

# SILICON ABRUPT JUNCTION VARACTOR

**DESCRIPTION:**

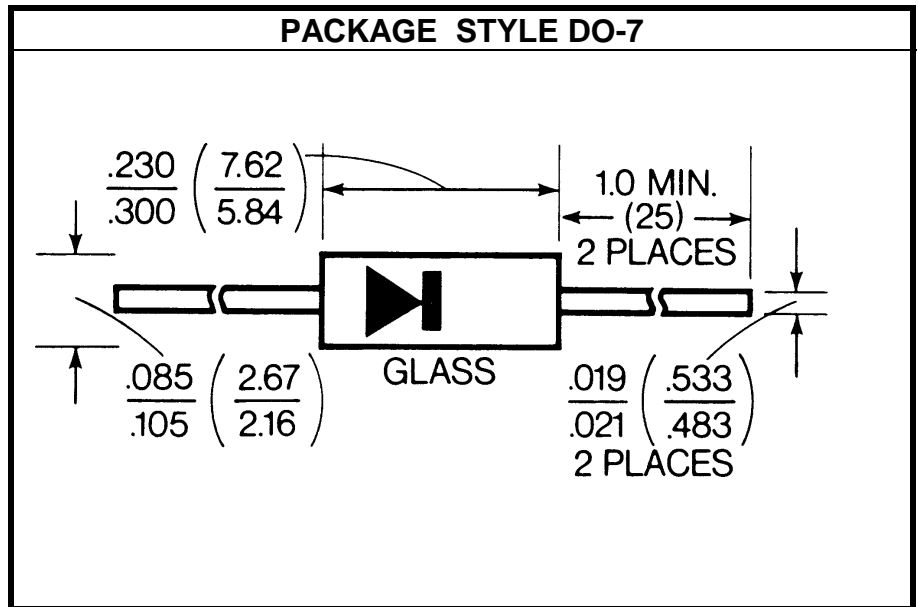
The **AT6022B-15** is a Silicon Abrupt Junction Varactor Designed for Octave Tuning of VHF Filters and Oscillators.

**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 @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$500^\circ\text{C/W}$


**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
$\Delta C_T$	$C_{T0} / C_{T60}$	$f = 1.0 \text{ MHz}$	7.4			---
$\Delta C_T$	$C_{T8} / C_{T60}$	$f = 1.0 \text{ MHz}$	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			---