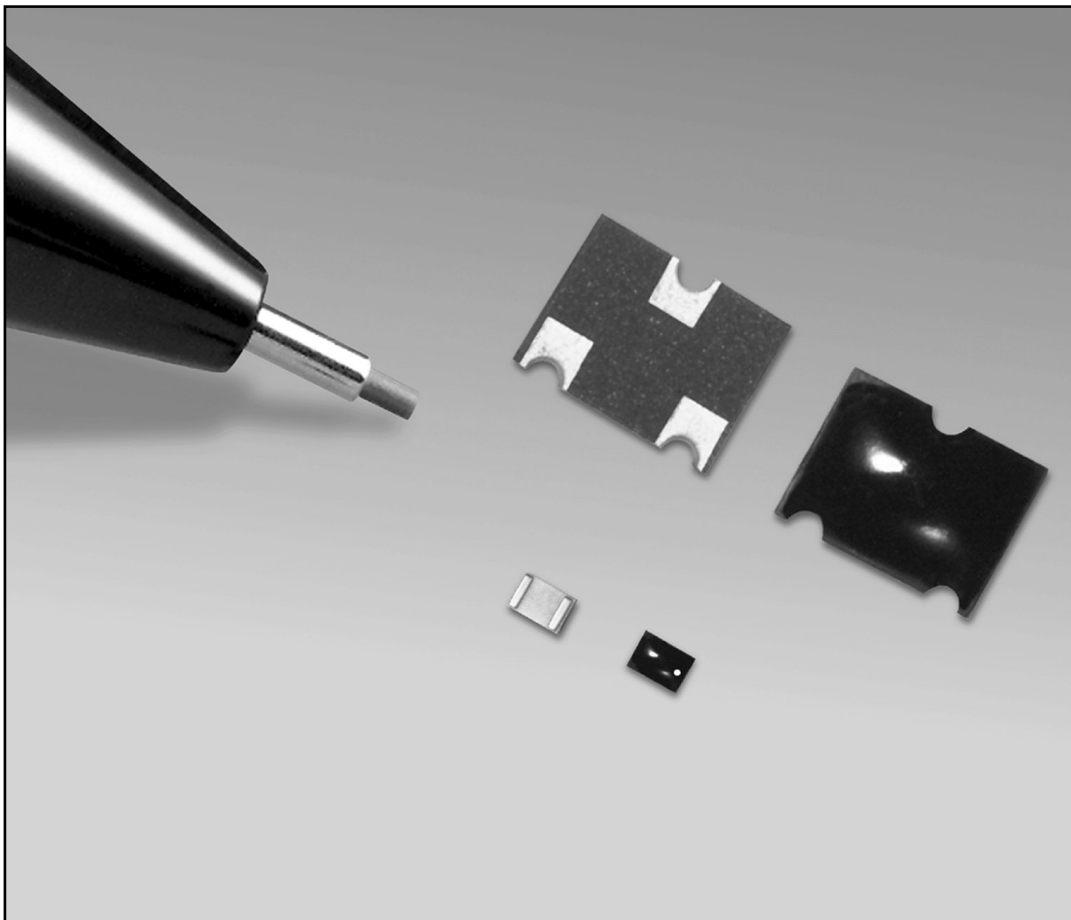


VARACTOR DIODES



Sprague-Goodman Electronics, Inc.

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SUPER HYPERABRUPT TUNING VARACTOR DIODES

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior mid range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- TCXOs, VCXOs
- Low voltage wireless open loop VCOs

- Low voltage wireless phase locked loop VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 12 V min

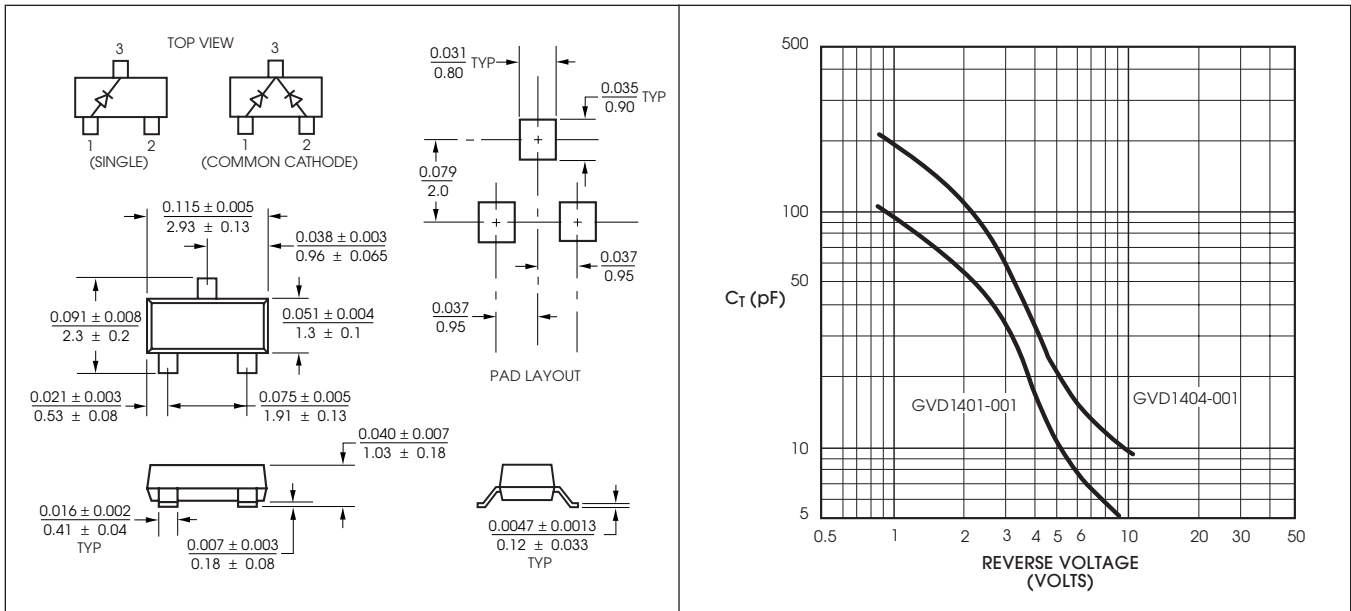
Maximum reverse leakage current at -10 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C _T (pF) at -2 V min max		Total Capacitance C _T (pF) at -7 V typ	Total Capacitance C _T (pF) at -10 V min max		Q min at -2 V (10 MHz)	Model Number	
						Single	Common Cathode
46	68	6.1	4.2	5.2	75	GVD1401-001	—
100	150	13.0	8.6	10.6	50	GVD1404-001	—



