Forward Current	I_o	150	mA
Forward Current, Surge	I_{surge}	4	A
Power Dissipation	PD	400	mW
Storage Temperature	T_{STG}	-55 to +125	°C
Junction Temperature	T_J	-55 to +125	°C

How To Order

CD 1206 - S 015 75

- Common Code: Chip Diode
- Package: • 1206
- Model: S = High Speed Switching
- Average Forward Current (I_o) Code: 015 = 150 mA (Code x 1000 mA = Average Forward Current)
- Reverse Voltage (V_R) Code: 75 = 75 V

BOURNS®

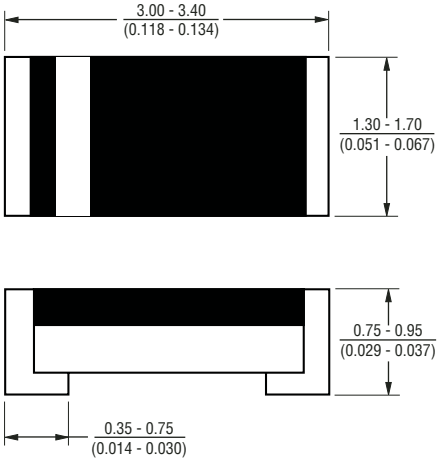
Asia-Pacific:
Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116
Europe:
Tel: +41-41 768 5555 • Fax: +41-41 768 5510
The Americas:
Tel: +1-951 781-5500 • Fax: +1-951 781-5700
www.bourns.com

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

CD1206-S01575 Switching Chip Diode

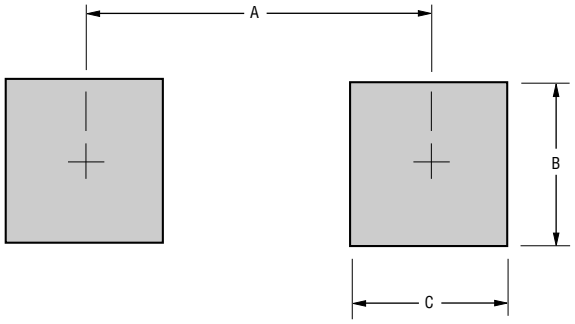
BOURNS®

Product Dimensions



DIMENSIONS: MM / (INCHES)

Recommended Pad Layout



Dimension	1206
A (Max.)	3.00 / (0.118)
B (Min.)	1.60 / (0.063)
C (Min.)	1.40 / (0.055)

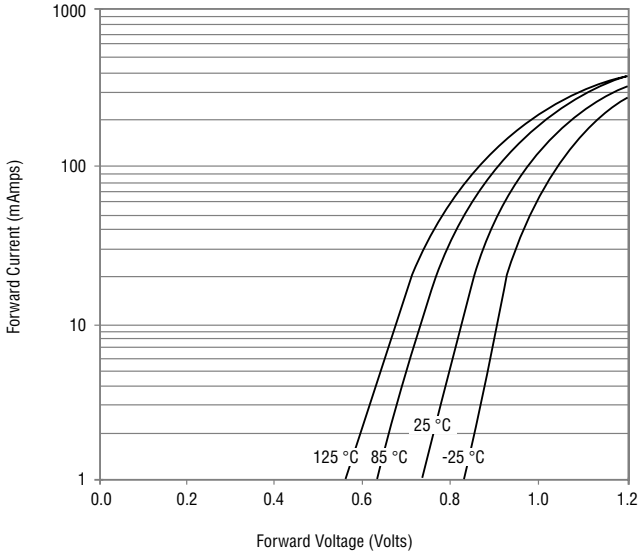
DIMENSIONS: MM / (INCHES)

Physical Specifications

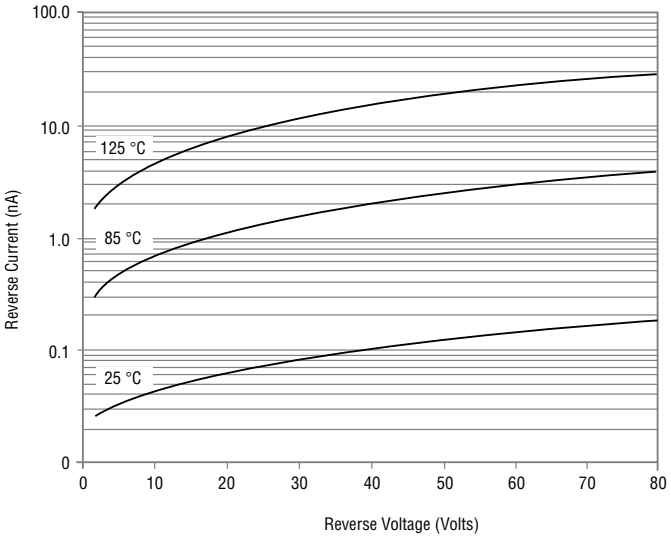
Case .....1206 (3216) Molded plastic
Terminals .....Solder plated, solderable per MIL-STD-750, Method 2026
Polarity .....Indicated by cathode band
Mounting Position .....Any

