CODI SEMICONDUCTOR

Division of CODI CORPORATION

C 8000, A, B, C, D
through C 8002, A, B, C, D
ULTRA-LOW CURRENT
Voltage Reference Diodes

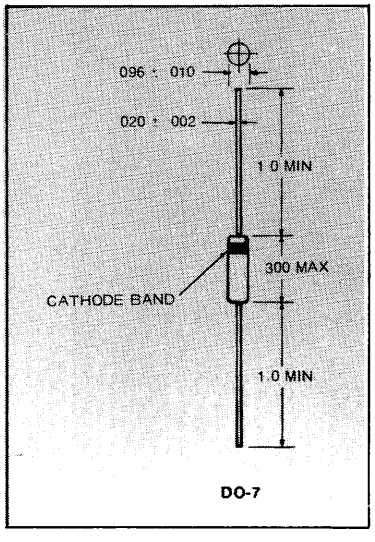
ULTRA-LOW CURRENT T. C. REFERENCE DIODES

LOW NOISE

MULTI-CURRENT RANGE

C 8000, A, B, C, D, through C 8002, A, B, C, D

High reliable voltage reference sources utilizing CODI SEMICONDUCTOR'S Bi-Taxial ™ processed junctions for Ultra-Low Operating Current, Long-Term Stability, Low Noise, and Guaranteed Low Temperature Coefficient over an extended current range. The junctions are encapsulated in a hermetically sealed DO-7 glass package and can be provided with a guaranteed long-term stability as low as 10 ppm/yr.



Physical Dimensions

MAXIMUM RATINGS

Power Dissipation	400 mw
Operating Temperature	– 65° to 175° C
Storage Temperature	– 65° to 200° C

ELECTRICAL CHARACTERISTICS: (25°C unless otherwise specified)

TYPE	VOLTAGE $V_Z \pm 5\%$	OPERATING CURRENT I_Z	MAXIMUM TEMPERATURE COEFFICIENT, TC_1 @ I_Z – 50° C to 100° C	OPERATING CURRENT RANGE	MAXIMUM TEMPERATURE COEFFICIENT, TC_2 † OPERATING CURRENT RANGE – 50° C to 100° C	MAXIMUM DYNAMIC IMPEDANCE Z_Z	TYPICAL NOISE
	volt	ua	%/° C	ua	%/° C	ohm	uv
C 8000	6.5	100	.01	50–150	.02	750	1.0
C 8000 A	6.5	100	.005	50–150	.01	750	1.0
C 8000 B	6.5	100	.002	50–150	.005	750	1.0
C 8000 C	6.5	100	.001	50–150	.002	750	1.0
C 8000 D	6.5	100	.0005	50–150	.001	750	1.0
C 8001	6.5	250	.01	125–375	.02	400	1.0
C 8001 A	6.5	250	.005	125–375	.01	400	1.0
C 8001 B	6.5	250	.002	125–375	.005	400	1.0
C 8001 C	6.5	250	.001	125–375	.002	400	1.0
C 8001 D	6.5	250	.0005	125–375	.001	400	1.0
C 8002	6.5	500	.01	250–750	.02	200	1.0
C 8002 A	6.5	500	.005	250–750	.01	200	1.0
C 8002 B	6.5	500	.002	250–750	.005	200	1.0
C 8002 C	6.5	500	.001	250–750	.002	200	1.0
C 8002 D	6.5	500	.0005	250–750	.001	200	1.0

CODI Semiconductor, Division of **CODI CORP.**, Pollitt Drive, Fair Lawn, N. J., USA 07410 Phone (201) 797-3900 TWX (710) 988-2241