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in / mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

SUPER HYPERABRUPT TUNING VARACTOR DIODES

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior mid range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode Style
- Available in chip form (add suffix -000)

APPLICATIONS

- TCXOs, VCXOs
- Low voltage wireless open loop VCOs

- Low voltage wireless phase locked loop VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 12 V min

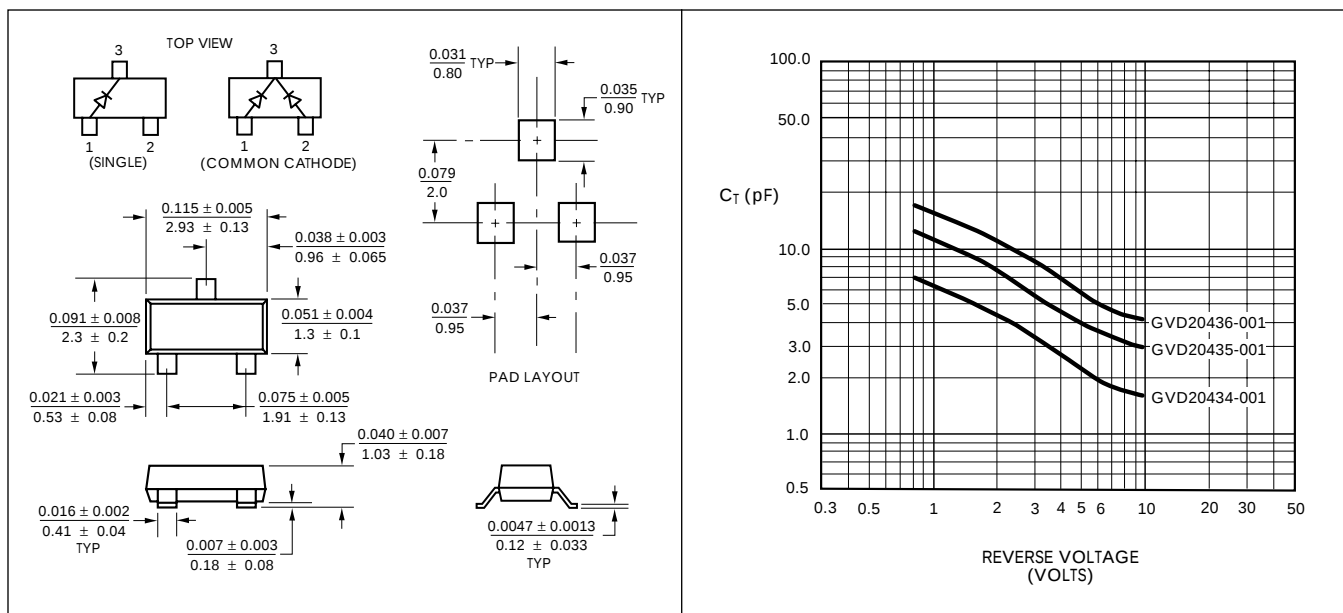
Maximum reverse leakage current at -10 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C_T (pF) at -1 V min max		Capacitance Ratio $\frac{C_T \text{ at } -1 \text{ V}}{C_T \text{ at } -3 \text{ V}}$ min max		Capacitance Ratio $\frac{C_T \text{ at } -1 \text{ V}}{C_T \text{ at } -6 \text{ V}}$ min max		Q min at -4 V (50 MHz)	Model Number	
							Single	Common Cathode
3.00	3.60	1.4	1.9	2.6	3.3	1500	GVD20433-001	GVD20433-004
5.85	7.15	1.6	2.0	2.8	3.4	1200	GVD20434-001	GVD20434-004
10.35	12.65	1.6	2.0	2.9	3.4	1000	GVD20435-001	GVD20435-004
15.50	18.50	1.6	2.0	3.0	3.5	900	GVD20436-001	GVD20436-004
45.00	54.00	1.6	2.0	3.0	3.5	750	GVD20437-001	---



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004 / 0.1$.

SUPER HYPERABRUPT TUNING VARACTOR DIODES

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior mid range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- TCXOs, VCXOs
- Low voltage wireless open loop VCOs

- Low voltage wireless phase locked loop VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 12 V min

