Preliminary Data - January 1999
Rev A Aug 2000

GVD91300-XXX Series

SPRAGUE-GOODMAN ELECTRONICS, INC.

SUPER HYPERABRUPT TUNING VARACTOR DIODES
SURFACE MOUNT LOW PARASITIC (SMLP) PACKAGES

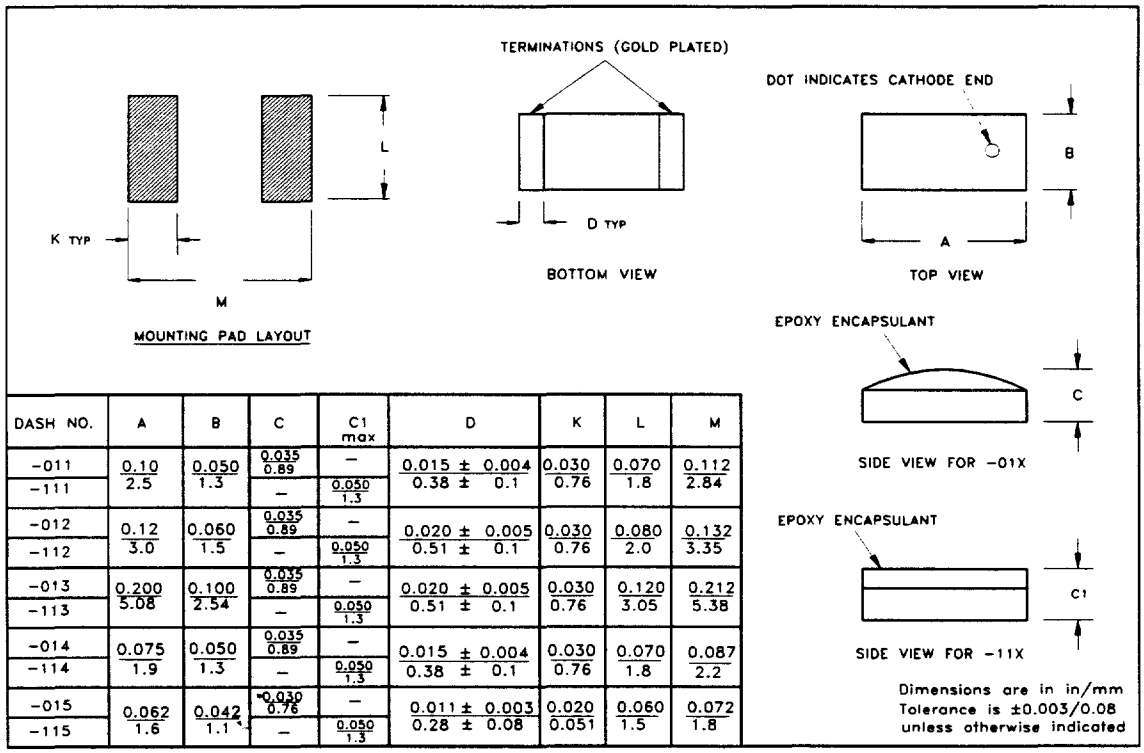
FEATURES

- 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

SPECIFICATIONS

Reverse breakdown voltage (at 10 µA DC) at 25°C: 30 V min
Maximum reverse leakage current (at -10 V) at 25°C: 0.05 µA 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

MODEL NUMBER	CAPACITANCE RATIO C_T (pF) at 0 V/ C_T (pF) at -4V min	DIODE CAPACITANCE C_T (pF) at -4V (±10%)	CAPACITANCE RATIO C_T (pF) at -4V/ C_T (pF) at -30V min	Q min at -4 V (50 MHz)
GVD91300-XXX	1.5	0.8	1.45	3900
GVD91301-XXX	1.6	1.0	1.55	3800
GVD91302-XXX	1.7	1.2	1.60	3700
GVD91303-XXX	1.8	1.5	1.65	3600
GVD91304-XXX	1.9	1.8	1.70	3500
GVD91305-XXX	2.0	2.2	1.75	3400
GVD91306-XXX	2.0	2.7	1.80	3300
GVD91307-XXX	2.1	3.3	1.85	3100
GVD91308-XXX	2.1	3.9	1.90	2700
GVD91309-XXX	2.2	4.7	1.95	2600
GVD91310-XXX	2.2	5.6	2.00	2500



DASH NO.	A	B	C	C1 max	D	K	L	M
-011	0.10 / 2.5	0.050 / 1.3	0.035 / 0.89	–	0.015 ± 0.004 / 0.38 ± 0.1	0.030 / 0.76	0.070 / 1.8	0.112 / 2.84
-111			–	0.050 / 1.3				
-012	0.12 / 3.0	0.060 / 1.5	0.035 / 0.89	–	0.020 ± 0.005 / 0.51 ± 0.1	0.030 / 0.76	0.080 / 2.0	0.132 / 3.35
-112			–	0.050 / 1.3				
-013	0.200 / 5.08	0.100 / 2.54	0.035 / 0.89	–	0.020 ± 0.005 / 0.51 ± 0.1	0.030 / 0.76	0.120 / 3.05	0.212 / 5.38
-113			–	0.050 / 1.3				
-014	0.075 / 1.9	0.050 / 1.3	0.035 / 0.89	–	0.015 ± 0.004 / 0.38 ± 0.1	0.030 / 0.76	0.070 / 1.8	0.087 / 2.2
-114			–	0.050 / 1.3				
-015	0.062 / 1.6	0.042 / 1.1	+0.030 / 0.76	–	0.011 ± 0.003 / 0.28 ± 0.08	0.020 / 0.051	0.060 / 1.5	0.072 / 1.8
-115			–	0.050 / 1.3				

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