

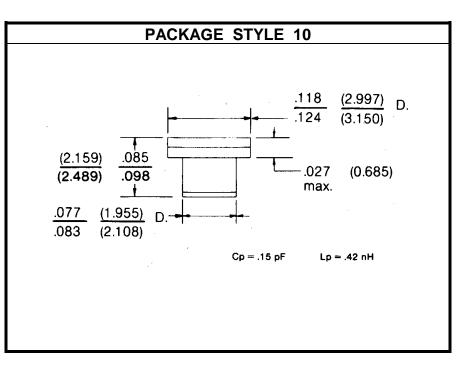
SILICON ABRUPT JUNCTION TUNING VARACTOR

DESCRIPTION:

The **AT6017-10** is an Epitaxial Silicon Abrupt Junction Microwave Tuning Varactor. This Device is Passivated With Silicon Dioxide Which Results in Very Low Leakage Current. The Capacitance Voltage Relationship Closley Approximates Square Law (n = 0.5).

MAXIMUM RATINGS

| I _c | 100 mA | | | | |
|-------------------|---------------------------------|--|--|--|--|
| V_{CE} | 60 V | | | | |
| P _{DISS} | 250 mW @ T _c = 25 °C | | | | |
| TJ | -65 °C t o +150 °C | | | | |
| T _{stg} | -65 °C t o +150 °C | | | | |



CHARACTERISTICS T_c=25°C

| SYMBOL | TEST CONDITIONS | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|----------------|-------------------------------|-------------|---------|---------|---------|---------------------|
| V _B | I _R = 10 μA | | 60 | | | V |
| C _T | V _R = 4.0 V | f = 1.0 MHz | 19.80 | 22.00 | 24.20 | pF |
| ΔCΤ | $C_{T} = 0 V / C_{T} = 8.0 V$ | f = 1.0 MHz | 7.2 | | | RATIO |
| Q | V _R = 4.0 V | f = 50 MHz | 800 | | | |
| Tc | V _R = 4.0 V | | | | 300 | Ppm/ ^o C |

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