Maximum reverse leakage current at -10 V
(at 25°C): 0.05 μ A DC

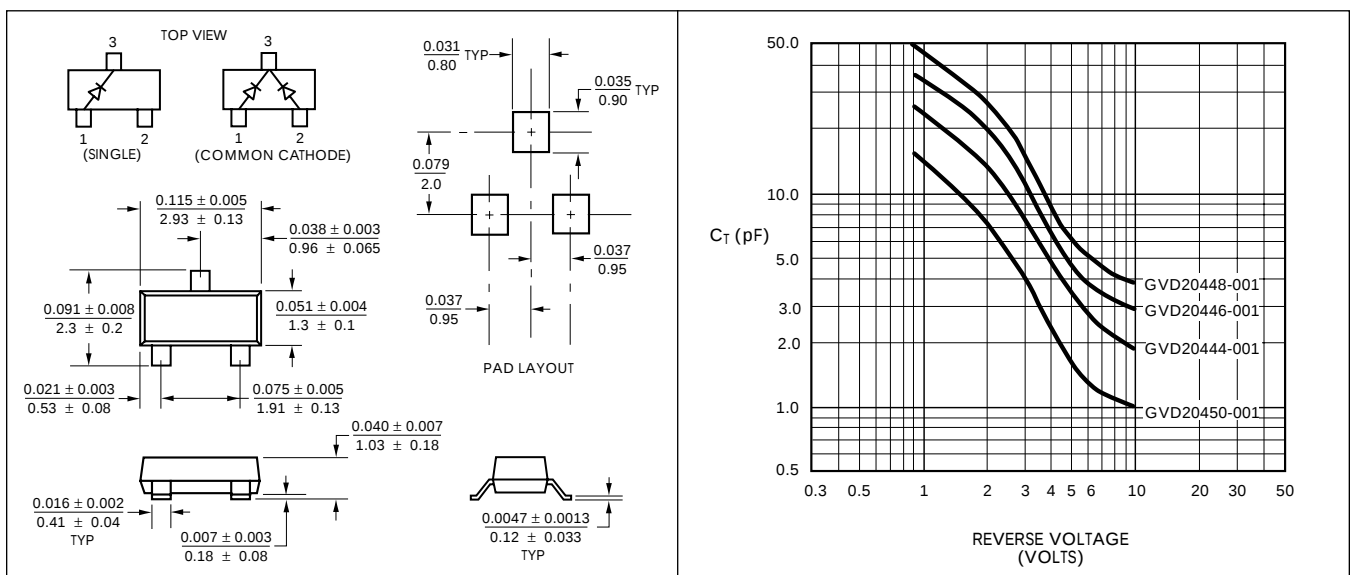
Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C_T (pF) at -1 V min	Total Capacitance C_T (pF) at -2.5 V min max		Total Capacitance C_T (pF) at -8 V max	Q min at -4 V (50 MHz)	Model Number	
					Single	Common Cathode
13.0	6.5	10.0	2.7	750	GVD20442-001	GVD20442-004
13.0	6.5	10.0	2.7	350	GVD20443-001	GVD20443-004
17.0	8.5	13.0	3.2	600	GVD20444-001	GVD20444-004
17.0	8.5	13.0	3.2	300	GVD20445-001	GVD20445-004
26.0	13.0	20.0	4.7	500	GVD20446-001	---
26.0	13.0	20.0	4.7	225	GVD20447-001	---
36.0	18.0	27.0	6.2	400	GVD20448-001	---
36.0	18.0	27.0	6.2	150	GVD20449-001	---

Total Capacitance C_T (pF) at -1 V min	Total Capacitance C_T (pF) at -2.5 V min max		Total Capacitance C_T (pF) at -4 V max	Q min at -4 V (50 MHz)	Model Number	
					Single	Common Cathode
9.0	4.5	6.5	3.0	400	GVD20450-001	GVD20450-004



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004 / 0.1$.

SUPER HYPERABRUPT TUNING VARACTOR DIODES

Surface Mount Low Parasitic Package (SMLP)

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Fits footprint for SOD-323, SOD-123 and smaller
- High frequency (VHF to 8 GHz)
- Available on carrier and reel
- Available in chip form (add suffix -000)
- Two package styles including lower cost, flat top version
- Alternate notched termination version available, contact factory for outline drawing

APPLICATIONS

- PCS
- WANS
- DECT
- GSM
- TAGS
- AMPS
- Cellular

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 12 V min

Maximum reverse leakage current at -10 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -65°C to +125°C

Storage temperature: -65°C to +125°C

Total Capacitance C_T (pF) at -1 V min	Total Capacitance C_T (pF) at -2.5 V min max		Total Capacitance C_T (pF) at -4 V max	Total Capacitance C_T (pF) at -8 V max	Q min at -4 V (50 MHz)	Model Number*
36.0	18.0	27.0	12.0	6.2	400	GVD90001 - ---
26.0	13.0	20.0	9.0	4.7	500	GVD90002 - ---
17.0	8.5	13.0	6.0	3.2	600	GVD90003 - ---
13.0	6.5	10.0	4.5	2.7	750	GVD90004 - ---
9.0	4.5	6.5	3.0	1.7	900	GVD90005 - ---
4.0	2.0	3.0	1.5	1.0	1200	GVD90006 - ---
1.8	1.1	1.5	0.8	0.55	1400	GVD90007 - ---
1.2	0.8	1.1	0.6	0.45	1600	GVD90008 - ---
0.6	0.5	0.8	0.4	0.35	1800	GVD90009 - ---

* For complete model number, select "Dash No." from chart below.

TERMINATIONS (GOLD PLATED)			Dash No.		A	B	C ₁	C ₂	D	K	L	M
			- 011	- 111	0.10	0.050	0.035	0.050	0.015 ± 0.004	0.030	0.070	0.112
			- 012	- 112	0.12	0.060	0.035	0.050	0.020 ± 0.005	0.030	0.080	0.132
			- 013	- 113	0.200	0.100	0.035	0.050	0.020 ± 0.005	0.030	0.120	0.212
			- 014	- 114	0.075	0.050	0.035	0.050	0.015 ± 0.004	0.030	0.070	0.087
			- 015	- 115	0.062	0.042	0.030	0.050	0.011 ± 0.003	0.020	0.060	0.072
			- 016	- 116	0.050	0.035	0.025	0.040	0.008 ± 0.002	0.015	0.045	0.055
			- 017	- 117	0.040	0.025	0.020	0.030	0.006 ± 0.001	0.010	0.035	0.040
			- 018	- 118	0.030	0.020	0.015	0.020	0.004 ± 0.001	0.008	0.025	0.030
			- 019	- 119	0.020	0.015	0.010	0.015	0.003 ± 0.001	0.005	0.015	0.020
			- 020	- 120	0.015	0.010	0.008	0.010	0.002 ± 0.001	0.004	0.010	0.015
			- 021	- 121	0.010	0.008	0.006	0.008	0.001 ± 0.001	0.003	0.008	0.010
			- 022	- 122	0.008	0.006	0.005	0.006	0.001 ± 0.001	0.002	0.006	0.008
			- 023	- 123	0.006	0.005	0.004	0.005	0.001 ± 0.001	0.002	0.005	0.006
			- 024	- 124	0.005	0.004	0.003	0.004	0.001 ± 0.001	0.002	0.004	0.005
			- 025	- 125	0.004	0.003	0.002	0.003	0.001 ± 0.001	0.002	0.003	0.004
			- 026	- 126	0.003	0.002	0.002	0.002	0.001 ± 0.001	0.002	0.003	0.003
			- 027	- 127	0.002	0.002	0.002	0.002	0.001 ± 0.001	0.002	0.002	0.002
			- 028	- 128	0.001	0.001	0.001	0.001	0.001 ± 0.001	0.001	0.001	0.001

All dimensions are in /mm.

