

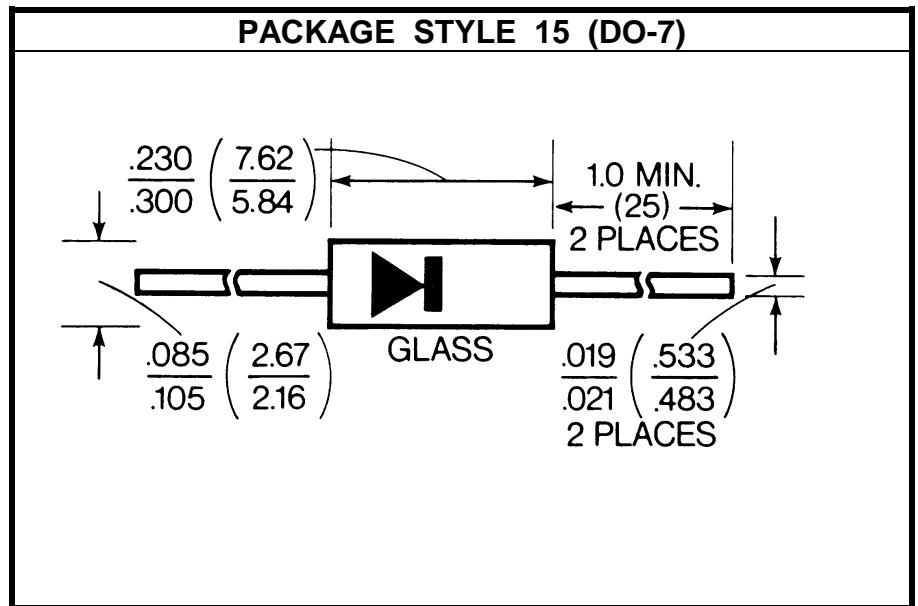
SILICON ABRUPT JUNCTION TUNING VARACTOR

DESCRIPTION:

The **AT6021** 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}	70 V
P_{DISS}	250 mW @ $T_C = 25^\circ\text{C}$
T_J	-65 to $+150^\circ\text{C}$
T_{STG}	-65 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_B	$I_R = 10 \mu\text{A}$	70			V
C_T	$V_R = 4.0 \text{ V}$ $f = 1.0 \text{ MHz}$	44.65	47.0	49.35	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	---
Q	$V_R = 4.0 \text{ V}$ $f = 50 \text{ MHz}$	600			---