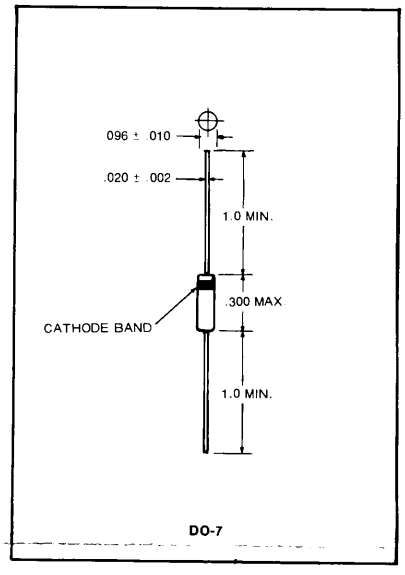
CODI SEMICONDUCTOR

Division of CODI CORPORATION

ULTRA-LOW LEAKAGE SILICON DIODES C-3141 thru C-3144

ULTRA-LOW LEAKAGE, 10 PICO-AMP DIODES

CODI Semiconductor's Bi-Taxial™ processed, silicon, ultra-low leakage diodes are designed for the most critical and sophisticated electronic applications where an extremely high back resistance is required. These devices also can be supplied with a specific capacitance and tightly controlled forward voltage characteristics if desired.



PHYSICAL DIMENSIONS

MAXIMUM RATINGS (25°C)

Power Dissipation	250 MW
Surge Current	5 Amp
Operating Temperature	– 65 to + 175°C
Storage Temperature	– 65 to + 200°C

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted)

TYPE	PEAK REVERSE VOLTAGE PRV @ 5 Ua	MAXIMUM REVERSE CURRENT I_R @ V_R		REVERSE VOLTAGE, V_R	TYPICAL CAPACITANCE Co @ V = 0	TYPICAL FORWARD VOLTAGE, V_F		
		25°C	150°C			@ 10ua	1.0ma	100.0ma
	volt	pico-amp	nano-amp	volt	pf	volt	volt	volt
C-3141	40	10	10	20	12	.570	.690	.850
C-3142	75	50	50	50	7	.550	.690	.900
C-3143	100	100	100	75	5	.530	.690	.950
C-3144	150	500	500	125	3	.520	.690	.970

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COMPLETE LINE OF VOLTAGE REFERENCE DEVICES

ALL JEDEC REGISTERED REFERENCE DIODES,
Including:

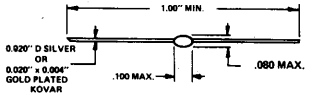
1N 4611, A, B, C, THRU 1N 4613, A, B, C	(DATA SHEET NO. TC-4-71)
1N 4565, A THRU 1N 4584, A	(DATA SHEET NO. TC-5-72)
JAN, JANTX, JANTXV 1N 821 THRU 1N 829	(DATA SHEET NO. TC-5-72)

CODI'S REFERENCE STANDARDS,

Certavolt – Ultra-Stable Precision Voltage Reference Source -	(DATA SHEET NO. C/12-73)
Certa-Cell – Solid State Replacement for Unsaturated Standard Cell	(DATA SHEET NO. CC/12-73)

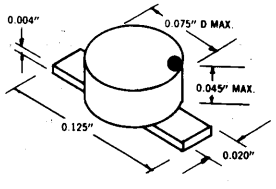
REFERENCE DIODES FOR HYBRID APPLICATIONS

Most T. C. Reference Diodes are available in fully encapsulated micro packages or chip form suitable for Hybrid circuit applications in the following configurations:

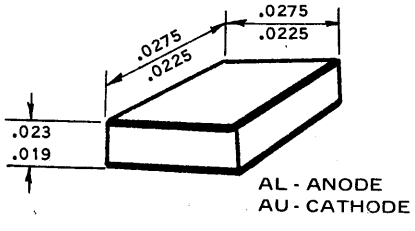


CASE # 4 (750mw silver lead)
(250mw ribbon lead)

MICRO-PACKAGE
(DATA SHEET NO. TC-5-72)



MICROSTRIP (LADYBUG)
(DATA SHEET NO. MS/5-71)



CHIP
(DATA SHEET NO. TCUR 9-72)

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