Unless otherwise specified, the tolerance on dimensions is ± 0.003/0.08.

Note: An SMLP package with three terminations sized to fit the pad layout for an SOT-23 package is also available. This package can be used for multiple diode designs (such as common cathode or common anode). Contact factory for the three-terminal SMLP outline drawing, and for further information on the multiple diode configurations.

WIDEBAND HYPERABRUPT TUNING VARACTOR DIODES

Microwave Hyperabrupt Series

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior wide range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- Low phase noise VCOs
- Phase locked loop VCOs

- High linearity VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 20 V min

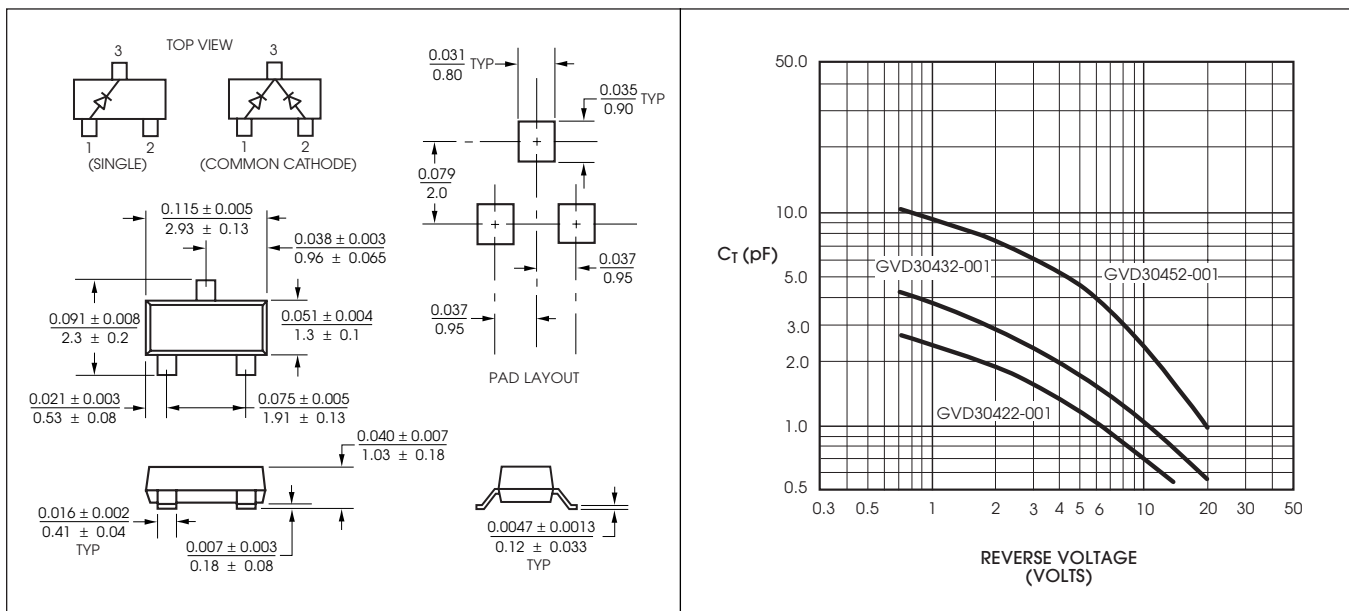
Maximum reverse leakage current at -20 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C_T (pF) at -0 V min	Total Capacitance C_T (pF) at -4 V min max		Total Capacitance C_T (pF) at -20 V min max		Q min at -4 V (50 MHz)	Model Number	
						Single	Common Cathode
2.7	1.25	1.75	0.43	0.57	1000	GVD30422-001	GVD30422-004
4.2	1.70	2.50	0.52	0.72	850	GVD30432-001	GVD30432-004
6.3	2.20	3.80	0.68	0.96	700	GVD30442-001	GVD30442-004
11.9	3.70	5.50	0.94	1.30	600	GVD30452-001	GVD30452-004
26.0	9.00	11.00	1.90	2.50	400	GVD30462-001	GVD30462-004



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in / mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

WIDEBAND HYPERABRUPT TUNING VARACTOR DIODES

VHF/UHF Hyperabrupt Series

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior wide range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- Low phase noise VCOs
- Phase locked loop VCOs

