

SILICON VARACTOR DIODE

DESCRIPTION:

The ASI AHV9501-15 is a Silicon Tuning Varactor Diode for HF to VHF operation.

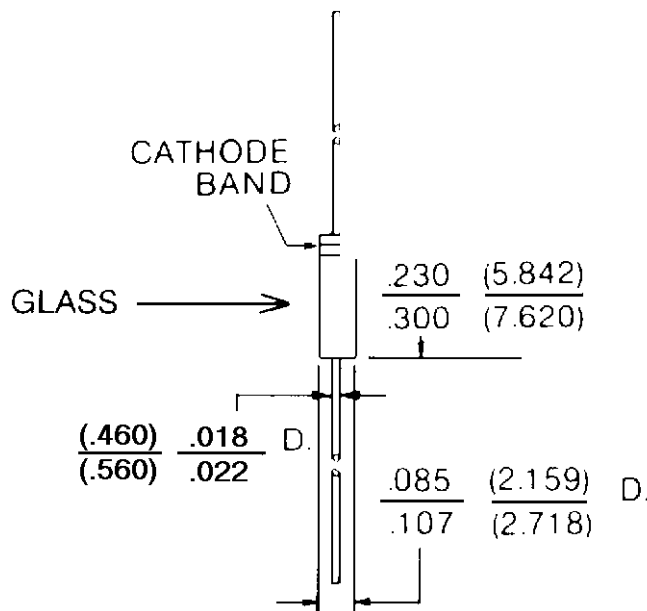
FEATURES INCLUDE:

- Octave tuning from 4 to 20 V
- Ultra high Q
- Linear frequency performance versus voltage

MAXIMUM RATINGS

I_F	50 mA
V_R	22 V
P_{DISS}	280 mW @ $T_C = 25^\circ C$
T_J	$-55^\circ C$ to $+125^\circ C$
T_{STG}	$-55^\circ C$ to $+125^\circ C$

PACKAGE STYLE 15



CHARACTERISTICS $T_A = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	$I_R = 10 \mu A$	22			V
I_R	$V_R = 20 V$			0.50	μA
C_t	$V_R = 4.0 V$ $f = 1.0 MHz$	180	200	220	pF
C_t	$V_R = 8.0 V$ $f = 1.0 MHz$	70	85	105	pF
C_t	$V_R = 20 V$ $f = 1.0 MHz$	29	32	36	pF
C_{T4}/C_{T20}	$f = 1.0 MHz$	5.8	6.4	7.1	---
Q	$V_R = 1.0 V$ $f = 1.0 MHz$	80			---