

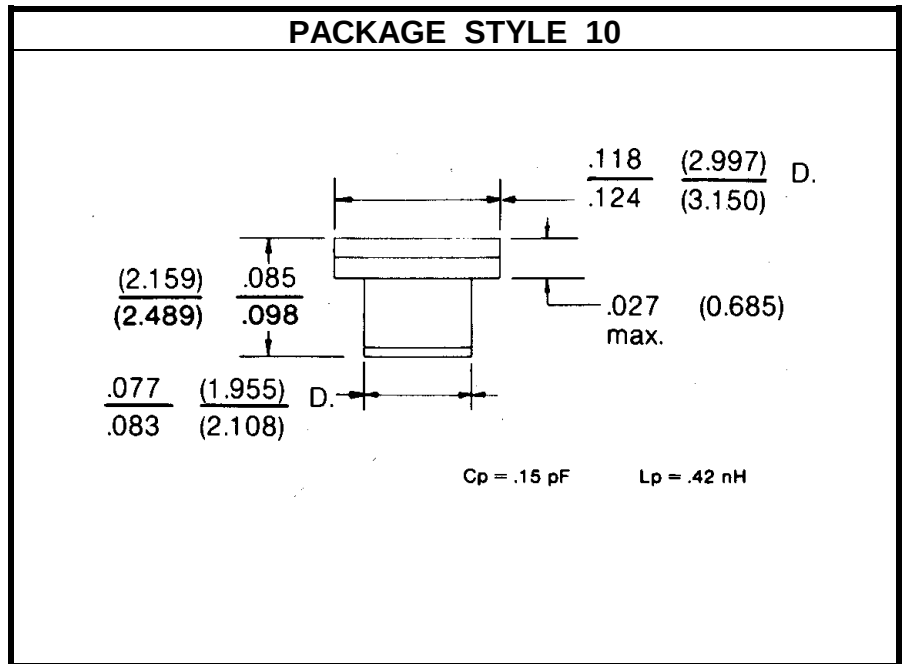
SILICON ABRUPT JUNCTION TUNING VARACTOR

DESCRIPTION:

The **AT9019-10** 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 Closely Approximates Square Law ($n = 0.5$).

MAXIMUM RATINGS

I_C	100 mA
V_{CE}	90 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 $+150^\circ\text{C}$



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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_B	$I_R = 10 \mu\text{A}$	90			V
C_T	$V_R = 4.0 \text{ V}$ $f = 1.0 \text{ MHz}$	29.70	33.00	36.30	pF
ΔC_T	$C_T = 0 \text{ V} / C_T = 8.0 \text{ V}$ $f = 1.0 \text{ MHz}$	9.5			RATIO
Q	$V_R = 4.0 \text{ V}$ $f = 50 \text{ MHz}$	500			---
T_C	$V_R = 4.0 \text{ V}$			300	Ppm/ $^\circ\text{C}$