- High linearity VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 25 V min

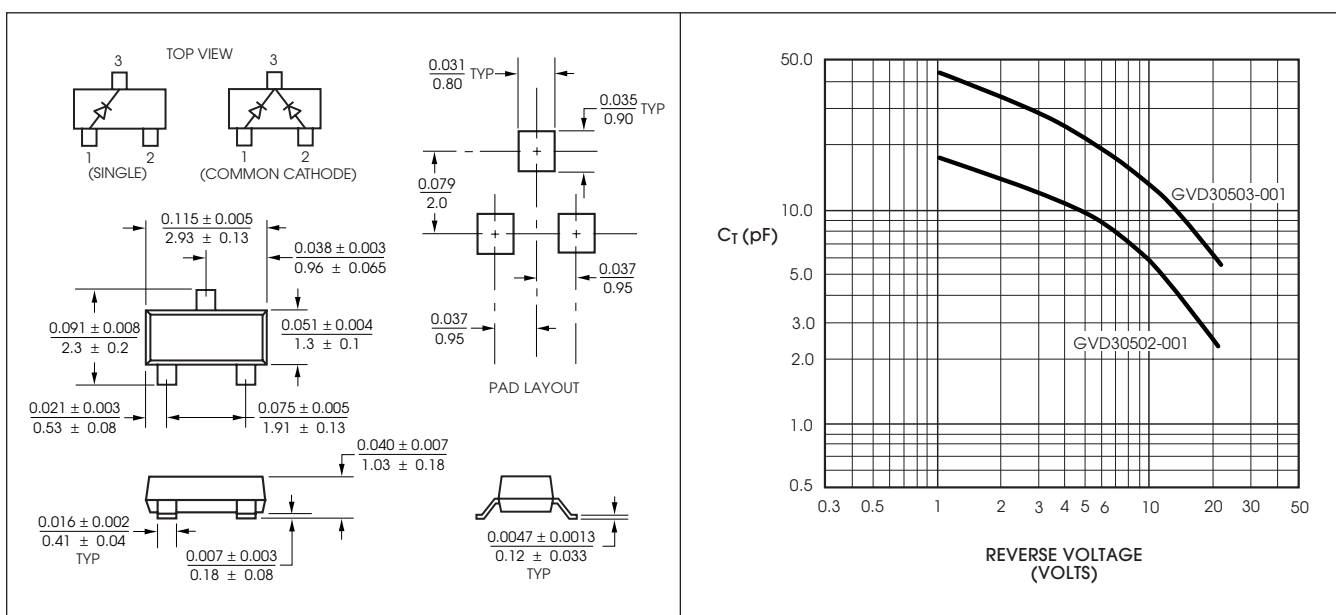
Maximum reverse leakage current at -20 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C _T (pF) at -3 V min max		Total Capacitance C _T (pF) at -25 V min max		Q min at -4 V (50 MHz)	Model Number	
					Single	Common Cathode
9.5	14.5	1.8	2.8	200	GVD30501-001	—
9.5	14.5	1.8	2.8	750	GVD30502-001	—
26.0	32.0	4.3	6.0	200	GVD30503-001	—
26.0	32.0	4.3	6.0	500	GVD30504-001	—



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

WIDEBAND HYPERABRUPT TUNING VARACTOR DIODES

VHF/UHF Hyperabrupt Series

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Superior wide range linear characteristics
- High tuning ratios
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- Low phase noise VCOs
- Phase locked loop VCOs

- High linearity VCOs
- Phase shifters

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 22 V min

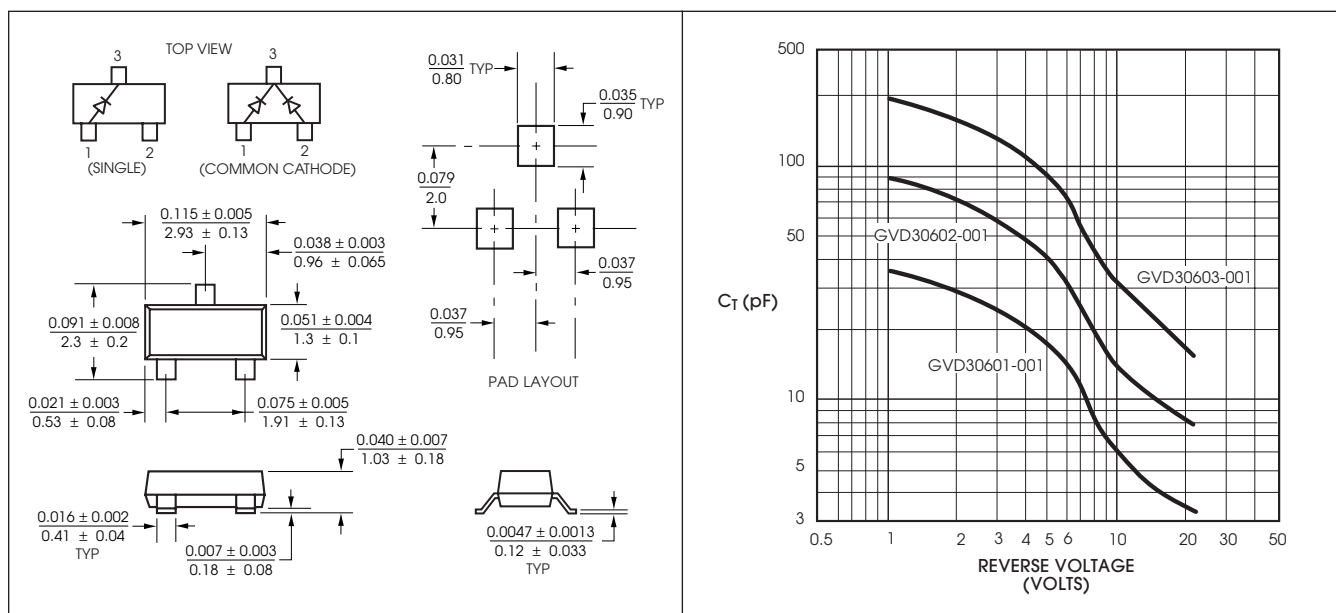
Maximum reverse leakage current at -20 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C _T (pF) at -4 V minmax		Total Capacitance C _T (pF) at -8 V minmax		Total Capacitance C _T (pF) at -20 V minmax		Q min at -4 V (50 MHz)	Model Number	
							Single	Common Cathode
18.0	22.0	7.5	10.5	2.7	3.5	160	GVD30601-001	—
45.0	55.0	18.0	25.0	6.6	9.0	125	GVD30602-001	—
100.0	120.0	39.0	55.0	14.0	19.0	80	GVD30603-001	—



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in /mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

MICROWAVE HYPERABRUPT TUNING VARACTOR DIODES

Surface Mount Low Parasitic Package (SMLP)

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Fits Footprint for SOD-323, SOD-123 and smaller
- High frequency (VHF to 8 GHz)
- Available on carrier and reel
- Available in chip form (add suffix -000)
- Two package styles including lower cost, flat top version
- Alternate notched termination version available, contact factory for outline drawing

