

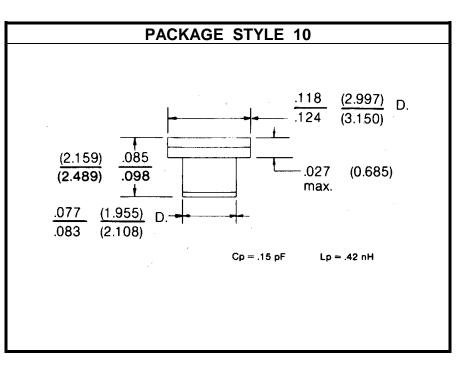
# SILICON ABRUPT JUNCTION TUNING VARACTOR

### **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 <sub>c</sub>	100 mA				
$V_{CE}$	60 V				
P <sub>DISS</sub>	250 mW @ T <sub>c</sub> = 25 °C				
TJ	-65 °C to +150 °C				
T <sub>stg</sub>	-65 °C to +150 °C				



#### CHARACTERISTICS T<sub>c</sub> = 25 °C

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
V <sub>B</sub>	I <sub>R</sub> = 10 μA		60			V
C <sub>T</sub>	V <sub>R</sub> = 4.0 V	f = 1.0 MHz	19.80	22.00	24.20	pF
ΔCT	$C_{T} = 0 V / C_{T} = 8.0 V$	f = 1.0 MHz	7.2			RATIO
Q	V <sub>R</sub> = 4.0 V	f = 50 MHz	800			
Tc	V <sub>R</sub> = 4.0 V				300	Ppm/ <sup>o</sup> C

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