

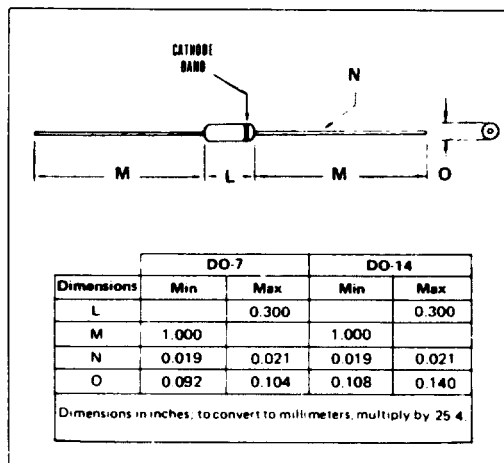
SUPER Q[®] ABRUPT TUNING VARACTORS

SERIES
PG107 - PG347
PC107 - PC141

The PG and PC series voltage variable capacitance diodes feature planar reliability, high Q, high voltage types with controlled tuning ratios for electronic tuning and harmonic generator applications. They are packaged in JEDEC DO-7 and DO-14 glass cases to meet or exceed MIL-S-19500 specifications.

GENERAL SPECIFICATIONS (25°C unless noted)

Rating	Symbol	Value
Reverse Voltage	V_R	As Specified
Reverse Voltage Leakage Current	I_R	0.5 μ Adc Max @ rated V_R
Device Dissipation	P_D	400 mW Max
Derate above 25°C		2.67 mW/°C
Junction Temperature	T_J	+175°C Max
Storage Temperature	T_{stg}	-65°C to 200°C
Case Capacitance	C_C	(DO-14) 0.3 pf Typ (DO-7) 0.2 pf Typ
Series Inductance	L_S	5 nH Typ



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ$)

Type No.*	Cap @ 4V/1 MHz pf	Q @ 4V/50 MHz Min	Tuning Ratio $C_0.5/C_{VR}$ Min/Max	V_R Volts Min	Case
PG107	6.8	100	4.20 4.60	65	DO-7
PG207	6.8	200	4.00 4.60	65	DO-7
PG307	6.8	300	3.55 4.15	50	DO-7
PG110	10	200	4.25 4.65	65	DO-7
PG210	10	200	4.05 4.65	65	DO-7
PG310	10	300	3.60 4.20	50	DO-7
PG115	15	200	4.30 4.70	65	DO-7
PG215	15	200	4.10 4.70	65	DO-7
PG315	15	300	3.65 4.25	50	DO-7
PG122	22	200	4.35 4.75	65	DO-7
PG222	22	200	4.15 4.75	65	DO-7
PG322	22	300	3.65 4.25	50	DO-7
PG133	33	200	4.40 4.80	65	DO-7
PG233	33	200	4.20 4.80	65	DO-7
PG333	33	300	3.70 4.30	50	DO-7
PG139	39	200	4.45 4.85	65	DO-7
PG239	39	200	4.25 4.85	65	DO-7
PG339	39	300	3.70 4.30	50	DO-7
PG147	47	200	4.45 4.85	65	DO-7
PG247	47	200	4.25 4.85	65	DO-7
PG347	47	300	3.70 4.30	50	DO-7

*Type Nos. shown are for $\pm 20\%$ Cap. tolerance; for $\pm 10\%$ tolerance, specify Type No. with "A" suffix; for $\pm 5\%$ with "B" suffix; for $\pm 2\%$ with "C" suffix.

Type No.*	Cap @ 4V/1 MHz pf	Tuning Ratio $C_{0.5}/C_{VR}$ Min	Q @ 4V/50 MHz Min	V_R Volts Min	Case	Type No.*	Cap @ 4V/1 MHz pf	Tuning Ratio $C_{0.5}/C_{VR}$ Min	Q @ 4V/50 MHz Min	V_R Volts Min	Case
PC107	6.8	4.5	150	30	DO-7	PC133	22.0	4.6	50	30	DO-7
PC138	6.8	4.5	75	30	DO-7	PC136	22.0	6.0	125	50	DO-7
PC139	6.8	5.7	150	50	DO-7	PC113	22.0	7.5	50	80	DO-7
PC140	6.8	6.8	75	80	DO-7	PC116	22.0	8.2	100	100	DO-7
PC141	6.8	7.6	125	100	DO-7	PC127	33.0	4.6	50	30	DO-7
PC132	10.0	4.5	50	30	DO-7	PC128	33.0	6.0	125	50	DO-7
PC135	10.0	5.8	150	50	DO-7	PC129	33.0	7.5	50	80	DO-14
PC112	10.0	6.9	50	80	DO-7	PC130	33.0	8.2	100	100	DO-14
PC115	10.0	7.7	100	100	DO-7	PC134	47.0	4.6	50	30	DO-7
PC123	15.0	4.6	50	30	DO-7	PC137	47.0	6.0	100	50	DO-7
PC124	15.0	5.9	125	50	DO-7	PC114	47.0	7.4	50	80	DO-14
PC125	15.0	7.0	50	80	DO-7	PC122	47.0	8.0	75	100	DO-14
PC126	15.0	7.9	100	100	DO-7	PC117	47.0	8.0	100	100	DO-14

*Type Nos. shown are for $\pm 20\%$ Cap. tolerance; for $\pm 10\%$ tolerance, specify Type No. with "A" suffix; for $\pm 5\%$ with "B" suffix; for $\pm 2\%$ with "C" suffix.