APPLICATIONS

- PCS
- WANS
- AMPS
- GSM
- TAGS
- DECT
- Cellular

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 22 V min

Maximum reverse leakage current at -20 V
(at 25°C): 0.05 μ A DC

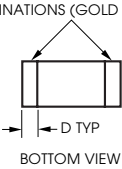
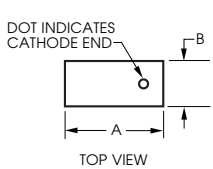
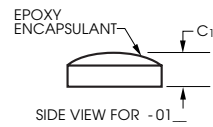
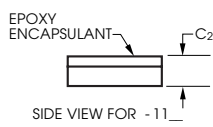
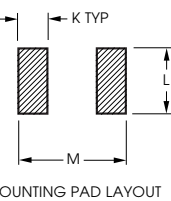
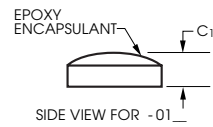
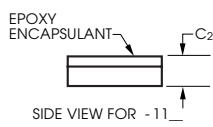
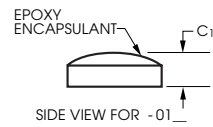
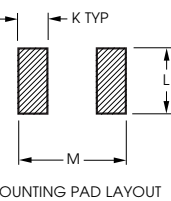
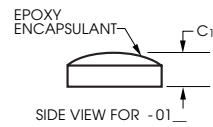
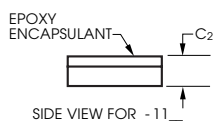
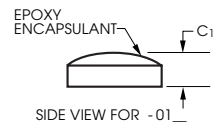
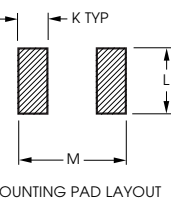
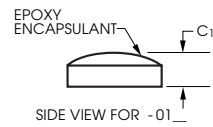
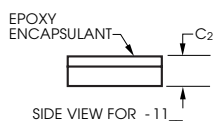
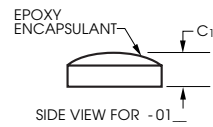
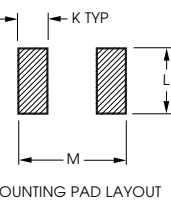
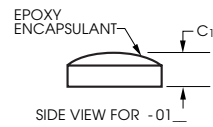
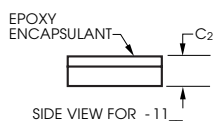
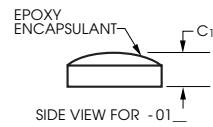
Device dissipation at 25°C: 250 mW (derated linearly to zero at +125°C)

Operating junction temperature: -65°C to +125°C

Storage temperature: -65°C to +125°C

Total Capacitance C_T (pF) at 0 V typical	Total Capacitance C_T (pF) at -4 V min max		Total Capacitance C_T (pF) at -20 V min max		Q min at -4 V (50 MHz)	Model Number*
26.0	8.75	10.80	1.85	2.50	400	GVD92101 - _ _ _
14.0	4.45	5.50	0.85	1.30	600	GVD92102 - _ _ _
7.0	2.65	3.30	0.65	0.90	700	GVD92103 - _ _ _
5.0	1.75	2.20	0.50	0.70	850	GVD92104 - _ _ _
3.0	1.30	1.65	0.40	0.55	1000	GVD92105 - _ _ _
2.0	0.85	1.10	0.30	0.45	1200	GVD92106 - _ _ _

*For complete model number, select "Dash No." from chart below.

TERMINATIONS (GOLD PLATED)				Dash No.	A	B	C_1	C_2	D	K	L	M
				- 011	0.10	0.050	0.035	0.050	0.015 $\pm$ 0.004	0.030	0.070	0.112
				- 111	2.5	1.3	0.89	1.3	0.38 $\pm$ 0.1	0.76	1.8	2.84
				- 012	0.12	0.060	0.035	0.050	0.020 $\pm$ 0.005	0.030	0.080	0.132
				- 112	3.0	1.5	0.89	1.3	0.51 $\pm$ 0.1	0.76	2.0	3.35
				- 013	0.200	0.100	0.035	0.050	0.020 $\pm$ 0.005	0.030	0.120	0.212
				- 113	5.08	2.54	0.89	1.3	0.51 $\pm$ 0.1	0.76	3.05	5.38
				- 014	0.075	0.050	0.035	0.050	0.015 $\pm$ 0.004	0.030	0.070	0.087
				- 114	1.9	1.3	0.89	1.3	0.38 $\pm$ 0.1	0.76	1.8	2.2
				- 015	0.062	0.042	0.030	0.050	0.011 $\pm$ 0.003	0.020	0.060	0.072
				- 115	1.6	1.1	0.76	1.3	0.28 $\pm$ 0.08	0.51	1.5	1.8

All dimensions are in / mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.003/0.08$.

Note: An SMLP package with three terminations sized to fit the pad layout for an SOT-23 package is also available. This package can be used for multiple diode designs (such as common cathode or common anode). Contact factory for the three-terminal SMLP outline drawing, and for further information on the multiple diode configurations.

HIGH Q ABRUPT TUNING VARACTOR DIODES

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Economy price
- Mil grade performance
- High Q
- Available in common cathode style
- Available in chip form (add suffix -000)

