

SILICON ABRUPT JUNCTION VARACTOR

DESCRIPTION:

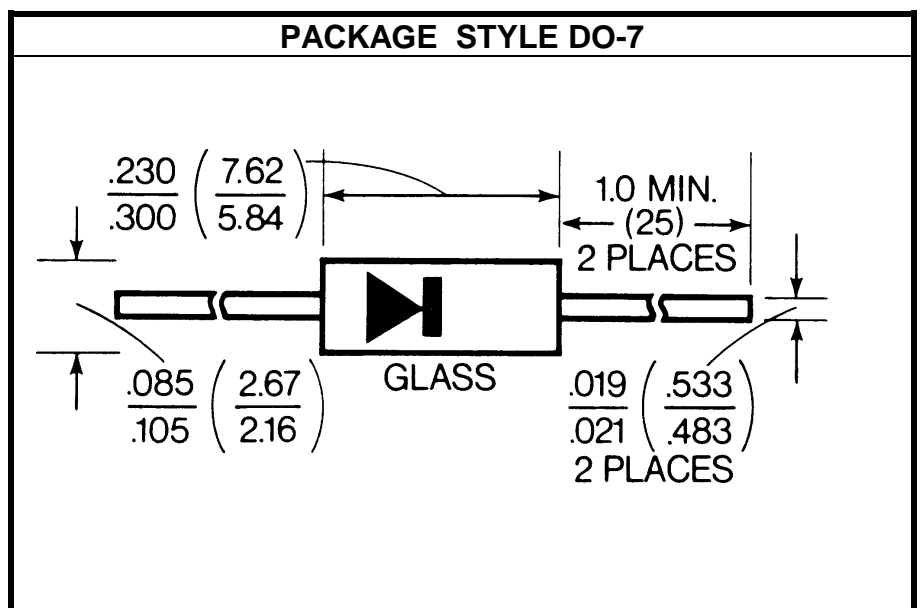
The **AT6022B-15** is a Silicon Abrupt Junction Varactor Designed for Octave Tuning of VHF Filters and Oscillators.

FEATURES INCLUDE:

- Silicon Dioxide Passivation
- $\gamma = 0.5$
- Hermetic **DO-7** Package

MAXIMUM RATINGS

| | |
|---------------|---|
| I_F | 100 mA |
| V_R | 70 V |
| P_{DISS} | 250 mW @ $T_C = 25^\circ\text{C}$ |
| T_J | -65°C to $+150^\circ\text{C}$ |
| T_{STG} | -65°C to $+150^\circ\text{C}$ |
| θ_{JC} | 500°C/W |


CHARACTERISTICS $T_C = 25^\circ\text{C}$

| SYMBOL | TEST CONDITIONS | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|--------------|------------------------|-----------------------|---------|---------|---------|-------|
| V_{BR} | $I_R = 10 \mu\text{A}$ | | 70 | | | V |
| I_R | $V_R = 48 \text{ V}$ | | | | 50 | nA |
| C_{T4} | $V_R = 4.0 \text{ V}$ | $f = 1.0 \text{ MHz}$ | 53.2 | | 58.8 | pF |
| C_{T30} | $V_R = 30 \text{ V}$ | $f = 1.0 \text{ MHz}$ | 22.0 | | 26.25 | pF |
| ΔC_T | C_{T0} / C_{T60} | $f = 1.0 \text{ MHz}$ | 7.4 | | | --- |
| ΔC_T | C_{T8} / C_{T60} | $f = 1.0 \text{ MHz}$ | 2.50 | | 2.60 | --- |
| T_C | $V_R = 4.0 \text{ V}$ | $f = 1.0 \text{ MHz}$ | | | 300 | ppm |
| Q | $V_R = 4.0 \text{ V}$ | $f = 50 \text{ MHz}$ | 600 | | | --- |