Rating and Characteristic Curves: CD1206-S01575

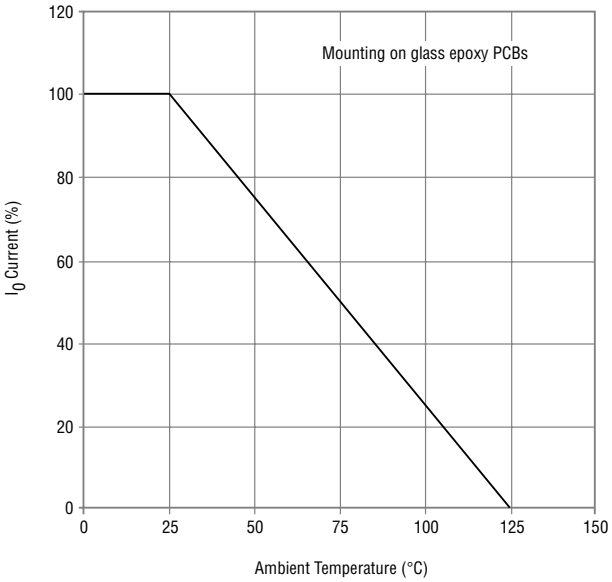
Forward Characteristics



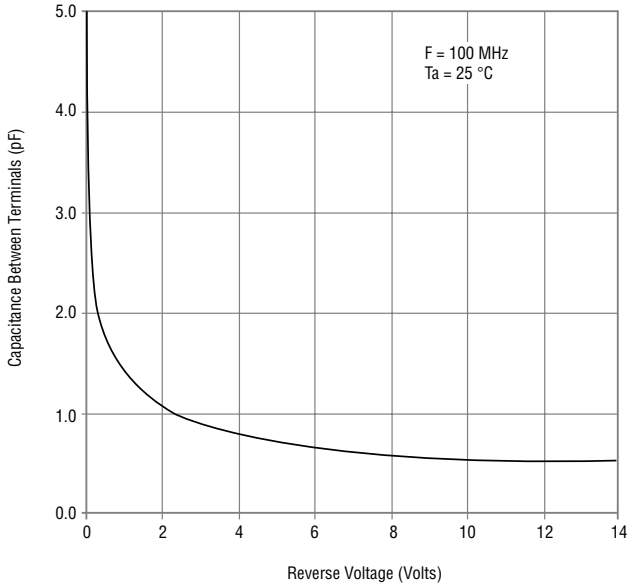
Reverse Characteristics



Derating Curve

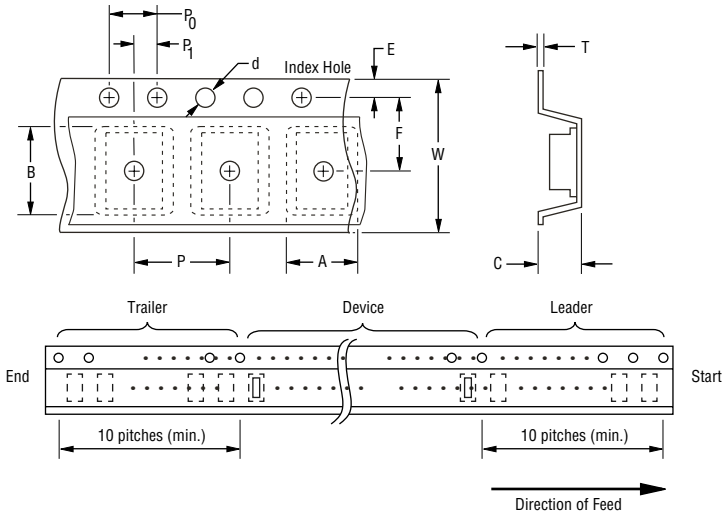


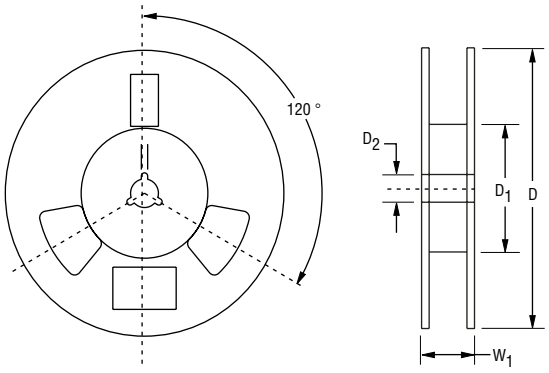
Capacitance Between Terminals



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 ± 0.10 (0.061 - 0.004)
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	--	5,000