APPLICATIONS

- Low phase noise VCOs

- Phase locked loop VCOs
- Moderate bandwidth VCOs

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 30 V min

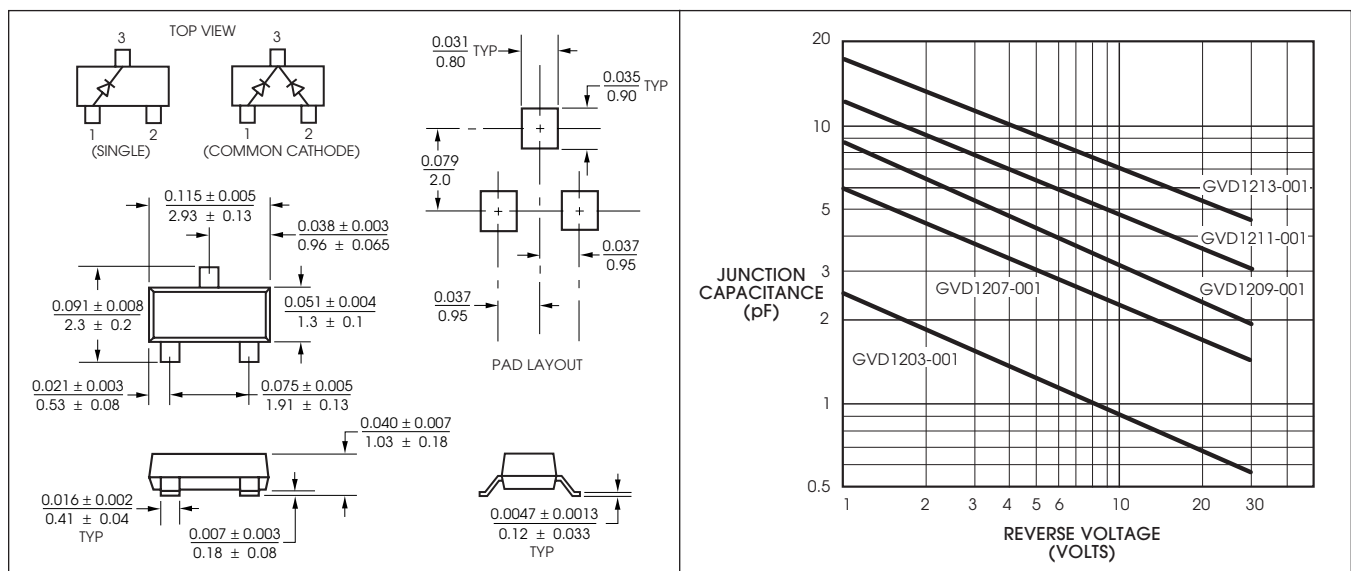
Maximum reverse leakage current at -25 V
(at 25°C): 0.05 μ A DC

Device dissipation at 25°C: 250 mW (derated
linearly to zero at +125°C)

Operating junction temperature: -55°C to +125°C

Storage temperature: -55°C to +125°C

Total Capacitance C_T (pF) at -4 V ($\pm 10\%$)	Capacitance Ratio C_T at 0 V C_T at -30 V min	Q min at -4 V (50 MHz)	Model Number	
			Single	Common Cathode
1.2	3.4	3200	GVD1202-001	GVD1202-004
1.5	3.5	3000	GVD1203-001	GVD1203-004
1.8	3.5	3000	GVD1204-001	GVD1204-004
2.2	3.7	3000	GVD1205-001	GVD1205-004
2.7	3.7	2500	GVD1206-001	GVD1206-004
3.3	3.8	2500	GVD1207-001	GVD1207-004
3.9	3.9	2500	GVD1208-001	GVD1208-004
4.7	3.9	2000	GVD1209-001	GVD1209-004
5.6	4.0	2000	GVD1210-001	GVD1210-004
6.8	4.0	2000	GVD1211-001	—
8.2	4.0	2000	GVD1212-001	—
10.0	4.1	1800	GVD1213-001	—
12.0	4.1	1600	GVD1214-001	—
15.0	4.2	1250	GVD1215-001	—
18.0	4.2	1000	GVD1216-001	—
22.0	4.2	850	GVD1217-001	—



SOT-23 PACKAGE - Consult factory for additional package configurations.

All dimensions are in / mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

MICROWAVE ABRUPT TUNING VARACTOR DIODES

Surface Mount Low Parasitic Package (SMLP)

FEATURES

- Mesa epitaxial silicon construction
- Silicon dioxide passivated
- Fits Footprint for SOD-323, SOD-123 and smaller
- High Frequency (VHF to 8 GHz)
- Available on carrier and reel
- Available in chip form (add suffix -000)
- Two package styles including lower cost, flat top version
- Alternate notched termination version available, contact factory for outline drawing

APPLICATIONS

- PCS
- WANS
- AMPS
- GSM
- TAGS
- DECT
- Cellular

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): 30 V min

Maximum reverse leakage current at -25 V
(at 25°C): 0.05 μ A DC

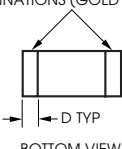
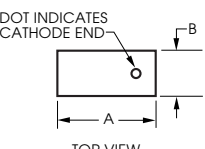
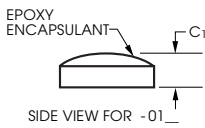
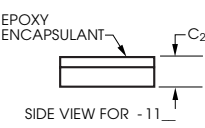
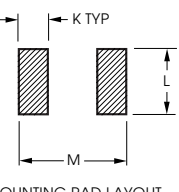
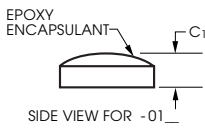
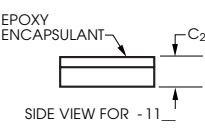
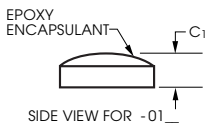
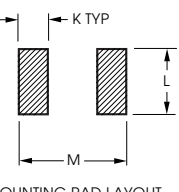
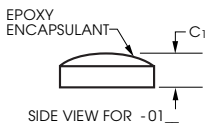
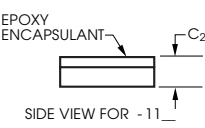
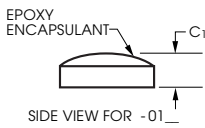
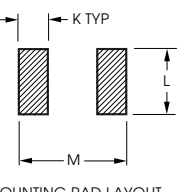
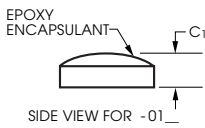
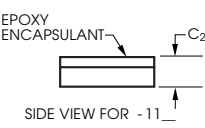
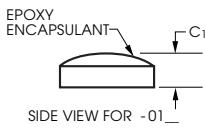
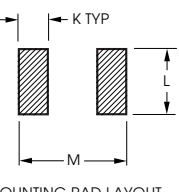
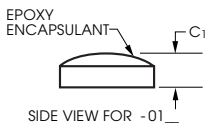
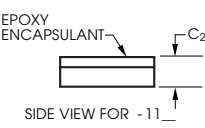
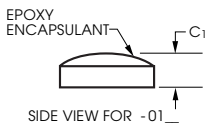
Device dissipation at 25°C: 250 mW (derated linearly to zero at +125°C)

