



SILICON ABRUPT VARACTOR DIODE

DESCRIPTION:

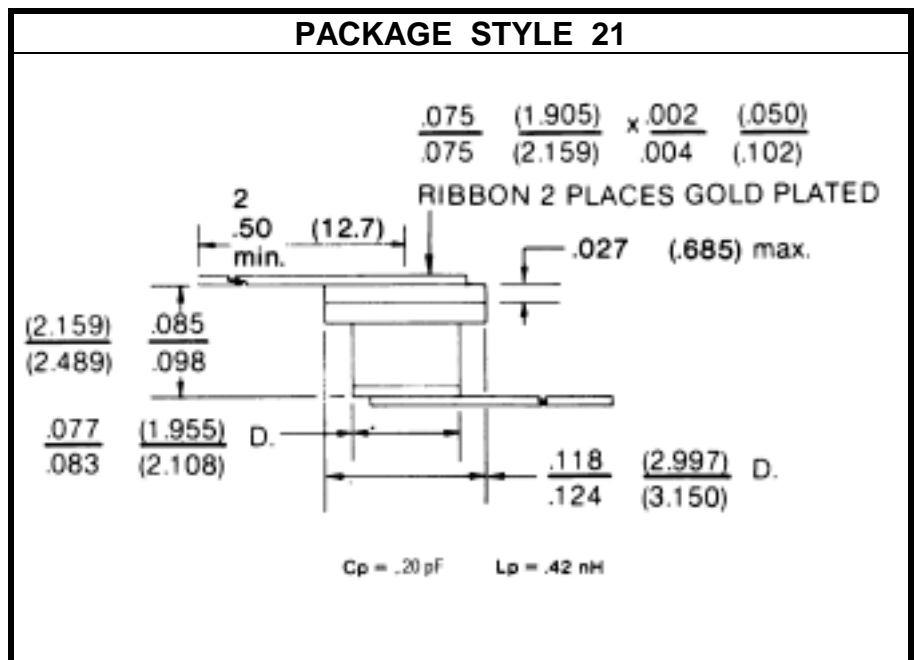
The **AT12015-21** is Designed for High Performance RF and Microwave Applications Requiring an Abrupt Variable Capacitance Characteristic.

FEATURES INCLUDE:

- High Tuning Ratio, $\Delta C_T = 8.5 \text{ MIN.}$
- High Quality Factor, $Q = 300 \text{ MIN.}$
- Hermetic Pkg, $C_P = .20 \text{ pF}$
 $L_S = .42 \text{ nH}$

MAXIMUM RATINGS

I_F	200 mA
V_R	120 V
P_{DISS}	1.75W @ $T_C 25^\circ\text{C}$
T_J	-55°C to $+150^\circ\text{C}$
T_{STG}	-55°C to $+150^\circ\text{C}$
θ_{JC}	70°C/W



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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_R	$I_R = 10 \mu\text{A}$	120			V
V_F	$I_F = 1 \text{ mA}$			1.0	V
I_R	$V_R = 100 \text{ V}$			100	nA
C_T	$V_R = 4 \text{ V}$ $f = 1.0 \text{ MHz}$	12	14	16	pF
ΔC_T	C_{T0} / C_{T120} $f = 1.0 \text{ MHz}$	8.5			---
Q	$V_R = 4 \text{ V}$ $f = 50 \text{ MHz}$	300			---
R_S	$I_F = 10 \text{ mA}$ $f = 2400 \text{ MHz}$			0.9	Ω