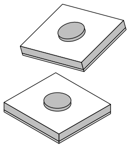
Step Recovery Diodes

CVB1151 to CVB1153, CVB1031 to CVB1033



Features

- Silicon Step Recovery Diodes for High Order Frequency Band Multiplication
- Fast transition times for output frequencies to 18 GHz
- Available as chips or packaged diodes

Maximum Ratings

Reverse Voltage, V_R:	V_{BR} rating
Operating Temperature:	–55 to 150°C
Storage Temperature:	–65 to 200°C

Electrical Characteristics (T_A = 25°C)

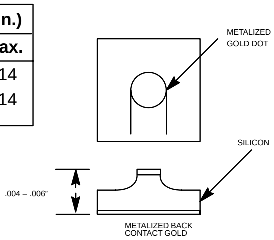
Step Recovery Diode Chips

Part Number	V_{BR} @ 10 µA (V)	I_R (80% of Rated V_{BR}) (nA)	C_J @ –6V (pF)		T_L[1] (ns)	T_T[1] (ps)	F_C @ –6V (GHz)	Typical Input Frequency (GHz)	Typical Output Frequency (GHz)	Outline Drawing Number
	Max.	Max.	Min.	Max.	Min.	Max.	Min.			
CVB1151–000	15	100	0.25	0.5	10	70	300	0.5–3.0	9–18	150–806
CVB1152–000	15	100	0.5	1.0	10	70	300	0.5–3.0	9–18	150–801
CVB1153–000	15	100	1.0	1.5	10	70	300	0.5–3.0	9–18	150–801
CVB1031–000	30	100	0.25	0.5	10	100	300	0.5–3.0	5–15	150–801
CVB1032–000	30	100	0.5	1.0	10	100	300	0.5–3.0	5–15	150–801
CVB1033–000	30	100	1.0	1.5	10	100	300	0.5–3.0	5–15	150–801

1. Test conditions for carrier lifetime (T_L) are I_F = 10 mA and I_R = 6 mA. Test conditions for transition time (T_T) are V_R = 10V and I_F = 10 mA.

Outline Dimensions

Chip Style	Bonding Pad Nominal (In.)	Chip Size (In.)	
		Min.	Max.
150–801	.002 (min)	.010	.014
150–806	.0011 (min)	.010	.014

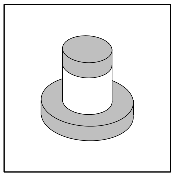


Ordering Information

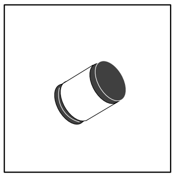
The following packages are also available. To order a part in a different package just replace the dash number with a package style listed below. For example, CVB1151–000 becomes CVB1151–210.

Available Package Outlines: 202, 203, 204, 210, 219, 230, 240

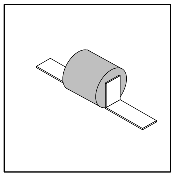
Refer to the Outline Drawings section in this catalog for the total selection of outline (package) dimensions.



202



203



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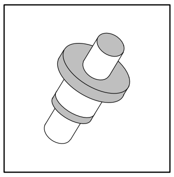

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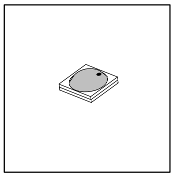

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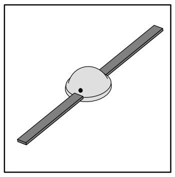

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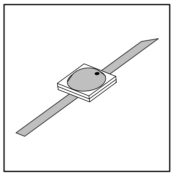

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