Operating junction temperature: -65°C to +125°C

Storage temperature: -65°C to +125°C

Total Capacitance C_T (pF) at -4 V ($\pm 10\%$)	Capacitance Ratio $\frac{C_T \text{ at } 0 \text{ V}}{C_T \text{ at } -4 \text{ V}}$ min	Capacitance Ratio $\frac{C_T \text{ at } -4 \text{ V}}{C_T \text{ at } -30 \text{ V}}$ min	Q min at -4 V (50 MHz)	Model Number*
0.8	1.5	1.45	3900	GVD91300 - ---
1.0	1.6	1.55	3800	GVD91301 - ---
1.2	1.7	1.60	3700	GVD91302 - ---
1.5	1.8	1.65	3600	GVD91303 - ---
1.8	1.9	1.70	3500	GVD91304 - ---
2.2	2.0	1.75	3400	GVD91305 - ---
2.7	2.0	1.80	3300	GVD91306 - ---
3.3	2.1	1.85	3100	GVD91307 - ---
3.9	2.1	1.90	2700	GVD91308 - ---
4.7	2.2	1.95	2600	GVD91309 - ---
5.6	2.2	2.00	2500	GVD91310 - ---

*For complete model number, select "Dash No." from chart below.

TERMINATIONS (GOLD PLATED)				Dash No.	A	B	C ₁	C ₂	D	K	L	M
				- 011	0.10	0.050	0.035	0.050	0.015 $\pm$ 0.004	0.030	0.070	0.112
				- 111	2.5	1.3	0.89	1.3	0.38 $\pm$ 0.1	0.76	1.8	2.84
				- 012	0.12	0.060	0.035	0.050	0.020 $\pm$ 0.005	0.030	0.080	0.132
				- 112	3.0	1.5	0.89	1.3	0.51 $\pm$ 0.1	0.76	2.0	3.35
				- 013	0.200	0.100	0.035	0.050	0.020 $\pm$ 0.005	0.030	0.120	0.212
				- 113	5.08	2.54	0.89	1.3	0.51 $\pm$ 0.1	0.76	3.05	5.38
				- 014	0.075	0.050	0.035	0.050	0.015 $\pm$ 0.004	0.030	0.070	0.087
				- 114	1.9	1.3	0.89	1.3	0.38 $\pm$ 0.1	0.76	1.8	2.2
				- 015	0.062	0.042	0.030	0.050	0.011 $\pm$ 0.003	0.020	0.060	0.072
				- 115	1.6	1.1	0.76	1.3	0.28 $\pm$ 0.08	0.51	1.5	1.8

All dimensions are in / mm. Unless otherwise specified, the tolerance on dimensions is $\pm 0.003/0.08$.

Note: An SMLP package with three terminations sized to fit the pad layout for an SOT-23 package is also available. This package can be used for multiple diode designs (such as common cathode or common anode). Contact factory for the three-terminal SMLP outline drawing, and for further information on the multiple diode configurations.

MINIATURE MICROWAVE SILICON VARACTOR DIODES

Surface Mount Monolithic Package (SMMP)

FEATURES

- Multilayer construction
- Low SMT profile
- Low series inductance
- Low parasitic capacitance (0.06 pF)
- High Q
- Available on carrier and reel

APPLICATIONS

Microwave Voltage Controlled Oscillators (VCOs)
Ideal for Wide Bandwidth Applications (VHF-10 GHz)

SPECIFICATIONS

Reverse breakdown voltage at 10 μ A DC
(at 25°C): See below

Maximum reverse leakage current at -10 V
(at 25°C): 0.05 μ A DC

Operating junction temperature: -65°C to +125°C

Storage temperature: -65°C to +125°C

Total Capacitance C_T (pF) at -1 V		Capacitance Ratio $\frac{C_T \text{ at } -1 \text{ V}}{C_T \text{ at } -3 \text{ V}}$		Capacitance Ratio $\frac{C_T \text{ at } -1 \text{ V}}{C_T \text{ at } -6 \text{ V}}$		Q min at -4 V (50 MHz)	Model Number
min	max	min	max	min	max		
2.6	3.8	1.4	2.2	2.6	3.6	1500	GVD60100

Reverse breakdown voltage at 10 μ A DC: 15 V min

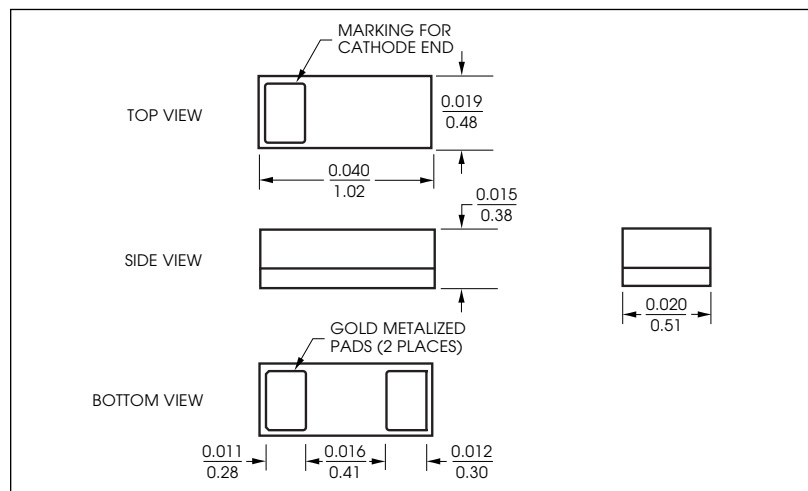
Total Capacitance C_T (pF) at -0 V typical	Total Capacitance C_T (pF) at -4 V		Total Capacitance C_T (pF) at -20 V		Q min at -4 V (50 MHz)	Model Number
	min	max	max	max		
3.25	0.9	1.5	0.2	0.45	1000	GVD60200

Reverse breakdown voltage at 10 μ A DC: 22 V min

Models shown above supplied bulk in vials.

For 300 pc gel pack, add "-03" to the model number.

For 5000 pc carrier and reel, add "-50" to the model number.



All dimensions are in /mm.

Unless otherwise specified, the tolerance on dimensions is $\pm 0.004/0.1$.

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